ALPS ELECTRIC CO., LTD.

Green Procurement Standards

(Appendix)

Friendly to people, friendly to nature.

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ALPS ELECTRIC CO.,LTD.

CONTENTS

Explanation and procedure of self-evaluation sheet for supplier of environmental management [Ver.2.1]

1. Explanation and procedure

This document "Explanation and procedure" describes how to treat and how to prepare "Self-evaluation sheet by suppliers" which was created through partly quoting and arranging of "Guidelines for Management of Chemical Substances in Products" issued by JGPSSI.

2.Definition of Terms

(1) Substance (a single chemical substance)

A "substance" is a chemical element or compound that either exists in nature or is obtained via a manufacturing process. A "substance" includes impurities introduced in manufacturing processes, and additives required for stability maintenance. However, solvents that can be broken down without affecting the stability of the single chemical substance and without changing the composition thereof, are excluded from this definition. (Reference: JIS Z 7250)

Examples: Lead oxides, nickel chlorides, benzenes, etc.

(2) Preparation (a mixture)

A "preparation" is a mixture comprising two or more individual chemical substances (including solvents).(Reference: JIS Z 7250)

Examples: Paints, inks, solders prior to use, adhesives, alloys, etc.

＊Note that in use, preparations become "articles" at the point' wherein reactions, such as curing, have occurred.

(3) Articles (fabricated products)

The United States' Toxic Substances Control Act (TSCA) refers to an "article" also as product or "goods," and defines an "article" as an item that:

1) Is formed into a specific shape or design during manufacture,
2) Has end use functions dependent in whole or in part upon its shape or design during end use,
3) Has either no change of chemical composition during its end use, or only those changes of composition which have no commercial purpose separate from that of the article, with the added provision in the United States Occupational Safety and Health Agency Hazard Communication Standard and the Code of Federal Regulations (CFR) Toxic Chemical Release Reporting (40 CFR Part 372) that the item "does not release a toxic chemical under normal conditions of processing or use," where
4) Fluids or particles are not considered articles regardless of their shape or design.

Examples: Keyboards, main units of computers, and other fabricated objects. The application of the terminology is broader than that of "Original Components."

3. The "Self-evaluation sheet for supplier of environmental management"

The "Action Item " summaraizes what is actually to be performed in the seven frameworks (I through VII) explained in "Manegement frameworks explains". Also, based on the Action Item List, the "Self-evaluation sheet for supplier of environmental management" evaluates whether the systems for managing chemical substances in products are properly constructed and operated within companies that implement these guidelines.

In the "Action Item," the action items picked up from among the action frameworks I through VII have been organized and described using PDCA in order to make the action items easily understood. Note that "PDCA" refers to the act of ongoing improvement through performing a cycle of planning (P: establishing policies and plans), doing (D: implementing the plans and performing the operations), checking (C: evaluating and improving performance) and taking action (A: Performing a management review).

In order to satisfy the "Action Details" in the "Action Item List," creating "systems (rules)"and actually "implementing (operating)" them are both required.

4.Each item in the "Action Item" is explained below:

1)"Action Items":

These list the items that are required for managing the chemical substances in products and comprise the six major items of "I. Establishing guidelines for the management of chemical substances in products" through "6. Management Review," where these five major items are divided into 23 minor items.

2)"Action details":

Action items describe the content to be put into practice. A common language throughout the entire supply chain is important in this section, however the appropriate expressions may be lacking in some industries. In this case, the concept for management of chemical substances in products and the intent of 'Additional Explanations' should be properly understood and 'Action Details' appropriate to the industry of the company implemented. If the noted action details are not applicable to the company, they need not be satisfied. For example, if the company has no design function, the action details in 3.1 Design Development may be considered as not applicable.

3)"Additional Explanations":

Supplementing 'Action Items' and 'Action Details', and practical examples and reasons for implementation etc.

4)"Management framework":

Items to be actioned for management of unit processes for substances/preparations and articles (4.3 in these guidelines). The position of each action item within the management framework is shown in this field. Used for entry in the 'Management Framework' field during compatibility checks.

5.Evaluation Criteria

(1) Determination of Frameworks Applicable to Your Unit Processes

Based on the Required Level in the Action Item List, select from management frameworks I through VII that are applicable to your company's unit processes. If none of the frameworks are applicable, clarify the reasons.

(2) Evaluation for Each Action Item

Regarding whether the systems for managing chemical substances in products are properly constructed and operated, evalution is carried out for each Action Item and Action Details according to the following four levels based on the Required Level.

Conforming: When there are both appropriate systems (rules) for fulfilling the Required Level and activities (implementation) based on the systems (rules), then it is deemed "Conforming." The results of systems (rules) and activities (implementation) must be verfied objectively either through documentation or records.

Partial conformance:When there are appropriate systems (rules) for fulfilling the Required Level but the activities (implementation) are insufficient or partially performed, or when activities (implementation) for fulfilling the Required Level are performed but the systems (rules) are insufficient or partially stipulated,
Or, even when you are doing a part of the task, fill in "Partial conformance".
then it is deemed "Partial conformance" The results of systems (rules) and activities

Non-Conforming: "Nonconforming" should be applied if the conditions below are met.
There is no rule (system) to meet the required level; there is no task (operation) based on the rules; or a critical accident occurred due to the cause related to the system in this item but no corrective actions have been taken.

Not Applicable:When the Required Level does not apply to management within the company, then it is deemed "Not Applicable." For example, if there is no design department in the firm, then 3.1: Design/Development in the "Action items" in the "Action Item List" is deemed not applicable.

Table 1: List of Evaluation Criteria

	Systems for Fulfilling the Action Details(Rules)	Activities for Fulfilling Action Details (Implementation)
Conforming	0	0
Partial conformance	0	#
	#	0
	0	x
	x	0
	#	#
	#	x
	x	#
Non-Conforming	x	x

0 : Required Level is satisfied
#: Some actions are performed but partially insufficient
x: Required Level is not satisfied

(3) Total Evaluation

When the criteria below is satisfied based on the evaluation of Action Items and Action Details, it is deemed as "passed."

1)Passed: All the items in the "implementation items" and "implementation content" are decided to be "conforming", or there is no "nonconforming".
However, regarding items of "improvement is required", there is an entry in the space for an improvement plan (or an improvement plan is attached).

2) Scoring of self-evaluation sheet for a supplier

Scoring of "Self-evaluation sheet for a supplier" should be done by following the procedures below. Ranking is to be given by the rules described in the table 2 based on the grade after calculating obtained points by the formula described later.

Based on the Required Level of the "Action Item List," the scores are as follows: "Conforming" = 3 pts., "Partial conformance" = 1 pts., "Non-Conforming" = 0 pts. The points are added to calculate the total score. When the Action Items or Action Details are not applicable to the company's management, the relevant column shall be left blank. Because there are 23 items in total, when all Required Levels are "Conforming," the full marks shall be 69 points. Since the full marks change when there are Not Applicable columns, the full marks are converted into 100 points using the following method.

$$\frac{\text{Actual score}}{\text{Number of relevant columns} * 3} * 100 = \text{Converted into full marks of 100 points (Evaluation points)}$$

<Example>
When 23 items are applicable among the 20 Required Level items and the score is 50 points:

$$\frac{50}{20*3} * 100 = \frac{50}{60} * 100 = 83 \text{ points}$$

Note: The evaluation points above do not indicate a passing mark for the total evaluation. The total evaluation is determined by taking the conditions for "Non-Conforming" and "Partial conformance" into account.

Table 2: Ranking based on the grade

Rank-A	the grade should be 100 without nonconformity
Rank-B	80 to 99 without nonconformity and with corrective action plans
Rank-C	50 to 79 without nonconformity and with corrective action plans
Rank-D	less than 49 points or with nonconformity

6. Procedure for preparation

Procedure-(1):

For each required level, look for X and O in the column of management frameworks (O: it is applicable to you: automatically displayed) and if there is at least one pair of consistent items (X = O), follow the rules described in Section 5 to make judgment and select an item in the pull-down list (if there no pair, it should be considered as "not applicable").
If you select manual processing, circle one of the sentences below.
"Conforming" "Partial conformance" "Non-Conforming" "Not Applicable"

Procedure-(2):

Fill in the facts verified in an objective manner with a document name if any in the space for "Evidence".
Every time you select "not applicable", fill in the reason for it in detail to the allowable extent.
Note: if you attach a copy of document as an evidence of objective verification, give the document a number for reference and fill in the number in the space for "Evidence".

Procedure-(3):

In the space of "Score", the point is displayed after it is calculated automatically according to the judgment result for each requirement level as described in Procedure-(1).
Note: scoring system: when the judgment result is "conforming", the point is 3, when it is "Partial conformance", it is 1, and when it is "non-conforming", it is 0. If it is not applicable, nothing should be entered in the space.

Procedure-(4):

Total value is calculated (There is no display). Please calculate total value at longhand.
The full marks value in case of all the correspondences of the item (When evaluating it) becomes 69 points.
This total value is made a molecule, and the integral value in which 100 values in which "Values three times the graded number of items" is assumed to be a denominator are multiplied is assumed to be .
"Points in evaluation"

Procedure-(5):

It judges by automatic calculation based on given criterion, and the rank is displayed in "Rank" column.
Please fill in the rank on the rank column at longhand.

Note: When the judgment result is "Partial conformance",it will display "Blank column in the improvement plan"if all the improvement plans are not filled in.
Please confirm all the improvement plans are filled in and check that A, B, C, and D are displayed in "Rank" column.

Procedure-(6):

If there is either "Partial conformance" or "nonconforming", a corrective action plan should be entered in the column of "Improvement Plan", and then select a result of the plan from the pull down menu for the column for "Judgment after Plan" in the same way as the procedure-(1). The space for the score after the plan will have the result automatically in the same way as the procedure-(3).
In case of manual processing, enter the score following the scoring system described in the procedure-(3).

End of explanation

Management frameworks considering ″manufacturing process″ and ″unit process″

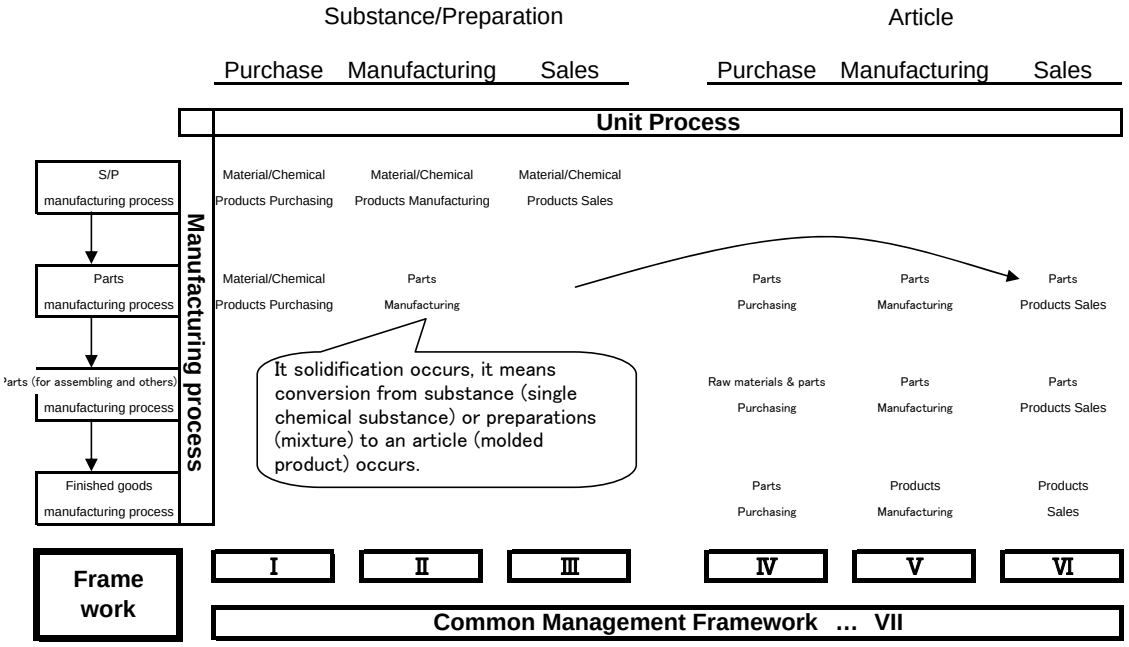
It is rational to establish management methods based on the six “unit processes” for each of the four “manufacturing processes”. The items that must be controlled for the management of the included chemical substances, performed for each of the six unit processes, are known as the six frameworks (I-VI). Those items, which are the same for all policies, planning, etc. comprise the “common management framework (VII)”.

Figure1 shows each manufacturing process and unit process as well as the principle of seven frameworks.

Ⅰ:[Substance (a single chemical substance)/Preparation (a mixture) Purchasing]
Ⅱ:[Substance (a single chemical substance)/Preparation (a mixture) Manufacturing]
Ⅲ:[Substance (a single chemical substance)/Preparation (a mixture) Sales]
Ⅳ:[Article(fabricated products) Purchasing]
Ⅴ:[Article(fabricated products) Manufacturing]
Ⅵ:[Article(fabricated products) Sales]
Ⅶ:Common Management Framework(All companies are objects. :It has checked it.)

[ ] indicated a unit process.

Figure1 Each manufacturing process and unit process as well as the principle of seven frameworks



<Supplement> 1.

According to Figure 1, the following is an explanation with a specific example to show you in which frame work you will be.

The company has a manufacturing process' in which electronic parts are soldered to printed circuit boards after purchasing printed circuit boards, electronic parts such as capacitors, and solders.

Solders: Because electronic parts are soldered to printed circuit boards, there is a process of ″Materials /Chemical Products Purchasing″ of the ″Original Component Manufacturing Process ″ (framework I. ″Framework″ omitted hereafter), and ″Original Component Manufacturing″ of the ″Original Component Manufacturing Process″ (Ⅱ) is also applied.

Electronic parts and printed circuit boards: ″Original Component Purchasing,″ ″Parts Assembly,″ and ″Products Sales (includes cases where the parts are handed over to the next process)″ of the ″Parts Manufacturing Process″ (Ⅳ, Ⅴ, Ⅵ respectively) are applied.

In the example above, frameworks I, II, IV, V, VI, and the Common Management Framework Ⅶ must be covered in the management. Also, in addition to ″soldering,″ when display inks and adhesives are incorporated into the equipment (articles) after hardening them in the manufacturing processes, it is important to correctly acknowledge that these are the ″Original Component Manufacturing Process″ (conversion process into articles).

<Supplement> 2.

Figure 2 shows the overall flow in the supply chain from the upstream companies (the materials manufacturers) to the downstream company (a set manufacturer) for the specific example provided by personal computers.

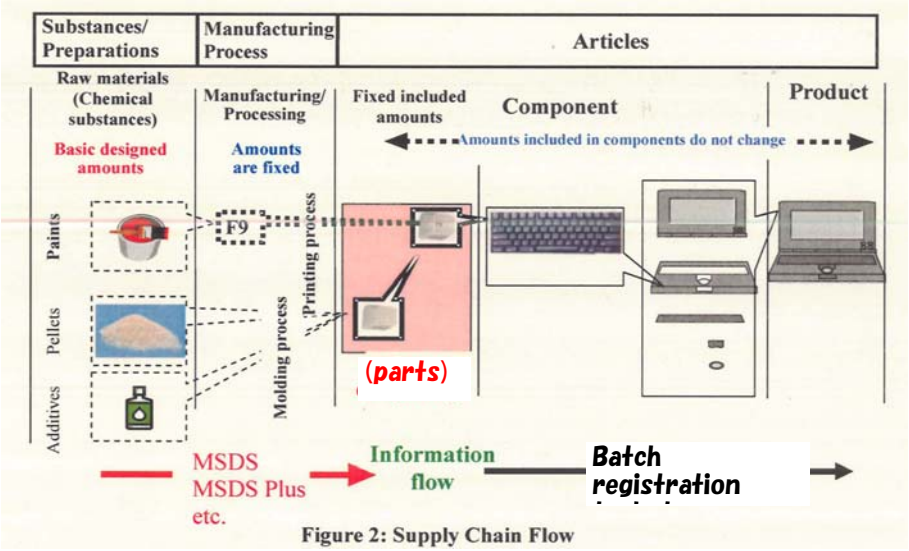


Figure 2: Supply Chain Flow

Date / /

Supplier's Name : (Your company's name)

Supplier's code :

Company's Name*2: (Manufacturer)

Division's name*3:

Self-evaluation sheet for supplier of environmental management

Alps Electric requests its suppliers to take actions according to the action item list described in "Guidelines for Management of Chemical Substances in Products" issued by JGPSSI (Green Procurement Survey Standardization Initiative) in April 3, 2008 as a requirement regarding Control System of Chemical Substances Contained in Products for green procurement.

Please refer to "Guidelines for Management of Chemical Substances in Products" by JGPSSI and implement selfchecking about your green procurement status by filling in the self-evaluation check sheet in the appendix.

When you fill in the self-evaluation sheet, refer to the entry method in the another page of the "Explanation and procedure".

Indicate all the standards that you are certified to by changing ☐ to.

☐ ISO14001	Date of Original Approval : / / [D/M/Y]	Date of Last Revision : / / [D/M/Y]	Certification body:	Registration NO:
☐ ISO9001	Date of Original Approval : / / [D/M/Y]	Date of Last Revision : / / [D/M/Y]	Certification body:	Registration NO:
☐ ISO/TS16949	Date of Original Approval : / / [D/M/Y]	Date of Last Revision : / / [D/M/Y]	Certification body:	Registration NO:

☐ The certifications mentioned above have not been acquired.

■ Please fill in the date on which the supplier completed the self-evaluation sheet. (Completion date: / / [D/M/Y])

■ Check all the applicable items of "Management Framework". For the details, refer to "Explanation and procedure of management frameworks" in the appendix.

- ☐ I :[Substance (a single chemical substance)/Preparation (a mixture) Purchasing]
- ☐ II:[Substance (a single chemical substance)/Preparation (a mixture) Manufacturing]
- ☐ III:[Substance (a single chemical substance)/Preparation (a mixture) Sales]
- ☐ IV:[Article(fabricated products) Purchasing]
- ☐ V:[Article(fabricated products) Manufacturing]
- ☐ VI:[Article(fabricated products) Sales]
- ☑ VII:[Common Management Framework](All companies are objects. :It has checked it.)

*1: This check sheet is prepared by Alps Electric for your submission in accordance with the action item list in "Guidelines for Management of Chemical Substances in Products" issued by JGPSSI.(URL of "JGPSSI Joint Industry Guid(JIG)" → http://home.jeita.or.jp/eps/)

*2: Enter the name of the company subject to this self-evaluation.
(If you are a manufacturer, enter your name.) (If you are a trading company, enter the manufacturer's name who actually manufactures the products to be delivered to)

*3: Enter the name of the factory subject to this self-evaluation.

Self-evaluation sheet for supplier of environmental management

Version 2.1 May 17, 2010

X: to be evaluated
0: applicable to you (automatically displayed) Refer to "Explanation and procedure".)

Action Items	Action Details	Additional Explanations	Management Framework I	II	III	IV	V	VI	VII	Evaluation	Evidence (facts, document names etc) (Enter action details and areas of insufficiency)	Score	Improvement program	Evaluation after improvemen
1. Policy	Declare items to be dealt with in management of chemical substances in products.	(1) Measures dealing with management of chemical substances in products shall include the following related legislation in accordance with these guidelines, and development of a system for management of chemical substances in products. (2) It is important that policies incorporating approval by managers shall be well-known and understood by related personnel. (3) It is important that policies are periodically reviewed and maintained. (4) Methods used for declaration of policy shall include explanations of policy to groups of related personnel, publication of policy on bulletin boards etc, and writing policy on cards for distribution (5) When developing structures for quality management and environmental management etc, existing structures may be employed to implement management to satisfy the action items shown in these guidelines.							× 0	*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable
2. Planning														
2.1 Definition of Management Criteria	Management criteria to be followed shall be clarified based on legislation and industry criteria related to management of chemical substances in products, and conveyed to related corporate units.	(1) Legislation includes legislation which must be followed by the customer. (2) Industry criteria are voluntary criteria determined by the industry. (3) Maintenance and management on information related to the most recent legislation and industry criteria is important. (4) It is important to verify that information transmitted to related corporate units is understood and is translated into the necessary action. (5) With sub-contracted manufacture as well, it is important to understand legislation to be followed, and to clarify company management criteria.							× 0	*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable
2.2 Definition of Scope of Management	'Organizations', 'business', 'chemical substances', 'constituent materials', 'processes', and 'products' etc shall be clarified as the scope of application of management criteria for chemical substances in products.	(1) Constituent materials refer to raw materials, parts, and subsidiary materials comprising the product. (2) In some cases, management of information on chemical substances in products (OUT information) is concentrated upstream in the supply chain, and measures suited to the nature of the manufacturing process are necessary. (3) Processes also include sub-contractors and original equipment manufacturers. (4) The scope of application may differ with the legislation. For example, products may be exported, or they may be limited to the domestic market.							× 0	*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable
2.3 Establishment of Objectives & Planning for Implemented Processes	Objectives and plans for management of chemical substances in products shall be prepared. Objectives and plans shall be revised as necessary.	(1) Clarification of the state of progress of objectives and plans. Objectives and plans require modification depending on their state of progress. (2) Even if objectives have been achieved (e.g. response to EU RoHS directives complete), response is still required for maintenance and management, and new legislation and industry criteria.							× 0	*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable
2.4 Definition of Organizational System, Responsibility & Authority	Rights and responsibilities for management of chemical substances in products shall be clarified.	(1) A number of methods are available for clarification, for example, rules for chemical substances in products, and organization charts. (2) It is important to clarify the scope of rights and responsibilities for sub-contractors and original equipment manufacturers as well. (3) In organizations for which 'clarification of the scope of management' is required, it is important to identify the information necessary for management of chemical substances in products, and to convey and share that information.							× 0	*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable

Action Items	Action Details	Additional Explanations	Management Framework I	II	III	IV	V	VI	VII	Evaluation	Evidence (facts, document names etc) (Enter action details and areas of insufficiency)	Score	Improvement program	Evaluation after improvemen
3. Implementation & Management														
3.1 Design and Development														
3.1.1 Design for Manufacture of Substances/Preparations	When manufacturing substances/preparations, information on chemical substances in raw materials shall be verified, and products and manufacturing processes shall be designed to satisfy management criteria. Specify specifications of purchased products if necessary.	(1) When constituent materials are selected not only by the design section, but also by the company, a 'design function' is implied, and this action item is 'Applicable'. (2) Included content (upper limit values) for managed chemical substances are determined from legislation and industry criteria related to products subject to management. (3) Purchasing and procurement conditions, manufacturing processes, manufacturing conditions, inspection and shipping conditions etc are determined such as to satisfy management criteria for the product, and in consideration of chemical substances in raw materials and subsidiary materials, and chemical substances added, created, and removed in processes. (4) Manufacturing conditions include prevention of incorrect use, admixture, and contamination, and appropriate management of reaction processes. (5) It is important to verify at each stage (e.g. testing, prototype manufacture, mass production) in the design and development stage. (6) The results of design and development are shown in specifications, drawings, manufacturing specifications, work specifications, and manuals etc. (7) When constituent materials are separated by the customer, specifications and management criteria etc are determined in discussion with the customer. (8) Use of MSDS and MSDSplus etc is recommended for verification of information on chemical substan in substances/preparations.	×	×						*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable
3.1.2 Design for Manufacture of Articles Using Substances/Preparations	When manufacturing articles from substances/preparations, information on chemical substances in raw materials shall be verified. Any possible changes in concentration and type of contained chemical substances in processes shall be understood. Furthermore, the product shall be verified as conforming to the management criteria.	(1) Surface processes such as plastics molding, plating, painting, and printing, and fusion processes such as soldering and gluing, are examples of the manufacture of articles from substances/preparations. In the case of gluing, for example, there is a possibility that changes may occur in the concentration and type of contained chemical substances, and care is therefore required. (2) In many cases, a process is conducted simultaneously with the process of manufacture of a new article from an existing article, and care is required to ensure that action items (3.1.3) related to design and development are not missed. (3) When manufactured articles are supplementary to substances/preparations, it is important to verify information on chemical substances contained in those substances/preparations. For example, coolant, grease, lubricating oil, rust preventative oil. (4) Refer to 3.1.1 (1)-(8).	×	×						*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable
3.1.3 Design for Manufacture of Articles Using Articles	When manufacturing new articles from existing articles, information on chemical substances in articles (eg parts), and conformance of the product to the management criteria, shall be verified.	(1) Processes such as assembly of parts, and machining of plastic and metal original components, are examples of the manufacture of new articles from existing articles. (2) When gluing and soldering etc, articles are manufactured simultaneously using substances/preparations, and care is required to ensure that action items (3.1.2) related to design and development for the same process are not missed. (3) The use of methods for transmission of information such as the AIS and JGP files, or the JAMA/JAPIA integrated data sheet, is recommended for verification of information on chemical substances in articles. (4) Refer to 3.1.1 (1)-(7). Not including responses related to chemical reactions. (5) Refer to 3.1.2 (3).				×	×			*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable
3.2 Purchase Management														
3.2.1 Verification and Acquisition of Chemical Substances in Products Information	Information on the chemical substances in purchased products (IN information) shall be acquired, verified that it contains the necessary details, and that it is compatible with the management criteria. For new products and changed products, acquisition and verification of information on chemical substances in products in accordance with the management criteria shall be complete prior to commencing mass production.	(1) Information on chemical substances in products covers inclusion or not in substances subject to management, the contained amount and concentration, and use etc. (2) When the purchased product is a substance/preparation, MSDS and MSDSplus etc are available as means of obtaining information on the contained chemical substances. (3) When the purchased product is an article, AIS and JGP files, or the JAMA/JAPIA integrated data sheet, are available as means of obtaining information on the contained chemical substances. (4) Since substances subject to management may vary with use, it is desirable that the other party be informed of use when making inquiries. (5) The CAS number, or names, numbers, and symbols etc are used in identification of substances subject to management.	×			×				*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable

Action Items	Action Details	Additional Explanations	Management Framework I	II	III	IV	V	VI	VII	Evaluation	Evidence (facts, document names etc) (Enter action details and areas of insufficiency)	Score	Improvement program	Evaluation after improvemen
3.2.2 Verification of Supplier Management Status	When selecting a new supplier, the status of management of chemical substances in the supplier's products shall be verified. When continuing with an existing supplier, reconfirmation shall be conducted as necessary. Measures for verification results shall be fixed. Supplier items to be verified, criteria, frequency, and method etc may be set in relation to risk level.	(1) Evaluation of the supplier risk level is based on acquired content information, the possibility of unintended inclusion (presence or absence of reaction processes, parallel production, constituent materials etc), the status of compatibility with these guidelines, the presence or absence of an environmental/quality management system, and past performance etc. (2) Verification of the status of management of chemical substances in products is based on documentation and visits etc. (3) Examples of measures to deal with results of verification are acceptance, continuing transactions, requests for improvement, guidance, discontinuing transactions. **(4) Evaluation is done based on the check list and others.** **(5) The company provides necessary information to suppliers in the second and subsequent tiers and keeps receipt records.** **(6) The company checks purchase lists (including investigation result) from the supplier in the second tier.** **(7) The audit above includes a description to require system audit of suppliers in the second and subsequent tiers.**	×			×				*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable
3.3 Acceptance Verification	When accepting purchased products, such products shall be verified as compatible with company management criteria. Items to be verified, criteria, method, and frequency etc may be selected in relation to the risk level of the purchased products.	(1) It is important that company acceptance procedures are clarified in response to risk in management of chemical substances in products. (2) Risk level for purchased products must be evaluated in terms of such factors as the degree of possibility of inclusion in chemical substances subject to management, supplier management level, past performance, and whether or not the purchased product is recycled materials. (3) Examples of items able to be clarified with acceptance procedures. a) Method of evaluation (comparison of actual items and information, measurement by company as necessary etc) b) Method of recording evaluation results c) Method of managing identification (4) With purchasing by multiple companies (multi-sourcing), it is necessary to implement methods of verification appropriate to each supplier. **(5)The standard to display the status of goods (e.g. before inspection, passed or nonconforming) is clarified and it is displayed on a product as well as a place for precise control.**	×			×				*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable
3.4 Process Management														
3.4.1 Preventing Incorrect Use, Admixture, and Contamination	Implementation of measures to prevent incorrect use, admixture and contamination of chemical substances shall be subject to management.	(1) In practice, it is possible to separate processes, and equipment and jigs etc, into those requiring priority management, and others. Processes requiring priority management are those in which chemical substances having management criteria are used, and it is important to manage these separately from other general processes. If processes requiring priority management are not separated, thorough identification, and appropriate procedures for changeover, are required. (2) In processes requiring priority management, it is important that this be extended to storage of materials, semi-finished products, and finished products, and to warehouses. (3) A minimal response may be sufficient when processes requiring priority management are not within the scope of management, however verification is necessary. (4) When using recycled materials, it is important to understand the degree of risk, determine the management method, and proceed on this basis. **(5)There is a system in which conformity of auxiliary materials and jig/tools is to be checked and the system is effective. Their expiration dates are defined for precise control.** **(6)The standard to display the status of goods (e.g. before inspection, passed or nonconforming) is clarified and it is displayed on a product as well as a place for precise control.**		×			×			*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable
3.4.2 Appropriate Management of Reaction Processes	Management shall ensure that residues do not remain, or are not created, when management criteria for chemical substances subject to management are exceeded, due to changes in constituents and concentrations.	(1) Identify processes for possible changes in the constituents of chemical substances such as oxidation, reduction, and reaction, and changes in concentration of chemical substances due to evaporation and vaporization, and implement the appropriate management. (2) The process of changing from a substance/preparation to an article may not be associated with any changes in chemical composition, and care is therefore required. For example, in the process of firing paint, the low molecular weight component of the paint film vaporizes, and in the process of the resin hardening, a monomer, hardener, and hardening initiator contribute to the hardening reaction, bonding with, and being incorporated in, the hardened resin, and forming a high-polymer compound with associated changes in chemical composition. (3) If an organization manufacturing articles from substances/preparations is unable to understand the change in chemical composition, it will be necessary to ask the raw materials supplier.		×						*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable

Action Items	Action Details	Additional Explanations	Management Framework I	II	III	IV	V	VI	VII	Evaluation	Evidence (facts, document names etc) (Enter action details and areas of insufficiency)	Score	Improvement program	Evaluation after improvemen
3.4.3 Management of Sub-contractors	Management of manufacturing sub-contractors shall be appropriate.	(1) Sub-contracted manufacture should be managed through the structure for management of chemical substances in products within the sub-contractor's organization. The sub-contractor must be informed of the necessary details of process management, and the management system periodically verified. (2) When the sub-contractor is supplied with the necessary raw materials for manufacture, or when the sub-contractor procures the materials, management is required which is appropriate to the format of sub-contracted manufacture, and the risk.		×			×			*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable
3.5 Shipping Verification	Products shall be shipped after verification that all specified items have been checked, including cases of implementation during acceptance, or during a process.	(1) Examples of verifiable items. a) Accepted raw materials and parts used in manufacture. b) Manufacture with set manufacturing conditions, equipment, and work methods. c) Appropriate measures implemented when non-conformance occurs. d) Storage of history when changes occur. e) Verification by sampling as necessary. (2) Examples of means of verification. a) Identification tags to provide an understanding of the status of management within processes. b) A production management system to provide an understanding of management data within processes. (3) Management is necessary for product warehouses and external distribution warehouses to prevent incorrect shipment and contamination. **(4)The standard to display the status of goods (e.g. before inspection, passed or nonconforming) is clarified and it is displayed on a product as well as a place for precise control.**			×			×		*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable
3.6 Traceability	Product traceability shall be reliable.	(1) Traceability (history management) provides an understanding of constituent materials, timing and location of manufacture, chemical substances contained in constituent materials, and information on chemical substances contained in manufactured products, in terms of risk to permit identification of the scope of any non-conformance occurring, and provision of information when a change occurs, and provides a structure for the rapid and smooth use, disclosure, and transmission of that information. (2) In processes, it is important to control management information, information on abnormalities, and information on changes in causal factors etc. (3) It is important to implement identification and isolation in response to risk.							× 0	*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable
3.7 Change Control	Rules for control of changes in management of chemical substances in products shall be determined, and the following details clarified. (1) Elemental changes having possible effects on chemical substances in products. Changes and additions in suppliers, changes in purchased items, and changes in processes etc (including changes not only in the company such as manufacturing conditions, molds, and jigs, but changes in sub-contractors etc). (2) Company internal and external procedures. Details to be verified, means of verification, approval processes etc. (3) Methods of transmitting information inside and outside the company. Recording changes, notification, identification information etc.	(1) Examples of details to be verified are changes in chemical substances in products, and compatibility with criteria. (2) It is necessary to ensure that information on changes in suppliers is reliably obtained. (3) Verify compatibility with criteria before making changes. (4) Provide updated information on chemical substances in products as soon as possible following any changes. Provide the customer with product lot information and identification information as necessary. (5) It is difficult to provide prior notification when changes occur in chemical substances in products (products sold via catalog, general market) delivered to the general public, and it is important to identify products by methods such as handling as separate products.							× 0	*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable

Action Items	Action Details	Additional Explanations	Management Framework I	II	III	IV	V	VI	VII	Evaluation	Evidence (facts, document names etc) (Enter action details and areas of insufficiency)	Score	Improvement program	Evaluation after improvemen
3.8 Non-conformity Response	Rules for measures to deal with non-conforming products (emergency measures, determination of causes, preventing reoccurrence, horizontal deployment etc) shall be determined.	(1) Examples of emergency measures are identification of the scope of influence (identification of the affected lot, equipment involved etc), containment (halting shipping, halting production), communication within the company, communication to customers, communication to persons responsible for management of chemical substances in products, and managers, as necessary (escalation). (2) Following emergency measures, it is necessary to identify the cause, and determine and implement the appropriate measures to prevent reoccurrence. (3) Horizontal deployment is the deployment not only within one's own section, but also to related sections (within the group, related companies) as necessary. (4) It is desirable that preventative measures be developed to prevent problems before they occur. For example, periodic measurement of the concentration of the lead in solder tanks as part of process management.							× 0	*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable
4. Management of Human Resources, Documentation, and Information														
4.1 Training	Details of training required for management of chemical substances in products, and related persons shall be identified and implemented.	(1) Examples of details of training are details of business covered, concepts of management of chemical substances in products, related legislation, industry standards, management of chemical substance risk, efforts by industry organizations, cases of use and contamination of managed substances, and methods of analysis. (2) It is important to verify that none of the necessary items have been missed. **(3)Annual plans are made for training & education.** **(4)General and specific rules about management of chemical substances contained in products are being provided.**							× 0	*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable
4.2 Management of Documentation and Records	Rules related to management of chemical substances in products shall be documented, maintained, and managed. Records of results of operation shall be prepared and stored appropriately.	(1) It is important for the company to prepare a system for management of chemical substances in products, and a system of related documentation (document structure diagram). (2) It is important that documentation content is reviewed as required, and that the most recent version is available for viewing as necessary. (3) Examples of documents are policy documentation, manuals for management of chemical substances in products, related procedure documentation for management of chemical substances in products, rules, standards, criteria, norms, procedure documentation, document structure diagrams. (4) Examples of records are information on contained chemical substances, acceptance verification data, shipping verification data, internal audit results, survey data, and analysis data.							× 0	*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable
4.3 Communication (Provision of Information)	Information on chemical substances in products (OUT information) shall be provided appropriately to suppliers. Appropriate response shall be provided to enquiries on the management system for chemical substances in products.	(1) Use of MSDS and MSDSplus is recommended when substances/preparations are supplied, and AIS, JGP files, and the JAMA/JAPIA integrated data sheet, when articles are supplied. (2) Clarify contracts with customers and purchasing manufacturers for handling of confidential information.							× 0	*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable

Action Items	Action Details	Additional Explanations	Management Framework I	II	III	IV	V	VI	VII	Evaluation	Evidence (facts, document names etc) (Enter action details and areas of insufficiency)	Score	Improvement program	Evaluation after improvemen
5. Performance (State of Implementation) Evaluation and Improvement	Status of management of chemical substances in products shall be verified periodically through an internal audit, and items requiring improvement shall be improved. Results of verification shall be reported to managers etc.	(1) It is necessary to determine implementation procedures and implement an internal audit etc. (2) It is important that the person in charge of the internal audit implements the necessary training for management of chemical substances in products. (3) It is important that evaluation of, and improvements in, the status of implementation employ methods appropriate to the scale of the implementing organization.							× 0	*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable
6. Management Review (Correction by Management)	When the manager determines, from the results of an internal audit, that there are problems with non-conformance, improvements shall be implemented and reflected in the next objective.								× 0	*Conforming *Partial conformance *Non-conforming *Not applicable	**Rules:** **Operation:**			*Conforming *Partial conformance *Non-conforming *Not applicable
Rank	**First**		**< Criterion >** **A rank: 100 points** **B rank: There is an improvement plan ..80-99 points.. without incompatible.** **C rank: There is an improvement plan ..50-79 points.. without incompatible.** **D rank: 49 points or less suitable are combined, exist, and it**								**The 1st points in evaluation** **100 point full marks conversion value**	Point	**Evaluation point after it improves it** **100 point full marks conversion value**	
	After improve													

Appendix 3: List of Environmentally Hazardous Substance (Group)

	Environmentally hazardous substances	Scope applicable	
1	ozone depleting substances	Electrical	Automotive
2	greenhouse substances	Electrical	Automotive
3	chloroform	Electrical	Automotive
4	glycol ether and its acetates	Electrical	Automotive
5	organic brominated solvents	Electrical	Automotive
6	benzene	Electrical	Automotive
7	aldehyde compounds	Electrical	Automotive
8	organic chlorinated solvents	Electrical	Automotive
9	cadmium and its compounds	Electrical	Automotive
10	mercury and its compounds	Electrical	Automotive
11	lead and its compounds	Electrical	Automotive
12	hexavalent chromium compounds	Electrical	Automotive
13	lead, mercury, cadmiun, and hexavalent chromium in wrapping material	Electrical	Automotive
14	organostannic compounds	Electrical	Automotive
15	beryllium and its compounds	Electrical	Automotive
16	asbestos	Electrical	Automotive
17	specified brominated flame retardants	Electrical	Automotive
18	polychlorinated naphthalene	Electrical	Automotive
19	poly chlorinated biphenyl : PCB poly chlorinated terphenyls : PCT	Electrical	Automotive
20	chlorinated paraffins	Electrical	Automotive
21	azo dye / pigment	Electrical	Automotive
22	radioactive substances	Electrical	Automotive
23	xylene	Electrical	Automotive
24	toluene	Electrical	Automotive
25	antimony and its compounds	Electrical	Automotive
26	chromium and its compounds（except hexavalent chromium compounds）	Electrical	Automotive
27	selenium and its compounds	Electrical	Automotive
28	nickel and its compounds	Electrical	Automotive
29	arsenic and its compounds	Electrical	Automotive
30	bismuth and its compounds	Electrical	Automotive
31	organophosphorus compounds	Electrical	Automotive
32	polyvinyl chloride	Electrical	Automotive
33	brominated flame retardants	Electrical	Automotive
34	phthalic esters	Electrical	Automotive
35	perfluorooctane sulfonate and its related substances	Electrical	Automotive
36	polycyclic aromatic hydrocarbons and its mixtures	Electrical	Automotive
37	cobalt and its compounds	Electrical	Automotive
38	1-tert-butyl-3,5-dimethyl-2,4,6-trinitrobenzene, 5-tert-butyl-2,4,6-trinitro-m-xylene(musk xylene)	Electrical	Automotive
39	pitch, coal tar, high temp.	Electrical	Automotive
40	mineral fibres (natural or synthetic) except continuous filament fibres	Electrical	Automotive
41	2,4-dinitrotoluene	Electrical	Automotive
42	biocidal coatings / biocidal additives	Electrical	Automotive
43	acrylamide	Electrical	Automotive
44	boric acid	Electrical	Automotive
45	disodium tetraborate, anhydrous	Electrical	Automotive
46	tetraboron disodium heptaoxide hydrate	Electrical	Automotive
47	volatile organic compounds	Electrical	Automotive
48	acetamide	--	Automotive
49	acetamide, n-methyl-	--	Automotive
50	acetonitrile	--	Automotive
51	acrylonitrile	--	Automotive
52	ammonium perchlorate	--	Automotive
53	aniline and its salts	--	Automotive
54	aromatic amines	--	Automotive
55	barium compounds (organic or water soluble)	--	Automotive
56	benzenamine, N-phenyl-, reaction products with styrene and 2,4,4-trimethylpentene	--	Automotive
57	1,4-benzenediamine, N,N' -mixed Ph and tolyl derivs	--	Automotive
58	2-benzothiazolesulphenamide, N, N-dicyclohexyl-	--	Automotive
59	butadiene, 1,3 -	--	Automotive
60	chlorinated or brominated dioxins or furans	--	Automotive

	Environmentally hazardous substances	Scope applicable	
61	colophony (rosin)	--	Automotive
62	copper	--	Automotive
63	cyclohexane	--	Automotive
64	2-cyclohexen-1-one, 3,5,5-trimethyl-	--	Automotive
65	cyclopentasiloxane, decamethyl-	--	Automotive
66	cyclotetrasiloxane, heptamethylphenyl-	--	Automotive
67	cyclotetrasiloxane, octamethyl-	--	Automotive
68	decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl)ester	--	Automotive
69	dimethylformamide (N,N-dimethylformamide)	--	Automotive
70	dodecachloropentacyclo 1, 3, 4-metheno-1H-cyclobuta(cd)pentalene, mirex	--	Automotive
71	epichlorohydrin (1-chloro-2,3-epoxypropane)	--	Automotive
72	1-ethenylpyrrolidin-2-one (2-Pyrrolidione, 1-ethenyl-)	--	Automotive
73	fatty acids, C6-19-branched, zinc salts	--	Automotive
74	fluorotelomers	--	Automotive
75	2-furancarboxaldehyde	--	Automotive
76	hexanedioic acid, bis(2-ethylhexyl) ester	--	Automotive
77	hexanoic acid, 2-ethyl-	--	Automotive
78	hydrazine	--	Automotive
79	methylacrylamidomethoxy-acetate	--	Automotive
80	1-methylpyrrolidin-2-one(2-pyrrolidinone, 1-methyl)	--	Automotive
81	chlorinated flame retardants	--	Automotive
82	2-naphthalenol, 1-[(4-methyl-2-nitrophenyl)azo]-	--	Automotive
83	nitrites	--	Automotive
84	4-nitrobiphenyl and its salts	--	Automotive
85	nitrocellulose	--	Automotive
86	N-nitrosamines	--	Automotive
87	nonylphenol	--	Automotive
88	nonylphenol ethoxylates	--	Automotive
89	7-oxa-3,20-diazadispiro[5.1.11.2]-heneicosan-21-one, 2,2,4,4-tetramethyl-	--	Automotive
90	perchlorates	--	Automotive
91	PFOA and its salts, perfluorooctanoic acids C8F15O2X (X = H, NH4, and metal salts)	--	Automotive
92	phenol	--	Automotive
93	phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethlethyl)-	--	Automotive
94	phenol, 2,4,6-tris(1,1-dimethylethyl)-	--	Automotive
95	phenol, 2-(5-chloro-2H-benzotriazol-2-yl)-4,6-bis(1,1'-dimethylethyl)-	--	Automotive
96	phenylendiamines and its salts	--	Automotive
97	phosphonium, triphenyl(phenylmethyl)-, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1)	--	Automotive
98	polyamine curing agents	--	Automotive
99	silica, crystalline	--	Automotive
100	siloxanes and silicones	--	Automotive
101	sodium azide	--	Automotive
102	vinyl benzenee	--	Automotive
103	styrene oxide (epoxy styrene)	--	Automotive
104	thallium and its compounds	--	Automotive
105	thioperoxydicarbonic diamide([(H2N)C(S)]2S2), tetramethyl-	--	Automotive
106	vanadium(V) oxide	--	Automotive
107	vinyl chloride	--	Automotive

Appendix 4-1: List of Environmentally Hazardous Substance Control Standard (For Electric)

	Environmentally hazardous substances	Report object	Control level	Tolerance (threshold)	Object, Usage, etc.
1	ozone depleting substances	Chemically formed product / Product	Prohibited	1000ppm	Use prohibition in manufacturing process including supplier. Liquid chemically formed product such as cleaner, adhesive, lubricant, mold releaser. Product using ozone-depleting substance. Treatments such as cleaning and foaming. Applies to foaming cushioning material using ODC.
2	greenhouse substances	Chemically formed product	Prohibited	1000ppm	The substances listed in Appendix5, and the substances whose GWP (100 years) is 1500 or large must not be used (except when it is used as cooling medium). Liquid chemically formed product such as cleaner, adhesive, lubricant, mold releaser.
			Controlled	unintended inclusion 1000ppm	GWP 100 year value of less than 1500. Thin film forming application such as semiconductor, liquid crystal rinsing, etching gas
3	chloroform	Chemically formed product	Prohibited	1000ppm	All applications Liquid chemically formed product such as cleaner, adhesive, lubricant, mold releaser.
		Article	Controlled	unintended inclusion 1000ppm	All applications
4	glycol ether and its acetates	Chemically formed product	Prohibited	1000ppm	With regards to proven reproductive toxicants. Liquid chemically formed product such as cleaner, adhesive, lubricant, mold releaser.
			Controlled	unintended inclusion 1000ppm	All applications excepting above. Liquid chemically formed product such as cleaner, adhesive, lubricant, mold releaser.
5	organic brominated solvents	Chemically formed product	Prohibited	1000ppm	With regards to proven reproductive toxicants. Liquid chemically formed product such as adhesive, lubricant, mold releaser.
			Controlled	unintended inclusion 1000ppm	All applications excepting above.
6	benzene	Chemically formed product	Prohibited	10000ppm	Liquid chemically formed product such as cleaner, adhesive, lubricant, mold releaser.
		Article	Prohibited	100ppm	Liquid chemically formed product such as cleaner, adhesive, lubricant, mold releaser. All applications excepting fuel constituent.
7	aldehyde compounds	Chemically formed product	Controlled	unintended inclusion 15ppm	Solder, or resin raw material, etc.
		Article	Prohibited	15ppm	All applications excepting such as emitted substance from polymer components. Fiber in human body contact part of product made as function to touch body continuing. Antiseptic of wood
			Controlled	unintended inclusion 1000ppm	Emitted substance from polymer components(Molding resin material, Principal ingredient of adhesive, etc.)

	Environmentally hazardous substances	Report object	Control level	Tolerance (threshold)	Object, Usage, etc.
8	organic chlorinated solvents	Chemically formed product	Prohibited	1000ppm	All applications Liquid chemically formed product such as cleaner, adhesive, lubricant, mold releaser.
		Article	Prohibited	1000ppm	carbon tetrachloride, and 1,1,1-trichloroethane
			Controlled	unintended inclusion 1000ppm	excepting carbon tetrachloride, and 1,1,1-trichloroethane
9	cadmium and its compounds	Article	Prohibited	5ppm	plastic, ink, paint, rubber
				100ppm	All applications other than packaging parts, surface treatment, photographic film, fluorescent lamps, electric contact such as DC motor contact, switch, temperature fuse, pigment of glass and glass paint, solder (20 ppm or greater), fluorescent matter, light conductive cell resistor, resistor paste, and Ni-cd battery., etc.
			Controlled	unintended inclusion 100ppm	Table1, Table2 Applications exempted from the prohibition in RoHS Article, and in ELV.
10	mercury and its compounds	Article	Prohibited	1000ppm	All applications excepting Table1, Table2 Applications exempted from the prohibition in RoHS Article, and in ELV.
			Controlled	unintended inclusion 1000ppm	Table1, Table2 Applications exempted from the prohibition in RoHS Article, and in ELV.
11	lead and its compounds	Article	Prohibited	100ppm	plastic, ink, paint, rubber
				unintended inclusion 1000ppm	All applications excepting Table1, Table2 Applications exempted from the prohibition in RoHS Article, and in ELV.
			Controlled	unintended inclusion 1000ppm	Table1, Table2 Applications exempted from the prohibition in RoHS Article, and in ELV. *Applies to lead in high melting temperature type solders for internal connections (i.e. lead-based alloys containing 85% by weight or more lead), as long as these solders are not exposed through external use.
12	hexavalent chromium compounds	Article	Prohibited	1000ppm	All applications. Pigment, surface treatment, etc.
13	lead, mercury, cadmiun, and hexavalent chromium in wrapping material	Chemically formed product / Article	Prohibited	Sum of Pb, Cd, Hg, Cr (VI): 100 ppm or less. However, cadmium in plastics: less than 5 ppm	Product packaging carton, returnable case, tray, reel, magazine, stick, sheet, wrap, bag, step, cardboard, paint, ink, tape, binding band, label, cushioning material, etc.
14	organostannic compounds	Article	Prohibited	1000ppm	With regards to triphenyltin compounds, tributyltin compounds, and other tri-subtituted organiostannic compounds, this status applies to the use of all applications such as paint, ink, fungicide, PVC stabilizer, etc.
			Prohibited	tin element of 1000ppm or less in the product	Use of all Dibutyl tin compounds and Dioctyl tin compounds for which the tin element exceeds 0.1wt% is prohibited.
			Controlled	unintended inclusion 1000ppm	Regarding other organostannic compounds, this status applies to all applications

	Environmentally hazardous substances	Report object	Control level	Tolerance (threshold)	Object, Usage, etc.
15	beryllium and its compounds	Article	Prohibited	1000ppm	Applies to all non-controlled applications. Alloys and ceramics
			Controlled	unintended inclusion 1000ppm	Applies to beryllium copper with less than 3% beryllium
16	asbestos	Article	Prohibited	1000ppm	Applies to all applications. Insulations materials and bulking agents, etc.
17	specified brominated flame retardants	Article	Prohibited	1000ppm	All applications. PBB, PBDE. Flame retardants for plastic, etc.
18	polychlorinated naphthalene	Article	Prohibited	1000ppm	Applies to all applications such as for lubrication oil and paint, etc. Ones with chlorine number greater than 3.
19	poly chlorinated biphenyl : PCB poly chlorinated terphenyls : PCT	Article	Prohibited	1000ppm	Applies to all applications. For oil-immersed tranformers, capacitors, insulation oil and flame retardants, etc.
20	chlorinated paraffins	Chemically formed product	Prohibited	1000ppm	short chain (C10-13,) chlorinated paraffins Applies to all applications.
			Controlled	unintended inclusion 1000ppm	middle chain (C14-17,) chlorinated paraffins Applies to all applications.
		Article	Prohibited	1000ppm	short chain (C10-13,) chlorinated paraffins Applies to all applications.
			Controlled	unintended inclusion 1000ppm	All applications middle chain paraffins(C14-17) and excepting short chain(C14-17).
21	azo dye / pigment	Article	Prohibited	1000ppm	Applies to azo dye having possibility of generating specific amine in Table 3 due to decomposition, being dye in human body contacting part of product made as function to contact human body continually.
			Controlled	unintended inclusion 1000ppm	Applies to all materials that have a part that is not in persistent contact with the human body
22	radioactive substances	Article	Prohibited	unintended inclusion	Applies to all applications. For optical glass and fluorescent substances, etc.
23	xylene	Chemically formed product	Controlled	unintended inclusion 1000ppm	Applies to liquefaction formed product such as cleaner, adhesive, lubricant, mold releaser.
24	toluene	Chemically formed product	Controlled	unintended inclusion 1000ppm	Applies to liquefaction formed product such as cleaner, adhesive, lubricant, mold releaser.
25	antimony and its compounds	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For auxiliary flame retardants, solder compositions, semconductor doping agents, glass, etc.

	Environmentally hazardous substances	Report object	Control level	Tolerance (threshold)	Object, Usage, etc.
26	chromium and its compounds (except hexavalent chromium compounds)	Article	Controlled	unintended inclusion 1000ppm	Applies to applications. For alloy, pigment, glass additive,etc.
27	selenium and its compounds	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For photosensitive matter, pigments, photoelectric cells, solar sells, magnetic core, etc.
28	nickel and its compounds	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For plating, alloy, ferrite, batteries, etc.
29	arsenic and its compounds	Article	Prohibited	1000ppm	arsenic acid, lead (4+) salt applies to the lead compound
			Controlled	unintended inclusion 1000ppm	Applies to all applications excepting arsenic acid, lead (4+) salt. Semiconductor doping agents, compound semiconductors, pigments, glass coloring agents, etc.
30	bismuth and its compounds	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For lead-free solders, resistive elements, etc.
31	organophosphorus compounds	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications except for use of agricultural chemicals and pesticides
32	polyvinyl chloride	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For cable covers, capacitor sleeves, labels, tape, packaging materials
33	brominated flame retardants	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For flame retardants for plastics or printed-wiring boards
34	phthalic esters	Article	Prohibited	1000ppm	Specified phthalic esters (groups Ⅰ & Ⅱ) listed in the table4 must not be used for plastic material whose applications are toys and nursery products.
			Controlled	unintended inclusion 1000ppm	Applies to all applications other than those outlined above and the phtalic esters not specified in table4
35	perfluorooctane sulfonate and its related substances	Article	Prohibited	1000ppm	Applies to all applications. However, the applications described below are excluded; A) Photo resist used in the photolithography processes, or when used as antireflective coating agent B) Photographic coating agent used for film, paper and lithographic plate.
				1μg/m2	When used for textiles and used as coating agent for other materials, it must not be contained beyond 1μg/m2 .
36	polycyclic aromatic hydrocarbons and its mixtures	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. In materials for dye and pigment, preservatives for timber, and insecticides.
37	cobalt and its compounds	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For gas absorbers, wet-and-dry indicators, solid lubricants, plate process aids, dyes for glass, and coloring agents for ceramics, etc.
38	1-tert-butyl-3,5-dimethyl-2,4,6-trinitrobenzene, 5-tert-butyl-2,4,6-trinitro-m-xylene(musk xylene)	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For flavors and fragrances (soap, detergents, creams, perfume, etc.)

	Environmentally hazardous substances	Report object	Control level	Tolerance (threshold)	Object, Usage, etc.
39	pitch, coal tar, high temp.	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For electrode binding agents, etc.
40	mineral fibres (natural or synthetic) except continuous filament fibres	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For insulation material used as a substitute for asbestos
41	2,4-dinitrotoluene	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For organic, synthetic raw materials, etc.
42	biocidal coatings / biocidal additives	Article	Prohibited	1000ppm	Applies to dimethyl fumarate such as for fungicides
			Controlled	unintended inclusion 1000ppm	Applies to all applications excepting dimethyl fumarate.
43	acrylamide	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
44	boric acid	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
45	tetraboron disodium heptaoxide	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
46	tetraboron disodium heptaoxide hydrate	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
47	volatile organic compounds	Chemically formed product	Prohibited	1000ppm	With regards to dichloromethane, trichloroethylene, and chloroform, applies to all applications.
			Controlled	unintended inclusion	Aplies to all applications

Appendix 4-2: List of Environmentally Hazardous Substance Control Standard (For Automotive)

	Environmentally hazardous substances	Report object	Control level	Tolerance (threshold)	Object, Usage, etc.
1	ozone depleting substances	Chemically formed product / Product	Prohibited	1000ppm	Use prohibition in manufacturing process including supplier. Liquid chemically formed product such as cleaner, adhesive, lubricant, mold releaser. Product using ozone-depleting substance. Treatments such as cleaning and foaming. Applies to foaming cushioning material using ODC.
2	greenhouse substances	Chemically formed product	Prohibited	1000ppm	The substances listed in Appendix5, and the substances whose GWP (100 years) is 1500 or large must not be used (except when it is used as cooling medium). Liquid chemically formed product such as cleaner, adhesive, lubricant, mold releaser.
			Controlled	unintended inclusion 1000ppm	GWP 100 year value of less than 1500. Thin film forming application such as semiconductor, liquid crystal rinsing, etching gas
3	chloroform	Chemically formed product	Prohibited	1000ppm	All applications Liquid chemically formed product such as cleaner, adhesive, lubricant, mold releaser.
		Article	Controlled	unintended inclusion 1000ppm	All applications
4	glycol ether and its acetates	Chemically formed product	Prohibited	1000ppm	With regards to proven reproductive toxicants. Liquid chemically formed product such as cleaner, adhesive, lubricant, mold releaser.
			Controlled	unintended inclusion 1000ppm	All applications excepting above. Liquid chemically formed product such as cleaner, adhesive, lubricant, mold releaser.
5	organic brominated solvents	Chemically formed product	Prohibited	1000ppm	With regards to proven reproductive toxicants. Liquid chemically formed product such as adhesive, lubricant, mold releaser.
			Controlled	unintended inclusion 1000ppm	All applications excepting above.
6	benzene	Chemically formed product	Prohibited	10000ppm	Liquid chemically formed product such as cleaner, adhesive, lubricant, mold releaser.
		Article	Prohibited	100ppm	Liquid chemically formed product such as cleaner, adhesive, lubricant, mold releaser. All applications excepting fuel constituent.
7	aldehyde compounds	Chemically formed product	Controlled	unintended inclusion 15ppm	Solder, or resin raw material, etc.
		Article	Prohibited	15ppm	All applications excepting such as emitted substance from polymer components. Fiber in human body contact part of product made as function to touch body continuing. Antiseptic of wood
			Controlled	unintended inclusion 1000ppm	Emitted substance from polymer components(Molding resin material, Principal ingredient of adhesive, etc.)

	Environmentally hazardous substances	Report object	Control level	Tolerance (threshold)	Object, Usage, etc.
8	organic chlorinated solvents	Chemically formed product	Prohibited	1000ppm	All applications Liquid chemically formed product such as cleaner, adhesive, lubricant, mold releaser.
		Article	Prohibited	1000ppm	carbon tetrachloride, and 1,1,1-trichloroethane
			Controlled	unintended inclusion 1000ppm	excepting carbon tetrachloride, and 1,1,1-trichloroethane
9	cadmium and its compounds	Article	Prohibited	5ppm	plastic, ink, paint, rubber
				100ppm	All applications other than packaging parts, surface treatment, photographic film, fluorescent lamps, electric contact such as DC motor contact, switch, temperature fuse, pigment of glass and glass paint, solder (20 ppm or greater), fluorescent matter, light conductive cell resistor, resistor paste, and Ni-cd battery., etc.
			Controlled	unintended inclusion 100ppm	Table1, Table2 Applications exempted from the prohibition in RoHS Article, and in ELV.
10	mercury and its compounds	Article	Prohibited	1000ppm	All applications excepting Table1, Table2 Applications exempted from the prohibition in RoHS Article, and in ELV.
			Controlled	unintended inclusion 1000ppm	Table1, Table2 Applications exempted from the prohibition in RoHS Article, and in ELV.
11	lead and its compounds	Article	Prohibited	100ppm	plastic, ink, paint, rubber
				unintended inclusion 1000ppm	All applications excepting Table1, Table2 Applications exempted from the prohibition in RoHS Article, and in ELV.
			Controlled	unintended inclusion 1000ppm	Table1, Table2 Applications exempted from the prohibition in RoHS Article, and in ELV. *Applies to lead in high melting temperature type solders for internal connections (i.e. lead-based alloys containing 85% by weight or more lead), as long as these solders are not exposed through external use.
12	hexavalent chromium compounds	Article	Prohibited	1000ppm	All applications. Pigment, surface treatment, etc.
13	lead, mercury, cadmiun, and hexavalent chromium in wrapping material	Chemically formed product / Article	Prohibited	Sum of Pb, Cd, Hg, Cr (VI): 100 ppm or less. However, cadmium in plastics: less than 5 ppm	Product packaging carton, returnable case, tray, reel, magazine, stick, sheet, wrap, bag, step, cardboard, paint, ink, tape, binding band, label, cushioning material, etc.
14	organostannic compounds	Article	Prohibited	1000ppm	With regards to triphenyltin compounds, tributyltin compounds, and other tri-subtituted organiostannic compounds, this status applies to the use of all applications such as paint, ink, fungicide, PVC stabilizer, etc.
			Prohibited	tin element of 1000ppm or less in the product	Use of all Dibutyl tin compounds and Dioctyl tin compounds for which the tin element exceeds 0.1wt% is prohibited.
			Controlled	unintended inclusion 1000ppm	Regarding other organostannic compounds, this status applies to all applications

	Environmentally hazardous substances	Report object	Control level	Tolerance (threshold)	Object, Usage, etc.
15	beryllium and its compounds	Article	Prohibited	1000ppm	Applies to all non-controlled applications. Alloys and ceramics
			Controlled	unintended inclusion 1000ppm	Applies to beryllium copper with less than 3% beryllium
16	asbestos	Article	Prohibited	1000ppm	Applies to all applications. Insulations materials and bulking agents, etc.
17	specified brominated flame retardants	Article	Prohibited	1000ppm	All applications. PBB, PBDE. Flame retardants for plastic, etc.
18	polychlorinated naphthalene	Article	Prohibited	1000ppm	Applies to all applications such as for lubrication oil and paint, etc. Ones with chlorine number greater than 3.
19	poly chlorinated biphenyl : PCB poly chlorinated terphenyls : PCT	Article	Prohibited	1000ppm	Applies to all applications. For oil-immersed tranformers, capacitors, insulation oil and flame retardants, etc.
20	chlorinated paraffins	Chemically formed product	Prohibited	1000ppm	short chain (C10-13,) chlorinated paraffins Applies to all applications.
			Controlled	unintended inclusion 1000ppm	middle chain (C14-17,) chlorinated paraffins Applies to all applications.
		Article	Prohibited	1000ppm	short chain (C10-13,) chlorinated paraffins Applies to all applications.
			Controlled	unintended inclusion 1000ppm	All applications middle chain paraffins(C14-17) and excepting short chain(C14-17).
21	azo dye / pigment	Article	Prohibited	1000ppm	Applies to azo dye having possibility of generating specific amine in Table 3 due to decomposition, being dye in human body contacting part of product made as function to contact human body continually.
			Controlled	unintended inclusion 1000ppm	Applies to all materials that have a part that is not in persistent contact with the human body
22	radioactive substances	Article	Prohibited	unintended inclusion	Applies to all applications. For optical glass and fluorescent substances, etc.
23	xylene	Chemically formed product	Controlled	unintended inclusion 1000ppm	Applies to liquefaction formed product such as cleaner, adhesive, lubricant, mold releaser.
24	toluene	Chemically formed product	Controlled	unintended inclusion 1000ppm	Applies to liquefaction formed product such as cleaner, adhesive, lubricant, mold releaser.
25	antimony and its compounds	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For auxiliary flame retardants, solder compositions, semconductor doping agents, glass, etc.

	Environmentally hazardous substances	Report object	Control level	Tolerance (threshold)	Object, Usage, etc.
26	chromium and its compounds (except hexavalent chromium compounds)	Article	Controlled	unintended inclusion 1000ppm	Applies to applications. For alloy, pigment, glass additive,etc.
27	selenium and its compounds	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For photosensitive matter, pigments, photoelectric cells, solar sells, magnetic core, etc.
28	nickel and its compounds	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For plating, alloy, ferrite, batteries, etc.
29	arsenic and its compounds	Article	Prohibited	1000ppm	arsenic acid, lead (4+) salt applies to the lead compound
			Controlled	unintended inclusion 1000ppm	Applies to all applications excepting arsenic acid, lead (4+) salt. Semiconductor doping agents, compound semiconductors, pigments, glass coloring agents, etc.
30	bismuth and its compounds	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For lead-free solders, resistive elements, etc.
31	organophosphorus compounds	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications except for use of agricultural chemicals and pesticides
32	polyvinyl chloride	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For cable covers, capacitor sleeves, labels, tape, packaging materials
33	brominated flame retardants	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For flame retardants for plastics or printed-wiring boards
34	phthalic esters	Article	Prohibited	1000ppm	Specified phthalic esters (groups Ⅰ & Ⅱ) listed in the table4 must not be used for plastic material whose applications are toys and nursery products.
			Controlled	unintended inclusion 1000ppm	Applies to all applications other than those outlined above and the phtalic esters not specified in table4
35	perfluorooctane sulfonate and its related substances	Article	Prohibited	1000ppm	Applies to all applications. However, the applications described below are excluded; A) Photo resist used in the photolithography processes, or when used as antireflective coating agent B) Photographic coating agent used for film, paper and lithographic plate.
				1μg/m2	When used for textiles and used as coating agent for other materials, it must not be contained beyond 1μg/m2 .
36	polycyclic aromatic hydrocarbons and its mixtures	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. In materials for dye and pigment, preservatives for timber, and insecticides.
37	cobalt and its compounds	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For gas absorbers, wet-and-dry indicators, solid lubricants, plate process aids, dyes for glass, and coloring agents for ceramics, etc.
38	1-tert-butyl-3,5-dimethyl-2,4,6-trinitrobenzene, 5-tert-butyl-2,4,6-trinitro-m-xylene(musk xylene)	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For flavors and fragrances (soap, detergents, creams, perfume, etc.)

	Environmentally hazardous substances	Report object	Control level	Tolerance (threshold)	Object, Usage, etc.
39	pitch, coal tar, high temp.	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For electrode binding agents, etc.
40	mineral fibres (natural or synthetic) except continuous filament fibres	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For insulation material used as a substitute for asbestos
41	2,4-dinitrotoluene	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications. For organic, synthetic raw materials, etc.
42	biocidal coatings / biocidal additives	Article	Prohibited	1000ppm	Applies to dimethyl fumarate such as for fungicides
			Controlled	unintended inclusion 1000ppm	Applies to all applications excepting dimethyl fumarate.
43	acrylamide	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
44	boric acid	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
45	tetraboron disodium heptaoxide	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
46	tetraboron disodium heptaoxide hydrate	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
47	volatile organic compounds	Chemically formed product	Prohibited	1000ppm	With regards to dichloromethane, trichloroethylene, and chloroform, applies to all applications.
			Controlled	unintended inclusion	Aplies to all applications
48	acetamide	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
49	acetamide, n-methyl-	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
50	acetonitrile	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
51	acrylonitrile	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
52	ammonium perchlorate	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.

	Environmentally hazardous substances	Report object	Control level	Tolerance (threshold)	Object, Usage, etc.
53	aniline and its salts	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
54	aromatic amines	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
55	barium compounds (organic or water soluble)	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
56	benzenamine, N-phenyl-, reaction products with styrene and 2,4,4-trimethylpentene	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
57	1,4-benzenediamine, N,N' -mixed Ph and tolyl derivs	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
58	2-benzothiazolesulphenamide, N, N-dicyclohexyl-	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
59	butadiene, 1,3 -	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
60	chlorinated or brominated dioxins or furans	Article	Prohibited	10ppb	Applies to all applications.
61	colophony (rosin)	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
62	copper	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
63	cyclohexane	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
64	2-cyclohexen-1-one, 3,5,5-trimethyl-	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
65	cyclopentasiloxane, decamethyl-	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
66	cyclotetrasiloxane, heptamethylphenyl-	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
67	cyclotetrasiloxane, octamethyl-	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
68	decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl)ester	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.

	Environmentally hazardous substances	Report object	Control level	Tolerance (threshold)	Object, Usage, etc.
69	dimethylformamide (N,N-dimethylformamide)	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
70	dodecachloropentacyclo 1, 3, 4-metheno-1H-cyclobuta(cd)pentalene, mirex	Article	Prohibited	1000ppm	Applies to all applications.
71	epichlorohydrin (1-chloro-2,3-epoxypropane)	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
72	1-ethenylpyrrolidin-2-one (2-Pyrrolidione, 1-ethenyl-)	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
73	fatty acids, C6-19-branched, zinc salts	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
74	fluorotelomers	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
75	2-furancarboxaldehyde	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
76	hexanedioic acid, bis(2-ethylhexyl) ester	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
77	hexanoic acid, 2-ethyl-	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
78	hydrazine	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
79	methylacrylamidomethoxy-acetate	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
80	1-methylpyrrolidin-2-one(2-pyrrolidinone, 1-methyl)	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
81	chlorinated flame retardants	Article	Prohibited	1000ppm	Applies to all applications.
82	2-naphthalenol, 1-[(4-methyl-2-nitrophenyl)azo]-	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
83	nitrites	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
84	4-nitrobiphenyl and its salts	Article	Prohibited	100ppm	Applies to all applications.

	Environmentally hazardous substances	Report object	Control level	Tolerance (threshold)	Object, Usage, etc.
85	nitrocellulose	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
86	N-nitrosamines	Article	Prohibited	unintended inclusion	N-nitroso dimethyl amine. Applies to all applications.
			Controlled	unintended inclusion 1000ppm	Applies to all applications excepting N-nitroso dimethyl amine. Applies to all applications.
87	nonylphenol	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
88	nonylphenol ethoxylates	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
89	7-oxa-3,20-diazadispiro[5.1.11.2]-heneicosan-21-one, 2,2,4,4-tetramethyl-	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
90	perchlorates	Article	Prohibited	1000ppm	Three materials apply to the standard of the lead compounds(lead perchlorate, perchloric acid, reaction products with lead oxide (pbo) and triethanolamine) and the mercury compounds(perchloric acid, mercury(2+) salt) respectively
			Controlled	unintended inclusion 1000ppm	Applies to all applications.excepting above three substance.. Explosive, Dynamite usage, etc.
91	PFOA and its salts, perfluorooctanoic acids C8F15O2X (X = H, NH4, and metal salts)	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
92	phenol	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
93	phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethlethyl)-	Article	Prohibited	1000ppm	Applies to all applications.
94	phenol, 2,4,6-tris(1,1-dimethylethyl)-	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
95	phenol, 2-(5-chloro-2H-benzotriazol-2-yl)-4,6-bis(1,1'-dimethylethyl)-	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
96	phenylendiamines and its salts	Article	Prohibited	1000ppm	Applies to all applications.
97	phosphonium, triphenyl(phenylmethyl)-, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1)	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
98	polyamine curing agents	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.

	Environmentally hazardous substances	Report object	Control level	Tolerance (threshold)	Object, Usage, etc.
99	silica, crystalline	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
100	siloxanes and silicones	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
101	sodium azide	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
102	vinyl benzenee	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
103	styrene oxide (epoxy styrene)	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
104	thallium and its compounds	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
105	thioperoxydicarbonic diamide([(H2N)C(S)]2S2), tetramethyl-	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
106	vanadium(V) oxide	Article	Controlled	unintended inclusion 1000ppm	Applies to all applications.
107	vinyl chloride	Article	Prohibited	5ppm	Applies to all applications.

Table 1: Applications exempted from the prohibition in RoHS Article

This list is the contents of the "Official Journal of the European Union" at Feb, 2011.

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There is no expiration date that the expiration date is an empty column at this time.

Material	No.	Exemption	Scope and dates of applicability
Mercury	1	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner):	
	1(a)	For general lighting purposes < 30 W: 5 mg	Expires on 31 December 2011; 3,5 mg may be used per burner after 31 December 2011 until 31 December 2012; 2,5 mg shall be used per burner after 31 December 2012
	1(b)	For general lighting purposes ≥ 30 W and < 50 W: 5 mg	Expires on 31 December 2011; 3,5 mg may be used per burner after 31 December 2011
	1(c)	For general lighting purposes ≥ 50 W and < 150 W: 5	
	1(d)	For general lighting purposes ≥ 150 W: 15 mg	
	1(e)	For general lighting purposes with circular or square structural shape and tube diameter ≤ 17 mm	No limitation of use until 31 December 2011; 7 mg may be used per burner after 31 December 2011
	1(f)	For special purposes: 5 mg	
	2		
	2(a)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp):	
	2(a)(1)	Tri-band phosphor with normal lifetime and a tube diameter > 9 mm (e.g. T2): 5 mg	Expires on 31 December 2011; 4 mg may be used per lamp after 31 December 2011
	2(a)(2)	Tri-band phosphor with normal lifetime and a tube diameter > 9 mm and ≤ 17 mm (e.g. T5): 5 mg	Expires on 31 December 2011; 3 mg may be used per lamp after 31 December 2011
	2(a)(3)	Tri-band phosphor with normal lifetime and a tube diameter > 17 mm and ≤ 28 mm (e.g. T8): 5 mg	Expires on 31 December 2011; 3.5 mg may be used per lamp after 31 December 2011
	2(a)(4)	Tri-band phosphor with normal lifetime and a tube diameter > 28 mm (e.g. T12): 5 mg	Expires on 31 December 2012; 3,5 mg may be used per lamp after 31 December 2012
	2(a)(5)	Tri-band phosphor with long lifetime (≥ 25 000 h): 8 mg	Expires on 31 December 2011; 5 mg may be used per lamp after 31 December 2011
	2(b)	Mercury in other fluorescent lamps not exceeding (per lamp):	
	2(b)(1)	Linear halophosphate lamps with tube > 28 mm (e.g. T10 and T12): 10 mg	Expires on 13 April 2012
	2(b)(2)	Non-linear halophosphate lamps (all diameters): 15 mg	Expires on 13 April 2016
	2(b)(3)	Non-linear tri-band phosphor lamps with tube diameter > 17 mm (e.g. T9)	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011
	2(b)(4)	Lamps for other general lighting and special purposes (e.g. induction lamps)	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011

Material	No.	Exemption	Scope and dates of applicability
Mercury	3	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp):	
	3(a)	Short length (≤ 500 mm)	No limitation of use until 31 December 2011; 3,5 mg may be used per lamp after 31 December 2011
	3(b)	Medium length (> 500 mm and ≤ 1 500 mm)	No limitation of use until 31 December 2011; 5 mg may be used per lamp after 31 December 2011
	3(c)	Long length (> 1 500 mm)	No limitation of use until 31 December 2011; 13 mg may be used per lamp after 31 December 2011
	4		
	4(a)	Mercury in other low pressure discharge lamps (per lamp)	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011
	4(b)	Mercury in High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner) in lamps with improved colour rendering index Ra > 60:	
	4(b) Ⅰ	P ≤ 155 W	No limitation of use until 31 December 2011; 30 mg may be used per burner after 31 December 2011
	4(b) Ⅱ	155 W < P ≤ 405 W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011
	4(b) Ⅲ	P > 405 W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011
	4(c)	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner):	
	4(c) Ⅰ	P ≤ 155 W	No limitation of use until 31 December 2011; 25 mg may be used per burner after 31 December 2011
	4(c) Ⅱ	155 W < P ≤ 405 W	No limitation of use until 31 December 2011; 30 mg may be used per burner after 31 December 2011’
	4(c) Ⅲ	P > 405 W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011
	4(d)	Mercury in High Pressure Mercury (vapour) lamps (HPMV)	Expires on 13 April 2015
	4(e)	Mercury in metal halide lamps (MH)	
	4(f)	Mercury in other discharge lamps for special purposes not specifically mentioned in this Annex	
	36	Mercury used as a cathode sputtering inhibitor in DC plasma displays with a content up to 30 mg per display	Expired on 1 July 2010
Lead	5		
	5(a)	Lead in glass of cathode ray tubes	
	5(b)	Lead in glass of fluorescent tubes not exceeding 0,2 % by weight	

Material	No.	Exemption	Scope and dates of applicability
Lead	6		
	6(a)	Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0,35 % lead by weight	
	6(b)	Lead as an alloying element in aluminium containing up to 0,4 % lead by weight	
	6(c)	Copper alloy containing up to 4 % lead by weight	
	7		
	7(a)	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)	
	7(b)	Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission, and network management for telecommunications	
	7(c) Ⅰ	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound	
	7(c) Ⅱ	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher	
	7(c) Ⅲ	Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC	Expires on 1 January 2013 and after that date may be used in spare parts for EEE placed on the market before 1 January 2013
	9(b)	Lead in bearing shells and bushes for refrigerant-containing compressors for heating, ventilation, air conditioning and refrigeration (HVACR) applications	
	11		
	11(a)	Lead used in C-press compliant pin connector systems	May be used in spare parts for EEE placed on the market before 24 September 2010
	11(b)	Lead used in other than C-press compliant pin connector systems	Expires on 1 January 2013 and after that date may be used in spare parts for EEE placed on the market before 1 January 2013
	12	Lead as a coating material for the thermal conduction module C-ring	May be used in spare parts for EEE placed on the market before 24 September 2010
	13		
	13(a)	Lead in white glasses used for optical applications	
	13(b)	Cadmium and lead in filter glasses and glasses used for reflectance standards	
	14	Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80 % and less than 85 % by weight	Expires on 1 January 2011 and after that date may be used in spare parts for EEE placed on the market before 1 January 2011
	15	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages	

Material	No.	Exemption	Scope and dates of applicability
Lead	16	Lead in linear incandescent lamps with silicate coated tubes	Expires on 1 September 2013
	17	Lead halide as radiant agent in high intensity discharge (HID) lamps used for professional reprography applications	
	18		
	18(a)	Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as speciality lamps for diazoprinting reprography, lithography, insect traps, photochemical and curing processes containing phosphors such as SMS ((Sr,Ba) 2 MgSi 2 O 7 :Pb)	Expires on 1 January 2011
	18(b)	Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as sun tanning lamps containing phosphors such as BSP (BaSi 2 O 5 :Pb)	
	19	Lead with PbBiSn-Hg and PbInSn-Hg in specific compositions as main amalgam and with PbSn-Hg as auxiliary amalgam in very compact energy saving lamps (ESL)	Expires on 1 June 2011
	20	Lead oxide in glass used for bonding front and rear substrates of flat fluorescent lamps used for Liquid Crystal Displays (LCDs)	Expires on 1 June 2011
	21	Lead and cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	
	23	Lead in finishes of fine pitch components other than connectors with a pitch of 0,65 mm and less	May be used in spare parts for EEE placed on the market before 24 September 2010
	24	Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors	
	25	Lead oxide in surface conduction electron emitter displays (SED) used in structural elements, notably in the seal frit and frit ring	
	26	Lead oxide in the glass envelope of black light blue lamps	Expires on 1 June 2011
	29	Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC	
	31	Lead in soldering materials in mercury free flat fluorescent lamps (which e.g. are used for liquid crystal displays, design or industrial lighting)	
	32	Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes	

Material	No.	Exemption	Scope and dates of applicability
Lead	33	Lead in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers	
	34	Lead in cermet-based trimmer potentiometer elements	
	37	Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body	
Hexavalent chromium	9	Hexavalent chromium as an anticorrosion agent of the carbon steel cooling system in absorption refrigerators up to 0,75 % by weight in the cooling solution	
Cadmium	8		
	8(a)	Cadmium and its compounds in one shot pellet type thermal cut-offs	Expires on 1 January 2012 and after that date may be used in spare parts for EEE placed on the market before 1 January 2012
	8(b)	Cadmium and its compounds in electrical contacts	
	21	Lead and cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	
	38	Cadmium and cadmium oxide in thick film pastes used on aluminium bonded beryllium oxide	
	39	Cadmium in colour converting II-VI LEDs (< 10 µg Cd per mm 2 of light-emitting area) for use in solid state illumination or display systems	Expires on 1 July 2014

Table 2: Applications exempted from the prohibition in ELV Article

This list is the contents of the "Official Journal of the European Union" at 31st March, 2011.

Apply the latest version when the content is revised.

There is no expiration date that the expiration date is an empty column at this time.

Material	No.		Exemption	Scope and dates of applicability
Lead	Lead as an alloying element	1(a)	Steel for machining purposes and batch hot dip galvanised steel components containing up to 0.35% lead by weight	
		1(b)	Continuously galvanised steel sheet containing up to 0.35% lead by weight	Vehicles type approved before 1 January 2016 and spare parts for these vehicles.
		2(a)	Aluminium for machining purposes with a lead content up to 2% by weight	As spare parts for vehicles put on the market brfore 1 July 2005
		2(b)	Aluminium with a lead content up to 1.5% by weight	As spare parts for vehicles put on the market brfore 1 July 2008
		2(c)	Aluminium with a lead content up to 0,4% by weight	
		3	Copper alloy containing up to 4% lead by weight	
		4(a)	Bearing shells and bushes	As spare parts for vehicles put on the market brfore 1 July 2007
		4(b)	Bearing shells and bushes in engines, transmissions and air conditioning compressors	1 July 2011 and spare parts for vehicles put on the market brfore 1 July 2011
	Lead and lead compounds in components	5	Batteries	
		6	Vibration dampers	Vehicles type approved before 1 January 2016 and spare parts for these vehicles.
		7(a)	Vulcanising agents and stabilisers for elastomers in brake hoses, fuel hoses, air ventilation hoses, elastomer/metal parts in the chassis applications, and engine mountings	As spare parts for vehicles put on the market before 1 July 2005
		7(b)	Vulcanising agents and stabilisers for elastomers in brake hoses, fuel hoses, air ventilation hoses, elastomer/metal parts in the chassis applications, and engine mountings containing up to 0.5% lead by weight	As spare parts for vehicles put on the market before 1 July 2006
		7(c)	Bonding agents for elastomers in powertrain applications containing up to 0.5% lead by weight	As spare parts for vehicles put on the market before 1 July 2009
		8(a)	Lead in solders to attach electrical and electronic components to electronic circuit boards and lead in finishes on terminations of components other than electrolyte aluminium capacitors, on component pins and on electronic circuit boards	Vehicles type approved before 1 January 2016 and spare parts for these vehicles
		8(b)	Lead in solders in electrical applications other than soldering on electronic circuit boards or on glass.	Vehicles type approved before 1 January 2011 and spare parts for these vehicles.
		8(c)	Lead in finishes on terminals of electrolyte aluminium capacitors.	Vehicles type approved before 1 January 2013 and spare parts for these vehicles.
		8(d)	Lead used in soldering on glass in mass airflow sensors	Vehicles type approved before 1 January 2015 and spare parts of such vehicles
		8(e)	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)	
		8(f)	Lead in compliant pin connector systems	

Material	No.		Exemption	Scope and dates of applicability
Lead	Lead and lead compounds in components	8(g)	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages	
		8(h)	Lead in solder to attach heat spreaders to the heat sink in power semiconductor assemblies with a chip size of at least 1cm2 of projection area and a nominal current density of at least 1 A/mm2 of silicon chip area	
		8(i)	Lead in solders in electrical glazing applications on glass except for soldering in laminated glazing	Vehicles type approved before 1 January 2013 and spare parts for these vehicles
		8(j)	Lead in solders for soldering in laminated glazing	
		9	Valve seats	As spare parts for engine types developed before 1 July 2003
		10(a)	Electrical and electronic components which contain lead in a glass or ceramic, in a glass or ceramic matrix compound, in a glass-ceramic material, or in a glass-ceramic matrix compound. This exemption does not cover the use of lead in: -glass in bulbs and glaze of spark plugs, -dielectric ceramic materials of components listed under 10(b), 10(c) and 10(d).	
		10(b)	Lead in PZT based dielectric ceramic materials of capacitors being part of integrated circuits or discrete semiconductors	
		10(c)	Lead in dielectric ceramic materials of capacitors with a rated voltage of less than 125 V AC or 250 V DC	Vehicles type approved before 1 January 2016 and spare parts for these vehicles
		10(d)	Lead in the dielectric ceramic materials of capacitors compensating the temperature-related deviations of sensors in ultrasonic sonar systems	
		11	Pyrotechnic initiators	Vehicles type approved before 1 July 2006 and spare parts for these vehicles
		12	Lead-containing thermoelectric materials in automotive electrical applications to reduce CO2 emissions by recuperation of exhaust heat	Vehicles type approved before 1 January 2019 and spare parts for these vehicles
Hexavalent chromium		13(a)	Corrosion preventive coatings	As spare parts for vehicles put on the market before 1 July 2007
		13(b)	Corrosion preventive coatings related to bolt and nut assemblies for chassis applications	As spare parts for vehicles put on the market before 1 July 2008
		14	As an anti-corrosion agent of the carbon steel cooling system in absorption refrigerators in motor caravans up to 0.75 weight -% in the cooling solution except where the use of other cooling technologies is practicable (i.e. available on the market for the application in motor caravans) and does not lead to negative environmental, health and/or consumer safety impacts	
Mercury		15(a)	Discharge lamps for headlight application	Vehicles type approved before 1 July 2012 and spare parts for these vehicles
		15(b)	Fluorescent tubes used in instrument panel displays	Vehicles type approved before 1 July 2012 and spare parts for these vehicles
Cadmium		16	Batteries for electrical vehicles	As spare parts for vehicles put on the market before 31 December 2008

Table 3: Specific amine
(generated due to decomposition of azo group greater than 1)

	Substance	CAS No.
1	4-aminoazobenzene	60-09-3
2	aniline, 2-methoxy-	90-04-0
3	2-naphthylamine	91-59-8
4	3,3'-dichlorobenzidine	91-94-1
5	biphenyl-4-ylamine	92-67-1
6	benzidine	92-87-5
7	ortho-toluidine	95-53-4
8	4-chloro-o-toluidine	95-69-2
9	toluene-2,4-diamine	95-80-7
10	2-methyl-4-(2-tolyldiazenyl)aniline	97-56-3
11	2-methyl-5-nitroaniline	99-55-8
12	4,4'-methylenebis-(2-chlorobenzenamine)	101-14-4
13	4,4'-methylenedianiline	101-77-9
14	4,4'-oxydianiline	101-80-4
15	4-chloroaniline	106-47-8
16	3,3'-dimethoxybenzidine	119-90-4
17	3,3'-dimethylbenzidine	119-93-7
18	6-methoxy-m-toluidine	120-71-8
19	2,4,5-trimethylaniline	137-17-7
20	4,4'-thiodianiline	139-65-1
21	4-methoxy-1,3-phenylenediamine	615-05-4
22	4,4'-methylenedi-o-toluidine	838-88-0

Table 4: Specified phthalic esters
( ) shows other representative names.

	Substance	CAS No.
Specified phthalic esters（Group Ⅰ）		
1	bis(2-ethylhexan-1-yl) phthalate （Bis (2-ethylhexyl) phthalate (DEHP)）	117-81-7
2	dibutan-1-yl phthalate （Dibutyl phthalate (DBP)）	84-74-2
3	benzyl butan-1-yl phthalate （Benzyl butyl phthalate (BBP)）	85-68-7
Specified phthalic esters（Group Ⅱ）		
4	diisononyl phthalate (DINP)	28553-12-0 68515-48-0
5	1,2-benzenedicarboxylic acid diisodecyl ester （di-isodecyl phthalate (DIDP)）	26761-40-0 68515-49-1
6	bis(n-octyl) phthalate (DNOP)	117-84-0

Table 5: PFOS and its related substances

( ) shows other representative names.

	Substance	CAS No.
1	perfluorooctane sulfonate (PFOS)	1763-23-1
2	perfluoroctane sulfonate acid	1763-23-1
3	perfluoroctane sulfonate anion	45298-90-6
4	perfluoro-1-octanesulfonyl fluoride	307-35-7
5	2-propenoic acid, 2-methyl-, dodecyl ester, polymers with 2-[methyl[(pe	306975-62-2
6	glycine, N-ethyl-N-[(heptadecafluorooctyl)sulfonyl]-, potassium salt	2991-51-7
7	perfluorooctane sulfonate ammonium salt	29081-56-9
8	perfluorooctane sulfonate lithium salt	29457-72-5
9	tetraethylammoniumheptadecafluoroctansulfonate	56773-42-3
10	PFOS related substances	(Example) 2795-39-3

Table 6: Volatile Organic Compounds (VOC)

	Substance	CAS No.
1	propan-2-ol	67-63-0
2	toluene	108-88-3
3	acetone	67-64-1
4	butyl acetate	123-86-4
5	methanol	67-56-1
6	xyrene	1330-20-7
7	2-butanone	78-93-3
8	dichloromethane	75-09-2
9	styrene	100-42-5
10	ethanol	64-17-5
11	ethylbenzene	100-41-4
12	tetrahydrofuran	109-99-9
13	2-propanol, 1-methoxy-	107-98-2
14	1-butanol	71-36-3
15	chloroform	67-66-3
16	methyl isobutyl ketone	108-10-1
17	heptane	142-82-5
18	ethyl acetate	141-78-6
19	trichloroethylene	79-01-6
20	cyclohexanone	108-94-1

Table 7: REACH Candidate List of SVHC

	Substance	CAS No.
1	anthracene	120-12-7
2	4,4'-diaminodiphenylmethane	101-77-9
3	dibutyl phthalate	84-74-2
4	cobalt dichloride	7646-79-9
5	diarsenic pentaoxide	1303-28-2
6	diarsenic trioxide	1327-53-3
7	sodium dichromate	7789-12-0 10588-01-9
8	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2
9	bis(2-ethyl(hexyl)phthal a te (DEHP））	117-81-7
10	hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α-HBCDD, β－HBCDD, γ－HBCDD)	25637-99-4 3194-55-6 134237-51-7 134237-50-6 134237-52-8
11	alkanes, C10-13, chloro(short chain chlorinated paraffins)	85535-84-8
12	bis (tributyltin) oxide	56-35-9
13	lead hydrogen arsenate	7784-40-9
14	benzyl butyl phthalate	85-68-7
15	triethyl arsenate	15606-95-8
16	anthracene oil	90640-80-5
17	anthracene oil, anthracene paste, distn. lights	91995-17-4
18	anthracene oil, anthracene paste, anthracene fraction	91995-15-2
19	anthracene oil, anthracene-low	90640-82-7
20	anthracene oil, anthracene paste	90640-81-6
21	pitch, coal tar, high temp.	65996-93-2
22	aluminiosilicate, refractory ceramic fibres	—
23	zirconia aluminosilicate, refractory ceramic fiber	—
24	2,4-dinitrotoluene	121-14-2
25	diisobutyl phthalate	84-69-5
26	lead chromate	7758-97-6
27	lead chromate molybdate sulphate red (C.I. pigment red 104)	12656-85-8
28	lead sulfochromate yellow (C.I. pigment yellow 34)	1344-37-2
29	tris(2-chloroethyl)phosphate	115-96-8
30	acrylamide	79-06-1
31	trichloroethylene	79-01-6
32	boric acid	10043-35-3 11113-50-1
33	disodium tetraborate, anhydrous	1303-96-4 1330-43-4 12179-04-3
34	tetraboron disodium heptaoxide, hydrate	12267-73-1
35	sodium chromate	7775-11-3
36	potassium chromate	7789-00-6
37	ammonium dichromate	7789-09-5
38	potassium dichromate	7778-50-9

	Substance	CAS No.
39	cobalt(II) sulphate	10124-43-3
40	cobalt(II) dinitrate	10141-05-6
41	cobalt(II) carbonate	513-79-1
42	cobalt(II) diacetate	71-48-7
43	2-methoxyethanol	109-86-4
44	2-ethoxyethanol	110-80-5
45	chromium trioxide	1333-82-0
46	Acids generated from chromium trioxide and their oligomers:	—
	chromic acid	7738-94-5
	dichromic acid	13530-68-2
	Oligomers of chromic acid and dichromic acid	—

Appendix 5: Detailed List of Environmentally Hazardous Substances

Number beginning with alphabet in CAS No. column is a code number rather than CAS No.

Substance Group name	
Substance	**CAS №**
ozone depleting substances	
pentachlorotrifluoropropane	165-97-7
1,2,3-trichloro-1,1,2,3,3-pentafluoropropane	76-17-5
2-chloro-1,1,1,2,3,3,3-heptafluoropropane	76-18-6
tetrachlorofluoroethane	134237-32-4
trichlorodifluoroethane	41834-16-6
trichlorofluorethane	134237-34-6
chlorotrifluoroethane	1330-45-6
1-chloro,1-fluoroethane	1615-75-4
hexachlorofluoropropane	134237-35-7
pentachlorodifluoropropane	134237-36-8
tetrachlorotrifluoropropane	134237-37-9
trichlorotetrafluoropropane	134237-38-0
1,1-dichloro-2,2,3,3,3-pentafluoropropane	422-56-0
1,3-dichloro-1,1,2,2,3-pentafluoropropane	507-55-1
clorohexafluoropropane	134308-72-8
tetrachlorodifluoropropane	134237-39-1
trichlorotrifluoropropane	134237-40-4
chloropentafluoropropane	134237-41-5
tetrachlorofluoropropane	134190-49-1
trichlorodifluoropropane	134237-42-6
dichlorotrifluoropropane	134237-43-7
trichlorofluoropropane	134190-51-5
chlorotrifluoropropane	134237-44-8
dichlorofluoropropane	134237-45-9
bromodifluoromethane	1511-62-2
tetrabromofluoroethane	HSC261016
tribromodifluoroethane	HSC261017
bromotetrafluoroethane	HSC261029
tribromofluoroethane	HSC261021
hexabromofluoropropane	HSC261039
pentabromodifluoropropane	HSC261040
tetrabromotrifluoropropane	HSC261015
tribromotetrafluoropropane	HSC261019
dibromopentafluoropropane	HSC261012
pentabromofluoropropane	HSC261041
tetrabromodifluoropropane	HSC261014
tribromotrifluoropropane	HSC261020
dibromotetrafluoropropane	HSC261006
bromopentafluoropropane	HSC261038
tetrabromofluoropropane	HSC261013
tribromodifluoropropane	HSC261018
bromotetrafluoropropane	HSC261028
tribromofluoropropane	HSC261022
bromotrifluoropropane	HSC261031
dibromofluoropropane	HSC261011
bromodifluoropropane	HSC261027
methyl bromide / methyl bromide (bromomethane)	74-83-9
bromofluoromethane	373-52-4
bromochloromethane / chlorobromomethane	74-97-5
carbon tetrachloride	56-23-5
bromotrifluoromethane / trifluorobromomethane	75-63-8
1,1,1-trichloroethane	71-55-6
trichlorofluoromethane	75-69-4
chlorotrifluoromethane	75-72-9
dichlorodifluorometahne	75-71-8
pentachlorofluoroethane	354-56-3
heptachlorofluoropropane	422-78-6
dichlorotetrafluoroethane	1320-37-2
hexachlorodifluoropropane	134452-44-1
bromochlorodifluoromethane / chlorodifluorobromomethane	353-59-3
heptafluoropropyl chloride	422-86-6
monochloropentafluoroethane	76-15-3

Substance Group name	
Substance	**CAS №**
pentachlorotrifluoropropane / 1,1,1,3,3-pentachlor-2,2,3-trifluoropropane	2354-06-5
1,2-dibromotetrafluoroethane / dibromotetrafluoroethane (Halon 2402)	124-73-2
1,2-difluorotetrachloroethane	76-12-0
tetrachlorotetrafluoropropane	29255-31-0
1,2,2-trichloropentafluoropropane	1599-41-3
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1
1,2-dichloro-1,1,2,3,3,3-hexafluoropropane	661-97-2
heptachlorofluoropropane	135401-87-5
cryofluorane	76-14-2
dichloropentafluoropropane	127564-92-5
trichlorotrifluoroethane	26523-64-8
trichlorotrifluoroethane	354-58-5
1,1-dichlor-1,2,2,2-tetrafluoroethane	374-07-2
pentachlorotrifluoropropane	134237-31-3
1,1,1-trichloropentafluoropropane	4259-43-2
1,1,1,2-tetrachlor-2,2-difluoroethane	76-11-9
1,1,1,3-tetrachlorotetrafluoropropane	2268-46-4
1,1,1,3,3,3-hexachloro-2,2-difluoropropane	3182-26-1
1,1,1-tribromo-2,2,2-trifluoroethane	354-48-3
1,1-dibromo-1,2,2,2-tetrafluoroethane	27336-23-8
1,1-dibromo-2,2-difluoroethylene	430-85-3
1,2-dibromo-1,1,2-trichloroethane	13749-38-7
1,2-dibromo-1-chloro-1,2,2-trifluoroethane	354-51-8
1,2-dibromotetrachloroethane	630-25-1
1-bromo-1-chloro-2,2-difluoroethylene	758-24-7
2-bromo-1,1-dichloroethylene	5870-61-1
bromodichlorofluoromethane	353-58-2
bromopentafluoroethane	354-55-2
bromotrifluoroethylene	598-73-2
carbon tetrabromide	558-13-4
chlorobromotrifluoroethane	74925-63-6
clorodibromomethane	124-48-1
dibromodichloromethane	594-18-3
dibromotetrafluoroethane	25497-30-7
ethane, 1-bromo-2-chloro-1,1,2-trifluoro- / ethane, 1,2-dibromo-1,1,2-trifluoro-	354-06-3
ethane, 2-bromo-1-chloro-1,1,2-trifluoro-	354-20-1
ethane, 2-bromo-2-chloro-1,1,1-trifluoro-, (R)-	51230-17-2
ethane, 2-bromo-2-chloro-1,1,1-trifluoro-, (S)-	51230-18-3
ethane, tribromo-	598-16-3
ethene, tetrabromo-	79-28-7
methane, bromotrichloro-	75-62-7
methane, tribromofluoro-	353-54-8
pentabromoethane	75-95-6
tribromochloromethane	594-15-0
dibromodifluoromethane	75-61-6
dibromodifluoroethane / 1,2-dibromo-1,1-difluoroethane	75-82-1
dibromofluoromethane	1868-53-7
C2H2F2Br2: 1,1-dibromo-2,2-difluoroethane	359-19-3
bromofluoroethane / 1-bromo-2-fluoroethane	762-49-2
1-bromo-3-fluoropropane	352-91-0
3-bromo-1,1,1-trifluoropropane	460-32-2
dibromofluoroethane	358-97-4
dibromodifluoropropane / 1,3-dibromo-1,1-difluoropropane	460-25-3
dibromotrifluoroethane / 1,2-dibromo-1,1,2-trifluoroethane	354-04-1
dibromotrifluoropropane / 2,3-dibromo-1,1,1-trifluoropropane	431-21-0
C2HFBr4	353-93-5 306-80-9
C2HF2Br3	7304-53-2 677-34-9 353-97-9
C2H2FBr3	598-67-4 420-88-2
bromodifluoroethane / C2H3F2Br: bromo-1,1-difluoroethane	359-07-9
C3HFBr6	AL01-1
C3HF2Br5	AL01-2

Substance Group name	
Substance	**CAS №**
C3HF3Br4	AL01-3
C3HF4Br3	666-48-8
C3H2FBr5	AL01-4
C3H2F2Br4	148875-98-3
1,2,2-tribromo-3,3,3-trifluoropropane	421-90-9
1,3-dibromo-1,1,3,3-tetrafluoropropane	460-86-6
C3H2F5Br	422-01-5 677-52-1 677-53-2 22692-16-6 460-88-8 679-94-7 26391-11-7 53692-43-6 53692-44-7
C3H3FBr4	148875-95-0
1,2,3-tribromo-3,3-difluoropropane	666-25-1
C3H3F4Br	19041-01-1 29151-25-5 679-84-5 460-67-3
C3H3F4Br	70192-71-1 70192-84-6
C3H4FBr3	75372-14-4
C3H5FBr2	453-00-9 1786-38-5 51584-26-0 62135-10-8 62135-11-9
C3H5F2Br	111483-20-6 430-87-5 420-89-3 420-98-4 2195-05-3 461-49-4
bromodifluoroethane / 1-bromo-1,1-difluoroethane	420-47-3
bromohexafluoropropane / 1-bromo-1,1,2,3,3,3-hexafluoropropane	2252-78-0
bromotrifluoroethane / 2-bromo-1,1,1-trifluoroethane / 1,1,1-trifluoro-2-bromoethane	421-06-7
ethene, 2-bromo-1,1-difluoro-	359-08-0
bromofluoropropane / propane, 1-bromo-2-fluoro-	1871-72-3
1,1-dichloro-1,2,2-trifluoroethane (HCFC-123b)	812-04-4
1,2,2-trichloro-1,1-difluoroethane	354-21-2
1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a)	354-23-4
1,2-dichloro-1,1-difluoroethane	1649-08-7
1,2-dichloro-1,2-difluoroethane	431-06-1
dichlorodifluoropropane	134190-52-6
dichlorofluropropane	127404-11-9
dichlorotetrafluoropropane	127564-83-4
dichlorotrifluoropropane	116890-51-8
1,2-dichloro-1-fluoroethane	430-57-9
1,2-dichloro-1-fluoroethylene	430-58-0
1-chloro-1,1,2,2-tetrafluoroethane (HCFC-124a)	354-25-6
1-chloro-1,1-difluoroethane	75-68-3
1-chloro-1,2-difluoroethylene	359-04-6
1-chloro-1-fluoroethylene	2317-91-1
1-chloro-2-fluoroethylene	460-16-2
2-chloro-1,1-difluoroethylene	359-10-4
chlorodifluoroethanes	25497-29-4
chlorodifluoromethane	75-45-6
chlorofluoromethane	593-70-4
chlorotetrafluoroethane	63938-10-3
dichlorofluoromethane	75-43-4
dichlorotrifluoroethane	34077-87-7
ethane, 1,1,1-trichloro-2-fluoro-	2366-36-1
ethane, 1,1,2-trichloro-1-fluoro-	811-95-0

Substance Group name	
Substance	**CAS №**
ethane, 1,1,2-trichloro-2-fluoro-	359-28-4
1,1-dichloro-1-fluoroethane / ethane, 1,1-dichloro-1-fluoro-	1717-00-6
ethane, 1,2-difluoro-1,1,2-trichloro-	354-15-4
ethane, 1-chloro-1,2-difluoro-	338-64-7
2,2-dichloro-1,1,1-trifluoroethane / ethane, 2,2-dichloro-1,1,1-trifluoro-	306-83-2
2-chloro-1,1,1,2-tetrafluoroetahne / ethane, 2-chloro-1,1,1,2-tetrafluoro-	2837-89-0
ethane, chloro-1,1-difluoro-	55949-44-5
ethane, monochlorodifluoro-	338-65-8
trichlorofluoroethane	27154-33-2
chlorodifluoropropane	134190-53-7
chlorofluoroethane	110587-14-9
chlorofluoropropane	134190-54-8
chlorohexafluoropropane	28987-04-4
chloropentafluoropropane	108662-83-5
chlorotetrafluoropropane	134190-50-4
chlorotrifluoroethylene	79-38-9
chlorotrifluoropropane	26588-23-8
chloro-1,1,1-trifluoroethane	75-88-7
pentachlorodifluoropropane	116867-32-4
pentachlorofluoropropane	134190-48-0
1-chloro-1,1,2-trifluoroethane	421-04-5
1-chloro-1,2,2-trifluoroethane	431-07-2
1,1-dichloro-2-fluoroethane	430-53-5
1,1-dichloro-2,2-difluoroethane	471-43-2
1,1,1,2-tetrachloro-2-fluoroethane	354-11-0
1,1,2,2-tetrachloro-1-fluoroethane	354-14-3
1,1,1,2,2,3,3-heptafluoropropane	2252-84-8
1,1,1,2,3,3-hexafluoropropane	431-63-0
1,1,1,2-tetrafluoroethane	811-97-2
1,1,2,2-tetrafluoroethane	359-35-3
1,1,2-trifluoroethane	430-66-0
1,1-difluoroethane	75-37-6
1,2-difluoroethane	624-72-6
difluoroethane	25497-28-3
difluoromethane	75-10-5
1,1,1-trifluoroethane / ethane, 1,1,1-trifluoro-	420-46-2
ethane, pentafluoro-	354-33-6
ethyl fluoride	353-36-6
methyl fluoride	593-53-3
1,1,1,2,2-pentafluoropropane	1814-88-6
1,1,1,3,3-pentafluoropropane	460-73-1
1,1,1,3,3-pentafluorobutane	406-58-6
1,1,1,2,2,3,4,5,5,5-decafluoropentane / pentane, 1,1,1,2,2,3,4,5,5,5-decafluoro-	138495-42-8
propane, 1,1,1,2,3,3,3-heptafluoro- / 1,1,1,2,3,3,3-heptafluoropropane	431-89-0
1,1,1,3,3,3-hexafluoropropane / propane, 1,1,1,3,3,3-hexafluoro-	690-39-1
propane, hexafluoro-	27070-61-7
trifluoroethane	27987-06-0
trifluoromethane	75-46-7
vinylidene fluoride	75-38-7
ozon depletion substances	AL01
greenhouse substances	
perfluoroisobutylene	382-21-8
n-perfluorooctane	307-34-6
octafluorocyclobutane	115-25-3
octafluoropropane	76-19-7
decafluorobutane	355-25-9
tetradecafluorohexane	355-42-0
tetrafluoroethylene	116-14-3
dodecafluoro-pentane	678-26-2
heptane, hexadecafluoro-	335-57-9
hexafluoroethane	76-16-4
tetrafluoromethane	75-73-0
perfluorocarbon greenhouse substances	AL02

Substance Group name	
Substance	**CAS №**
1,1,1,2,2,3,4,5,5,5-decafluoropentane / pentane, 1,1,1,2,2,3,4,5,5,5-decafluoro-	138495-42-8
propane, 1,1,1,2,3,3,3-heptafluoro- / 1,1,1,2,3,3,3-heptafluoropropane	431-89-0
1,1,1,2-tetrafluoroethane	811-97-2
1,1,1,3,3,3-hexafluoropropane	690-39-1
1,1,1,3,3-pentafluoropropane	HSC680205
1,1,1,4,4,4-hexafluorobutane	407-59-0
1,1,1-trifluoroethane / ethane, 1,1,1-trifluoro-	420-46-2
1,1,2,2,3-pentafluoropropane	679-86-7
1,1,2,2-tetrafluoroethane	359-35-3
1,1,2-trifluoroethane	430-66-0
1,1-difluoroethane	75-37-6
difluoromethane	75-10-5
trifluoromethane	75-46-7
vinylidene fluoride	75-38-7
vinyl fluoride	75-02-5
methyl fluoride	593-53-3
pentafluoroethane	354-33-6
sulfur hexafuoride	2551-62-4
hydrofluorocarbon greenhouse substances	AL03
chloroform	
chloroform / trichloromethane (chloroform)	67-66-3
glycol ether and its acetates	
With regards to proven reproductive toxicity	
2-ethoxyethanol	110-80-5
2-ethoxyethyl acetate	111-15-9
methyl cellosolve acetate / 2-methoxyethyl acetate	110-49-6
2-methoxyethanol	109-86-4
diethleneglycol dimethylether	111-96-6
other glycol ether and its acetates	
ethanol, 2-(2-methoxyethoxy)-	111-77-3
propanol, 2-methoxy-	1589-47-5
2-butoxyethanol	111-76-2
2-butoxyethyl acetate	112-07-2
2-propanol, 1-methoxy-	107-98-2
2-propyl, 1-methoxy-, acetate	108-65-6
2-propanol, 1-ethoxy-	1569-02-4
propanol, 1(or 2)-ethoxy-, acetate	98516-30-4
glycol ether and its acetate	AL50
brominated solvents	
1-bromopropane	106-94-5
2-bromopropane	75-26-3
brominated solvent	AL51
benzene	
benzen	71-43-2
aldehyde compounds	
formaldehyde	50-00-0
acetaldehyde	75-07-0
chlorinated solvents	
1,2-dichloroethane	107-06-2
cis-1,2-dichloroethene	156-59-2
trans-1,2-dichloroethene	156-60-5
1,3-dichloropropene	542-75-6
1,1,2-trichloroethane	79-00-5
1,1,2,2 tetrachloroethane	79-34-5
dichloromethane	75-09-2
pentachloroethane	76-01-7
trichloroethylene	79-01-6
tetrachloroethylene	127-18-4
chloromethyl methyl ether (CMME)	107-30-2
dichloropropanol (1,3-dichloro-2-propanol)	96-23-1
hexachlorobenzene	118-74-1
hexachloro-1,3-butadiene (HCBD)	87-68-3
hexachlorocyclohexane, gamma isomer, lindane	58-89-9
pentachlorobenzene	608-93-5

Substance Group name	
Substance	**CAS №**
pentachlorophenol,	87-86-5
potassium pentachlorophenate	7778-73-6
sodium pentachlorophenate	131-52-2
zinc bis(pentachlorophenol,ate)	2917-32-0
1,2,3,4-tetrachlorobenzene	634-66-2
1,2,3,5- tetrachlorobenzene	634-90-2
1,2,4,5- tetrachlorobenzene	95-94-3
bis(chloromethyl) ether (BCME)	542-88-1
2,4,5 -trichlorophenol,	95-95-4
2,4,6 -trichlorophenol,	88-06-2
trichloropropane (1,2,3 - trichloropropane)	96-18-4
1,1 dichloroethylene	75-35-4
1,1,1 trichloroethane	71-55-6
1,1,1,2 tetrachloroethane	630-20-6
1,1,2 trichloroethane	79-00-5
dichloromethane	75-09-2
tetrachloroethylene	127-18-4
tetrachloromethane (tetrachlorocarbon)	56-23-5
trichloroethylene	79-01-6
chloroform / trichloromethane (chloroform)	67-66-3
chlorinated solvent	AL09
cadmium and its compounds	
diethyl cadmium	592-02-9
dimethylcadmium	506-82-1
cadmium chloride monohydrate	35658-65-2
cadmium sulfate tetrahydrate	13477-21-9
antimony, compound with cadmium (2:3)	12014-29-8
boric acid, cadmium salt	51222-60-7
C.I. pigment orange 20	12656-57-4
cadmate(2-), tetrakis(cyano-C)-, dipotassium, (T-4)-	14402-75-6
cadmium	7440-43-9
cadmium acetate	543-90-8
cadmium acrylate	15743-19-8
cadmium arsenide (Cd3As2)	12006-15-4
cadmium bromide	7789-42-6
cadmium bromide, tetrahydrate	13464-92-1
cadmium carbonate	513-78-0
cadmium chloride	10108-64-2
cadmium chloride phosphate (Cd5Cl(PO4)3)	12185-64-7
cadmium chloride phosphate (Cd5Cl(PO4)3), manganese-doped	100402-53-7
cadmium chloride, hydrate (2:5)	7790-78-5
cadmium chromate	14312-00-6
cadmium cyanide (Cd(CN)2)	542-83-6
cadmium diicosanoate	14923-81-0
cadmium dinitrite	7790-83-2
cadmium diricinoleate	13832-25-2
cadmium fluoborate	14486-19-2
cadmium fluoride (CdF2)	7790-79-6
cadmium hexafluorosilicate(2-)	17010-21-8
cadmium hydrogen phosphate	14067-62-0
cadmium hydroxide (Cd(OH)2)	21041-95-2
cadmium iodate	7790-81-0
cadmium iodide	7790-80-9
cadmium mercury telluride ((Cd,Hg)Te)	29870-72-2
cadmium molybdenum oxide (CdMoO4)	13972-68-4
cadmium niobium oxide (Cd2Nb2O7)	12187-14-3
cadmium nitrate	10022-68-1
cadmium nitrate	10325-94-7
cadmium oxide	1306-19-0
cadmium oxide (CdO), solid solution with calcium oxide and titanium oxide (TiO2), praseodymium-	101356-99-4
cadmium oxide (CdO), solid solution with magnesium oxide, tungsten oxide (WO3) and zinc oxide	102110-30-5
cadmium peroxide (Cd(O2))	12139-22-9
cadmium phosphide (Cd3P2)	12014-28-7
cadmium propionate	16986-83-7

Substance Group name	
Substance	**CAS №**
cadmium selenide (CdSe)	1306-24-7
cadmium selenide (CdSe), solid solution with cadmium sulfide, zinc selenide and zinc sulfide, aluminum and copper-doped	101357-00-0
cadmium selenide (CdSe), solid solution with cadmium sulfide, zinc selenide and zinc sulfide, copper and manganese-doped	101357-01-1
cadmium selenide (CdSe), solid solution with cadmium sulfide, zinc selenide and zinc sulfide, europium-doped	101357-02-2
cadmium selenide (CdSe), solid solution with cadmium sulfide, zinc selenide and zinc sulfide, gold and manganese-doped	101357-03-3
cadmium selenide (CdSe), solid solution with cadmium sulfide, zinc selenide and zinc sulfide, manganese and silver-doped	101357-04-4
cadmium selenide sulfide (Cd(Se,S))	12626-36-7
cadmium selenide sulfide (Cd2SeS)	12214-12-9
cadmium selenide sulfide (CdSe0.53S0.47)	71243-75-9
cadmium selenide sulfide, (Cd2SeS)	12213-70-6
cadmium selenide sulphide	11112-63-3
cadmium stearate	2223-93-0
cadmium succinate	141-00-4
cadmium sulfate	10124-36-4
cadmium sulfate, hydrate	7790-84-3
cadmium sulfide	1306-23-6
cadmium sulphite	13477-23-1
cadmium tantalum oxide (CdTa2O6)	12292-07-8
cadmium telluride (CdTe)	1306-25-8
cadmium titanium oxide (CdTiO3)	12014-14-1
cadmium tungsten oxide (CdWO4)	7790-85-4
cadmium vanadium oxide (CdV2O6)	16056-72-7
cadmium zinc sulfide	11129-14-9
cadmium zinc sulfide ((Cd,Zn)S)	12442-27-2
cadmium zirconium oxide (CdZrO3)	12139-23-0
Lauric acid, barium cadmium salt	15337-60-7
carbonic acid, cadmium salt	93820-02-1
diboron tricadmium hexaoxide	13701-66-1
dicadmium hexakis(cyano-C)ferrate(4-)	13755-33-4
diphosphoric acid, barium cadmium salt	37131-86-5
diphosphoric acid, cadmium salt	19262-93-2
diphosphoric acid, cadmium salt (1:2)	15600-62-1
dipotassium tetrachlorocadmate(2-)	20648-91-3
phosphoric acid, ammonium cadmium salt (1:1:1)	14520-70-8
phosphoric acid, cadmium salt	13847-17-1
phosphoric acid, cadmium salt (2:3)	13477-17-3
propanoic acid, cadmium salt	16984-36-4
selenic acid, cadmium salt (1:1)	13814-62-5
selenious acid, cadmium salt (1:1)	13814-59-0
silicic acid (H2SiO3), cadmium salt (1:1)	13477-19-5
sulfamic acid, cadmium salt (2:1)	14017-36-8
telluric acid (H2TeO3), cadmium salt (1:1)	15851-44-2
telluric acid (H2TeO4), cadmium salt (1:1)	15852-14-9
tetradecanoic acid, cadmium salt	10196-67-5
cadmiumbis(diethyldithiocarbamat)	14239-68-0
cadmium(+2) cation diformate	4464-23-7
cadmium Litophone Yellow	90604-90-3
cadmium sulfoselenide red	58339-34-7
cadmium zinc litophone yellow	90604-89-0
cadmium mercury sulfide	1345-09-1
cadmium zink sulfide yellow	8048-07-5
nonanoic acid, branched, cadmium salt	93686-40-9
cadmium compounds	AL10

Substance Group name	
Substance	**CAS №**
mercury and its compounds	
alkylmercury	HSC130112
(2',7'-dibromo-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-4'-yl)hydroxymercury	55728-51-3
(2-carboxy-m-tolyl)hydroxymercury, monosodium salt	52795-88-7
(2-carboxyphenyl)hydroxymercury	14066-61-6
(acetato-O)ethylmercury	109-62-6
(acetato-O)methylmercury	108-07-6
(bromodichloromethyl)phenylmercury	3294-58-4
(dihydroxyphenyl)phenylmercury	27360-58-3
(lactato-O1,O2)mercury	18918-06-4
(maleoyldioxy)bis[phenylmercury]	2701-61-3
(metaborato-O)phenylmercury	31224-71-2
(phenylmercurio)urea	2279-64-3
[(2-hydroxyethyl)amino]phenylmercury acetate	61792-06-1
[.mu.-[(oxydiethylene but-2-enedioato)(2-)]]diphenyldimercury	94070-92-5
[.mu.-[[4,4'-(oxydiethylene) bis(dodecenylsuccinato)](2-)]]diphenyldimercury	93882-20-3
[.mu.-[metasilicato(2-)-O:O]]bis(2-methoxyethyl)dimercury	19367-79-4
[.mu.-[orthoborato(2-)-O:O']]diphenyldimercury	6273-99-0
[2,2',2"-nitrilotri(ethanol)-N,O,O',O"]phenylmercury lactate	23319-66-6
[2-ethylhexyl hydrogen maleato-O']phenylmercury	27605-30-7
[benzoato(2-)-C2,O1]mercury	5722-59-8
[naphthoato(1-)-O]phenylmercury	31632-68-5
2-(ethylmercuriothio)benzoic acid	148-61-8
2-ethoxyethylmercury acetate	124-08-3
2-ethoxyethylmercury chloride	124-01-6
2-hydroxy-5-(1,1,3,3-tetramethylbutyl)phenylmercury acetate	584-18-9
2-methoxyethylmercury chloride	123-88-6
6-methyl-3-nitrobenzoxamercurate	133-58-4
barium tetraiodomercurate	10048-99-4
bis(5-oxo-DL-prolinato-N1,O2)mercury	94276-38-7
bis(5-oxo-L-prolinato-N1,O2)mercury	94481-62-6
bis(acetato-O)[.mu.-[1,3-dioxane-2,5-diylbis(methylene)-c:c',O,O']]dimercury	84029-43-6
bis(lactato-O1,O2)mercury	18917-83-4
bis(trichloromethyl)mercury	6795-81-9
bis[(+)-lactato]mercury	33724-17-3
bis[(trimethylsilyl)methyl]mercury	13294-23-0
bromo(2-hydroxypropyl)mercury	18832-83-2
bromoethylmercury	107-26-6
bromomethylmercury	506-83-2
bromophenylmercury	1192-89-8
chlormerodrin	62-37-3
chloro(hydroxyphenyl)mercury	1320-80-5
chloro(o-hydroxyphenyl)mercury	90-03-9
chloro[p-[(2-hydroxy-1-naphthyl)azo]phenyl]mercury	3076-91-3
chloro-2-thienylmercury	5857-39-6
chloro-m-tolylmercury	5955-19-1
chloro-o-tolylmercury	2777-37-9
cobaltate(2-), tetrakis(thiocyanato-N)-, mercury(2+) (1:1), (T-4)-	27685-51-4
cyclohexanebutanoic acid, mercury(2+) salt	62638-02-2
diammonium tetrachloromercurate	33445-15-7
diethylmercury	627-44-1
dihydrogen [orthoborato(3-)-O]phenylmercurate(2-)	102-98-7
diiodo(5-iodopyridin-2-amine-N1)mercury	93820-20-3
dimercury amidatenitrate	1310-88-9
dimercury difluoride	13967-25-4
dimercury diiodide	15385-57-6
dimercury(I) oxalate	2949-11-3
dimethyl[.mu.-[sulphato(2-)-O:O']]dimercury	3810-81-9
dimethylmercury	593-74-8
di-o-tolylmercury	616-99-9
diphenyl[.mu.-[(tetrapropenyl)succinato(2-)-O:O']]dimercury	27236-65-3
diphenylmercury	587-85-9
disodium tetra(cyano-C)mercurate(2-)	15682-88-9
disuccinimidomercury	584-43-0
ethyliodomercury	2440-42-8

Substance Group name	
Substance	**CAS №**
ethylmercuric chloride	107-27-7
ethylmercuric phosphate	2235-25-8
fluorescein mercuric acetate	3570-80-7
hexanoic acid, 2-ethyl-, mercury(2+) salt	13170-76-8
hydrargaphen	14235-86-0
hydrogen [metasilicato(2-)-O](2-methoxyethyl)mercurate(1-)	64491-92-5
hydrogen .mu.-hydroxy[.mu.-[orthoborato(3-)-O:O']]diphenyldimercurate(1-)	94277-53-9
hydrogen [3-[(.alpha.-carboxylato-o-anisoyl)amino]-2-hydroxypropyl]hydroxymercurate(1-)	26552-50-1
iodomethylmercury	143-36-2
lactatophenylmercury	122-64-5
meralein sodium	4386-35-0
mercaptomerin sodium	21259-76-7
mercuderamide	525-30-4
mercurate(1-), (4-carboxylatophenyl)chloro-, hydrogen	59-85-8
mercurate(1-), (4-carboxylatophenyl)hydroxy-, sodium	138-85-2
mercurate(1-), triiodo-, hydrogen, compound with 3-methyl-2(3H)-benzothiazolimine (1:1)	72379-35-2
mercurate(2-), tetrachloro-, dipotassium, (T-4)-	20582-71-2
mercurate(2-), tetraiodo-, (T-4)-, dihydrogen, compound with 5-iodo-2-pyridinamine (1:2)	63325-16-6
mercurate(2-), tetraiodo-, dicopper(1+), (T-4)-	13876-85-2
mercury di(acetate) / mercuric acetate	1600-27-7
mercuric arsenate	7784-37-4
mercuric benzoate	583-15-3
mercury dibromide / mercuric bromide	7789-47-1
mercury dichloride / mercuric chloride	7487-94-7
mercuric cyanide	592-04-1
mercury diiodide / mercuric iodide	7774-29-0
mercuric nitrate	10045-94-0
mercury oxide / mercuric oxide	21908-53-2
mercuric oxycyanide	1335-31-5
mercuric potassium cyanide	591-89-9
mercuric subsulfate	1312-03-4
mercury sulphate / mercuric sulfate	7783-35-9
mercuric thiocyanate	592-85-8
mercurobutol	498-73-7
mercurous acetate	631-60-7
mercurous azide	38232-63-2
mercurous chloride	7546-30-7
mercurous iodide	7783-30-4
mercurous nitrate	10415-75-5
mercurous oxide	15829-53-5
mercurous sulfate	7783-36-0
mercury	7439-97-6
mercury (I) chromate	13465-34-4
mercury (I) nitrate	14836-60-3
mercury (II) chromate	13444-75-2
mercury (II) nitrate, monohydrate	7783-34-8
mercury acetate	592-63-2
mercury acetylide	68833-55-6
mercury ammonium chloride	10124-48-8
mercury bis(4-chlorobenzoate)	15516-76-4
mercury bis(trifluoroacetate)	13257-51-7
mercury bromide (Hg2Br2)	15385-58-7
mercury bromide (HgBr)	10031-18-2
mercury chloride	10112-91-1
mercury dichromate	7789-10-8
mercury diiodate	7783-32-6
mercury dipotassium tetrathiocyanate	14099-12-8
mercury disilver tetraiodide	7784-03-4
mercury distearate, pure	645-99-8
mercury fluoride	27575-47-9
mercury fluoride (HgF2)	7783-39-3
mercury gluconate	63937-14-4
mercury nitride	12136-15-1
mercury oleate	1191-80-6
mercury salicylate	5970-32-1

Substance Group name	
Substance	**CAS №**
mercury selenide (HgSe)	20601-83-6
mercury silver iodide	12344-40-0
mercury succinate	589-65-1
mercury sulfide (HgS)	1344-48-5
mercury telluride (HgTe)	12068-90-5
mercury thallium dinitrate	94022-47-6
mercury(1+) bromate	13465-33-3
mercury(1+) ethyl sulphate	71720-55-3
mercury(1+) trifluoroacetate	2923-15-1
mercury(1+), amminephenyl-, acetate	22450-90-4
mercury(2+) (9Z,12Z)-octadeca-9,12-dienoate	7756-49-2
mercury(2+) chloroacetate	26719-07-3
mercury(2+), bis(2,4,6-tri-2-pyridinyl-1,3,5-triazine-N1,N2,N6)-, (OC-6-1'2)-	53010-52-9
mercury(II) oxalate	3444-13-1
mercury(II) potassium iodide	7783-33-7
mercury, (2-ethylhexanoato-O)(1-methoxycyclohexyl)-	103332-13-4
mercury, (1-methoxycyclohexyl)(neodecanoato-O)-	103369-15-9
mercury, (1-methoxyethyl)(9-octadecenoato-O)-,	104325-07-7
mercury, (1-methoxycyclohexyl)(9-octadecenoato-O)-,	104325-08-8
mercury, (1-methoxyethyl)(neodecanoato-O)-	104335-53-7
mercury, (2-ethylhexanoato-O)(1-methoxyethyl)	104339-46-0
mercury, (2',7'-dibromo-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-4'-yl)hydroxy-, disodium salt	129-16-8
mercury, (2-ethylhexanoato-O)phenyl-	13302-00-6
mercury, (9-octadecenoato-O)phenyl-, (Z)-	104-60-9
mercury, (acetato-O)(2-hydroxy-5-nitrophenyl)-	63468-53-1
mercury, (acetato-O)(4-aminophenyl)-	6283-24-5
mercury, (acetato-O)[3-(chloromethoxy)propyl-C,O]-	5954-14-3
mercury, (acetato-O)[4-[[4-(dimethylamino)phenyl]azo]phenyl]-	19447-62-2
mercury, (acetato-O)diamminephenyl-, (T-4)-	68201-97-8
mercury, (neodecanoato-O)phenyl-	26545-49-3
mercury, [.mu.-[dodecylbutanedioato(2-)-O:O']]diphenyldi-	24806-32-4
mercury, [2,5-dichloro-3,6-dihydroxy-2,5-cyclohexadiene-1,4-dionato(2-)-O1,O6]-	33770-60-4
mercury, bis(4-methylphenyl)-	537-64-4
mercury, bis(acetato-O)(benzenamine)-	63549-47-3
mercury, bis(phenyldiazenecarbothioic acid 2-phenylhydrazidato-N2,S)-, (T-4)-	14783-59-6
mercury, chloro(2-hydroxy-5-nitrophenyl)-	24579-90-6
mercury, chloro(4-hydroxyphenyl)-	623-07-4
mercury, chloro(4-methylphenyl)-	539-43-5
mercury, chloro(ethanethiolato)-	1785-43-9
mercury, chloro[2-(2-cyclohexen-1-yl)-3-benzofuranyl]-	90584-88-6
mercury, chloro[p-(2,4-dinitroanilino)phenyl]-	15785-93-0
mercury, compound with sodium (2:1)	12055-37-7
mercury, compound with sodium (4:1)	57363-77-6
mercury, compound with titanium (1:3)	11083-41-3
mercury, dibutyl-	629-35-6
mercury, iodo(iodomethyl)-	141-51-5
mercury, methyl(8-quinolinolato-N1,O8)-	86-85-1
mercury, phenyl(phenyldiazenecarbothioic acid 2-phenylhydrazidato)-	56724-82-4
mercury, phenyl(propanoato-O)-	103-27-5
mercury, phenyl(trichloromethyl)-	3294-57-3
mercurymethylchloride	115-09-3
mersalyl	492-18-2
mersalyl acid	486-67-9
methoxyethylmercuric acetate	151-38-2
methyl mercury dicyandiamide	502-39-6
methyl(pentachlorophenol,ato)mercury	5902-76-1
methylmercury	22967-92-6
methylmercury benzoate	3626-13-9
methylmercury hydroxide	1184-57-2
n-(ethylmercuric)-p-toluenesulphonannilide	517-16-8
naphthenic acids, mercury salts	1336-96-5
nitric acid, mercury(2+) salt, hemihydrate	13465-31-1
otimerate sodium	16509-11-8
perchloric acid, mercury(2+) salt	7616-83-3

Substance Group name	
Substance	**CAS №**
phenyl(quinolin-8-olato-N1,O8)mercury	14354-56-4
phenyl(tribromomethyl)mercury	3294-60-8
phenylmercuric acetate	62-38-4
phenylmercuric hydroxide	100-57-2
phenylmercuric nitrate	55-68-5
phenylmercury benzoate	94-43-9
phenylmercury chloride	100-56-1
phenylmercury dimethyldithiocarbamate	32407-99-1
phenylmercury hydroxide--phenylmercury nitrate	8003-05-2
phenylmercury salicylate	28086-13-7
phenylmercury stearate	104-59-6
phosphoric acid, mercury salt	10451-12-4
potassium triiodomercurate(1-)	22330-18-3
sodium [3-[[(3-carboxylatopropionamido)carbonyl]amino]-2-methoxypropyl]hydroxymercurate(1-)	7620-30-6
sodium 4-chloromercuriobenzoate	3198-04-7
sodium o-(ethylmercurithio)benzoate	54-64-8
sodium timerfonate	5964-24-9
tetrakis(acetato-O)[.mu.4-(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-2',4',5',7'-tetrayl)]tetramercury	54295-90-8
trimercury biscitrate	18211-85-3
cadmium mercury sulfide	1345-09-1
mercury, (2-mercaptoacetamidato-O,S)methyl	7548-26-7
mercury-difulminate	628-86-4
mercury compounds	AL11
lead and its compounds	
lead hydride	14452-81-4
(2-ethylhexanoato-O)(isodecanoato-O)lead	94246-92-1
(2-ethylhexanoato-O)(isononanoato-O)lead	94246-91-0
(2-ethylhexanoato-O)(isooctanoato-O)lead	94246-90-9
(2-ethylhexanoato-O)(neodecanoato-O)lead	94246-93-2
(isodecanoato-O)(isononanoato-O)lead	94246-86-3
(isodecanoato-O)(isooctanoato-O)lead	94246-85-2
(isodecanoato-O)(neodecanoato-O)lead	94246-87-4
(isononanoato-O)(isooctanoato-O)lead	94246-84-1
(isononanoato-O)(neodecanoato-O)lead	94481-58-0
(neononanoato-O)(neoundecanoato-O)lead	93894-64-5
.alpha.-D-glucopyranose, 1-(dihydrogen phosphate), lead salt	68901-12-2
[.mu.-(4,6-dinitroresorcinolato(2-)-O1,O3)]dihydroxydilead	84837-22-9
[.mu.-[[5,5'-azobis[1H-tetrazolato]](2-)]]dihydroxydilead	94015-57-3
1,2,3-propanetricarboxylic acid, 2-hydroxy-, lead salt	14450-60-3
1,2,3-propanetricarboxylic acid, 2-hydroxy-, lead(2+) salt (2:3)	512-26-5
1,2,3-propanetricarboxylic acid, 2-hydroxy-, lead(2+) salt (2:3), trihydrate	6107-83-1
1,2-benzenedicarboxylic acid, lead(2+) salt	18608-34-9
1,2-benzenedicarboxylic acid, lead(2+) salt, basic	90193-83-2
1,3,5,7,9-pentaoxa-2.lambda.2,4.lambda.2,6.lambda.2,8.lambda.2-tetraplumbacyclotridec-11-ene-	12275-07-9
1,3,5-triazine-2,4,6(1H,3H,5H)-trione, lead salt	54554-36-8
1,3-benzenediol, 2,4,6-trinitro-, lead salt	15245-44-0
1,3-benzenediol, nitro-, lead(2+) salt (1:1)	70268-38-1
2,4-Cyclohexadien-1-one, 3,5,6-trihydroxy-4,6-bis(3-methyl-2-butenyl)-2-(3-methyl-2-oxobutyl)-,	68901-11-1
2-butenedioic acid (E)-, lead salt	13698-55-0
2-butenedioic acid (E)-, lead(2+) salt, basic	90268-59-0
2-butenedioic acid (Z)-, lead(2+) salt, basic	90268-66-9
2-propenoic acid, 2-methyl-, lead salt, basic	90552-19-5
2-propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, lead(2+) bis(2-methyl-2-propenoate) and .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)	68155-47-5
3-(triphenylplumbyl)-1H-pyrazole	51105-45-4
7,11-Metheno-11H,13H-tetrazolo[1,5-c][1,7,3,5,2,6]dioxadiazadiplumbacyclododecine, 5,5,13,13-tetradehydro-4,5-dihydro-4,8,10,15-tetranitro-	19651-80-0
7-methyloctanoic acid, lead salt	97952-39-1
9-hexadecenoic acid, lead(2+) salt, (Z)-, basic	90388-15-1
9-octadecenoic acid (Z)-, lead salt	15347-55-4

Substance Group name	
Substance	**CAS №**
9-octadecenoic acid (Z)-, lead salt, basic	90459-88-4
acetic acid, lead salt, basic	51404-69-4
acetoxytributylplumbane	2587-82-8
acetoxytrimethylplumbane	5711-19-3
acetoxytriphenylplumbane	1162-06-7
arsenic acid, lead (4+) salt	53404-12-9
basic lead sulfite	12608-25-2
benzenesulfonic acid, 4-C10-13-sec-alkyl derivitives, lead(2+) salts	84961-75-1
bis(diethyldithiocarbamato-S,S')lead	17549-30-3
bis(o-acetoxybenzoato)lead	62451-77-8
bis(pentane-2,4-dionato-O,O')lead	15282-88-9
bismuth lead ruthenium oxide	65229-22-3
bismuth, compound with lead (1:1)	12048-28-1
butanedioic acid, 2,3-dihydroxy- [R-(R*,R*)]-, lead(2+) salt (1:1)	815-84-9
carbamodithioic acid, ethylphenyl-, lead(2+) salt	93892-65-0
carbonic acid, lead(2+) salt	25510-11-6
castor oil, dehydrated, polymer with rosin, calcium lead zinc salt	68604-05-7
chlorotrimethylplumbane	1520-78-1
chlorotriphenylplumbane	1153-06-6
lead sulfochromate yellow / chrome yellow (lead chromate pigment)	1344-37-2
chromium lead oxide	11119-70-3
chromium lead oxide sulfate, silica-modified	116565-74-3
copper, .beta.-resorcylate salicylate lead complexes	68411-07-4
cyclohexanebutanoic acid, lead(2+) salt	62637-99-4
decanoic acid, branched, lead salts	90342-24-8
decanoic acid, lead salt	20403-42-3
diacetoxydiphenylplumbane	6928-68-3
diamyldithiocarbamate, lead	109707-90-6
diantimony lead tetroxide	16450-50-3
dibasic lead stearate	56189-09-4
dibismuth dilead tetraruthenium tridecaoxide	11116-83-9
dilead chromate dihydroxide	12017-86-6
dilead dirhodium heptaoxide	37240-96-3
diphenyllead dichloride	2117-69-3
diplumbane, hexaethyl-	2388-00-3
diplumbane, hexaphenyl-	3124-01-4
docosanoic acid, lead salt	3249-61-4
dodecanoic acid, lead salt, basic	90342-56-6
dodecanoic acid, lead(2+) salt	15773-55-4
fatty acids, C12-18, lead salts	68131-60-2
fatty acids, C14-26, lead salts	93165-26-5
fatty acids, C16-18, lead salts	91031-62-8
fatty acids, C18-24, lead salts	84776-54-5
fatty acids, C4- 20-branched, lead salts	125328-49-6
fatty acids, C6- 19-branched, lead salts	91002-20-9
fatty acids, C8-10, lead salts	91031-61-7
fatty acids, C8-10-branched, lead salts	85049-42-9
fatty acids, C8-10-branched, lead salts, basic	68409-79-0
fatty acids, C8-12, lead salts	84776-53-4
fatty acids, C8-18 and C18-unsaturated, lead salts	84776-36-3
fatty acids, C8-9, lead salts	91031-60-6
fatty acids, C9-11-branched, lead salts	81412-57-9
fatty acids, castor-oil, hydrogenated, lead salts	91697-36-8
fatty acids, coco, lead salts	92044-89-8
fatty acids, tall-oil, lead manganese salts	61788-53-2
fatty acids, tall-oil, lead salts	61788-54-3
fatty acids, tallow, reaction products with lead oxide	94349-78-7
flue dust, lead blast furnace	70514-05-5
formic acid, lead salt	7056-83-9
gilsonite, polymer with linseed oil, lead salt	68989-89-9
glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, lead(2+) sodiumsalt (1:1:2)	22904-40-1
hafnium lead trioxide	12029-23-1
hexacosanoic acid, lead salt	94006-20-9
hexadecanoic acid, lead salt, basic	90388-09-3
hexadecanoic acid, lead(2+) salt, basic	90388-10-6

Substance Group name	
Substance	**CAS №**
hexanoic acid, 2-ethyl-, lead(2+) salt	301-08-6
hexanoic acid, 3,5,5-trimethyl-, lead salt	23621-79-6
hydroxy(neodecanoato-O)lead	71753-04-3
iron lead oxide (Fe12PbO19)	12023-90-4
isodecanoic acid, lead salt, basic	90431-14-4
isodecanoic acid, lead(2+) salt, basic	91671-82-8
isononanoic acid, lead salt	27253-41-4
isononanoic acid, lead salt, basic	90431-21-3
isooctanoic acid, lead salt	64504-12-7
isooctanoic acid, lead salt, basic	90431-26-8
isooctanoic acid, lead(2+) salt, basic	91671-83-9
isoundecanoic acid, lead(2+) salt, basic	91671-84-0
lauric acid, lead salt	15306-30-6
leach residues, lead slag	69029-71-6
lead	7439-92-1
lead (II) acetate, trihydrate	6080-56-4
lead (II) methylthiolate	35029-96-0
lead (IV) acetate	546-67-8
lead 12-hydroxyoctadecanoate	65127-78-8
lead 198	16646-00-7
lead 199	27486-00-6
lead 2,4-dihydroxybenzoate	20936-32-7
lead 200	16645-99-1
lead 201	17239-87-1
lead 202	15752-86-0
lead 203	14687-25-3
lead 205	14119-28-9
lead 209	14119-30-3
lead 210	14255-04-0
lead 211	15816-77-0
lead 212	15092-94-1
lead 214	15067-28-4
lead 2-ethylhexoate	16996-40-0
lead 3-(acetamido)phthalate	93839-98-6
lead 5-nitroterephthalate	60580-60-1
lead acetate	15347-57-6
lead acetate	301-04-2
lead acrylate	14466-01-4
lead alloy, dross	69011-59-2
lead alloy, Pb,Sn, dross	69011-60-5
lead antimonate	13510-89-9
lead antimonide	12266-38-5
lead arsenate	3687-31-8
lead arsenate (1:1) / lead arsenate	7784-40-9
lead arsenate (Pb3(AsO4)2)	10102-48-4
lead arsenate, unspecified	7645-25-2
lead arsenite	10031-13-7
lead azide	13424-46-9
lead benzoate	15907-04-7
lead bis(12-hydroxystearate)	58405-97-3
lead bis(2-ethylhexanolate)	93840-04-1
lead bis(3,5,5-trimethylhexanoate)	35837-70-8
lead bis(5-oxo-DL-prolinate)	85392-78-5
lead bis(5-oxo-L-prolinate)	85392-77-4
lead bis(isononanoate)	52847-85-5
lead bis(isoundecanoate)	93965-29-8
lead bis(nonylphenol,ate)	72586-00-6
lead bis(piperidine-1-carbodithioate)	41556-46-1
lead bis(p-octylphenol,ate)	84394-98-9
lead bis(tetracosylbenzenesulphonate)	85865-91-4
lead bis(tricosanoate)	93966-37-1
lead bis[didodecylbenzenesulphonate]	85865-92-5
lead borate	14720-53-7
lead b-resorcylate	41453-50-3
lead bromide (PbBr2)	10031-22-8

Substance Group name	
Substance	**CAS №**
lead carbonate	598-63-0
lead carbonate hydroxide	1319-46-6
lead chloride	7758-95-4
lead chloride (V.A.N.)	12612-47-4
lead chloride oxide	12205-72-0
lead chromate	7758-97-6
lead chromate oxide	18454-12-1
lead chromate silicate	11113-70-5
lead chromate silicate (Pb3(CrO4)(SiO4))	69011-07-0
lead chromate sulfate (Pb9(CrO4)5(SO4)4)	51899-02-6
lead cyanamidate	20890-10-2 20837-86-9 35112-70-0
lead cyanide	592-05-2
lead dibenzoate	873-54-1
lead dibromate	34018-28-5
lead dibutanolate	65119-94-0
lead dibutyrate	819-73-8
lead didocosanoate	29597-84-0
lead dihexanoate	15773-53-2
lead dilactate	18917-82-3
lead dilinoleate	33627-12-2
lead dimethyldithiocarbamate	19010-66-3
lead dimyristate	32112-52-0
lead dipalmitate	15773-56-5
lead diphosphinate	10294-58-3
lead dipicrate	6477-64-1
lead dipropionate	814-70-0
lead disulphamidate	13767-78-7
lead disulphide	12137-74-5
lead diundec-10-enoate	94232-40-3
lead fluoborate	13814-96-5
lead fluoride	7783-46-2
lead fluoride hydroxide	97889-90-2
lead hexafluorosilicate / lead fluorosilicate	25808-74-6
lead formate	811-54-1
lead germanate	12435-47-1
lead hexafluorosilicate	1310-03-8
lead hydroxide	19783-14-3 39345-91-0
lead hydroxide nitrate	12268-84-7
lead hydroxysalicylate	87903-39-7
lead icosanoate	94266-32-7
lead icosanoate (1:2)	94266-31-6
lead iodate	25659-31-8
lead iodide	10101-63-0
lead isophthalate	38787-87-0
lead linoleate	16996-51-3
lead malate	816-68-2
lead maleate	19136-34-6
lead methacrylate	1068-61-7
lead methacrylate	52609-46-8
lead molybdate	10190-55-3
lead oxide / lead monoxide	1317-36-8
lead myristate	20403-41-2
lead naphthalate	50825-29-1
lead naphthenate	61790-14-5
lead neobate	12034-88-7
lead neodecanoate	27253-28-7
lead nitrate	10099-74-8
lead nitroresorcinate	51317-24-9
lead oleate	1120-46-3
lead oxalate	814-93-7
lead oxide	1335-25-7
dilead oxide (Pb2O)	12059-89-1

Substance Group name	
Substance	**CAS №**
lead oxide (PbO), lead-contg.	68411-78-9
lead oxide (PbO), retort	69029-53-4
lead oxide phosphonate (Pb3O2(HPO3))	12141-20-7
lead oxide phosphonate, hemihydrate	1344-40-7
lead oxide sulfate	12765-51-4
lead oxide sulfate (Pb2O(SO4))	12036-76-9
lead oxide sulfate (Pb4O3(SO4))	12202-17-4
lead oxide sulfate (Pb5O4(SO4))	12065-90-6
lead palmitate	19528-55-3
lead pentadecanoate	93966-74-6
lead perchlorate	13637-76-8
lead dioxide / lead peroxide	1309-60-0
lead phosphate	7446-27-7
lead phthalate	16183-12-3
lead phthalate	6838-85-3
lead picrate	25721-38-4
lead propionate	42558-73-6
lead pyrophosphate	13453-66-2
lead ruthenium oxide (PbRuO3)	37194-88-0
lead sebacate	29473-77-6
lead selenate	7446-15-3
lead selenide	12069-00-0
lead selenite	7488-51-9
lead silicate	11120-22-2
lead silicate	13566-17-1
lead silicate	22569-74-0
lead silicate sulfate	12687-78-4
lead silicate sulfate	67711-86-8
lead stearate	7428-48-0
lead stearate dibasic	52652-59-2
lead styphnate	63918-97-8
lead subacetate	1335-32-6
lead succinate	1191-18-0
lead sulfate	15739-80-7
lead sulfate	7446-14-2
lead sulfate, tribasic	12397-06-7
lead sulfide / lead sulfide (PbS)	1314-87-0
lead sulfomolybdochromate, silica encapsulated	116565-73-2
lead tantalate	12065-68-8
lead telluride	1314-91-6
lead tellurite	13845-35-7
lead tetracosanoate	93966-38-2
lead(II,IV) oxide / lead tetraoxide	1314-41-6
lead thiocyanate	592-87-0
lead thiosulfate	13478-50-7
lead tin oxide (PbSnO3)	12036-31-6
lead titanate / lead titanium oxide (PbTiO3)	12060-00-3
lead titanium zirconium oxide / lead titanium zirconium oxide (Pb(Ti,Zr)O3)	12626-81-2
lead trioxide	1314-27-8
lead tungsten oxide	7759-01-5
lead tungsten oxide	12737-98-3
lead uranate pigment	85536-79-4
lead vanadate	10099-79-3
lead zirconate	12060-01-4
lead(2+) (R)-12-hydroxyoleate	13094-04-7
lead(2+) (Z)-hexadec-9-enoate	93858-24-3
lead(2+) 2,4-dinitroresorcinolate	13406-89-8
lead(2+) 4-(1,1-dimethylethyl)benzoate	85292-77-9
lead(2+) 4,4'-isopropylidenebisphenol,ate	93858-23-2
lead(2+) 4,6-dinitro-o-cresolate	65121-76-8
lead(2+) acrylate	867-47-0
lead(2+) decanoate	15773-52-1
lead(2+) heptadecanoate	63399-94-0
lead(2+) isohexadecanoate	95892-13-0
lead(2+) isooctadecanoate	70727-02-5

Substance Group name	
Substance	**CAS №**
lead(2+) neodecanoate	71684-29-2
lead(2+) neononanoate	93894-48-5
lead(2+) neoundecanoate	93894-49-6
lead(2+) octanoate	7319-86-0
lead(4+) stearate	7717-46-6
lead(II) fumarate	71686-03-8
lead(II) isodecanoate	84852-34-6
lead(II) isooctanoate	93981-67-0
lead(II) maleate	17406-54-1
lead(IV) fluoride	7783-59-7
lead, (2-methyl-4,6-dinitrophenol,ato-O1)(nitrato-O)-.mu.-oxodi-, monohydrate	79357-62-3
lead, [.mu.-[1,2-benzenedicarboxylato(2-)-O1:O2]]di-.mu.-oxotri-, cyclo-	17976-43-1
lead, [1,2-benzenedicarboxylato(2-)]dioxotri-	69011-06-9
lead, [1,2-benzenedicarboxylato(2-)]oxodi-	57142-78-6
lead, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, (SP-4-1)-	15187-16-3
lead, 2-ethylhexanoate isodecanoate complexes, basic	90431-30-4
lead, 2-ethylhexanoate isononanoate complexes, basic	90431-31-5
lead, 2-ethylhexanoate isooctanoate complexes, basic	90431-32-6
lead, 2-ethylhexanoate naphthenate complexes	90431-33-7
lead, 2-ethylhexanoate naphthenate complexes, basic	90431-34-8
lead, 2-ethylhexanoate neodecanoate complexes, basic	90431-35-9
lead, 2-ethylhexanoate tall-oil fatty acids complexes	68187-37-1
lead, alkyls, manufacturing wastes	70513-89-2
lead, antimonial	69029-50-1
lead, antimonial, dross	69029-51-2
lead, bis(2-hydroxybenzoato-O1,O2)-, (T-4)-	15748-73-9
lead, bis(dipentylcarbamodithioato-S,S')-, (T-4)-	36501-84-5
lead, bis(diphenylcarbamodithioato-S,S')-, (T-4)-	75790-73-7
lead, bis(octadecanoato)dioxotri-	12565-18-3
lead, bis(octadecanoato)dioxotri-	12578-12-0
lead, bullion	97808-88-3
lead, C3-13-fatty acid naphthenate complexes	79803-79-5
lead, C4-10-fatty acid naphthenate complexes	84067-00-5
lead, C4-10-fatty acid octanoate complexes	92200-92-5
lead, C5-23-branched carboxylate C4-10-fatty acid complexes	84066-98-8
lead, C5-23-branched carboxylate C4-10-fatty acid naphthenate complexes	83711-45-9
lead, C5-23-branched carboxylate naphthenate complexes	83711-46-0
lead, C5-23-branched carboxylate naphthenate octanoate complexes	83711-47-1
lead, C5-23-branched carboxylate octanoate complexes	84066-99-9
lead, C6-19-branched carboxylate naphthenate complexes	70084-67-2
lead, C8-10-branched fatty acids C9-11-neofatty acids naphthenate complexes	90431-28-0
lead, C8-10-branched fatty acids C9-11-neofatty acids naphthenate complexes, overbased	90431-27-9
lead, C9- 28-neocarboxylate 2-ethylhexanoate complexes, basic	125494-56-6
lead, decanoate octanoate complexes	70321-55-0
lead, di-.mu.-hydroxy(2-methyl-4,6-dinitrophenol,ato-O1)(nitrato-O)di-	96471-22-6
lead, dihydroxy[2,4,6-trinitro-1,3-benzenediolato(2-)]di-	12403-82-6
lead, dross	69029-52-3
lead, dross, antimony-rich	69029-45-4
lead, dross, bismuth-rich	69029-46-5
lead, dross, copper-rich	69227-11-8
lead, dross, vanadium-zinc-containing	100656-49-3
lead, isodecanoate isononanoate complexes, basic	90431-36-0
lead, isodecanoate isooctanoate complexes, basic	90431-37-1
lead, isodecanoate naphthenate complexes	90431-38-2
lead, isodecanoate naphthenate complexes, basic	101012-92-4
lead, isodecanoate neodecanoate complexes, basic	90431-39-3
lead, isononanoate isooctanoate complexes, basic	84929-94-2
lead, isononanoate naphthenate complexes	84929-97-5
lead, isononanoate naphthenate complexes, basic	90431-40-6
lead, isononanoate neodecanoate complexes, basic	90431-41-7
lead, isooctanoate naphthenate complexes	68515-80-0
lead, isooctanoate naphthenate complexes, basic	90431-42-8
lead, isooctanoate neodecanoate complexes	101013-06-3
lead, isooctanoate neodecanoate complexes, basic	84929-95-3
lead, naphthenate neodecanoate complexes	90431-43-9

Substance Group name	
Substance	**CAS №**
lead, naphthenate neodecanoate complexes, basic	84929-96-4
lead, neononanoate neoundecanoate complexes, basic	90431-44-0
lead, zinc dross	94551-60-7
linseed oil, polymer with tung oil, lead salt	68990-75-0
linseed oil, reaction products with lead oxide (Pb3O4) and mastic	68152-99-8
methanesulfonic acid, lead(2+) salt	17570-76-2
lead chromate molybdate sulphate red / molybdate orange (lead chromate pigment)	12656-85-8
naphthalenesulfonic acid, diisononyl-, lead(2+) salt	63568-30-9
naphthalenesulfonic acid, dinonyl-, lead(2+) salt	61867-68-3
naphthenic acids, lead (2+) salts	91078-81-8
naphthenic acids, lead manganese salts	61788-52-1
naphthenic acids, lead salts, basic	92045-67-5
neodecanoic acid, lead salt, basic	90459-25-9
neononanoic acid, lead salt, basic	90459-26-0
neoundecanoic acid, lead salt, basic	90459-28-2
nitric acid, lead(2+) salt, reaction products with sodium tin oxide	97953-08-7
nitrous acid, lead(2+) salt	13826-65-8
octadecanoic acid, lead salt, basic	90459-51-1
octadecanoic acid, lead(2+) salt, basic	90459-52-2
octadecanoic acid, lead(2+) salt, tribasic	52080-60-1
octanoic acid, lead salt	15696-43-2
orthoboric acid, lead(2+) salt	35498-15-8
perchloric acid, reaction products with lead oxide (pbo) and triethanolamine	99749-31-2
petrolatum, petroleum, oxidized, lead salt	67674-14-0
phenol,, 2-methyldinitro-, lead salt	50319-14-7
phenol,, dodecyl-, lead(2+) salt	68586-21-0
phenol,, tetrapropylene-, lead(2+) salt	122332-23-4
phosphonic acid, lead salt	16038-76-9
phosphonic acid, lead salt, basic	53807-64-0
phosphonic acid, lead(2+) salt	24824-71-3
phosphonic acid, lead(2+) salt (1:1)	13453-65-1
phosphonic acid, lead(2+) salt (2:1)	15521-60-5
phosphoric acid, lead(2+) salt (1:1)	15845-52-0
phosphoric acid, mixed butyl and hexyl diesters, lead(2+) salts	93925-27-0
phosphorodithioate O,O-bis(1,3-dimethylbutyl), lead salt	20383-42-0
phosphorodithioic acid, mixed O,O-bis(bu and pentyl) esters, lead(2+) salt	91783-10-7
plumbane, chlorotriethyl-	1067-14-7
plumbane, diethyldimethyl-	1762-27-2
plumbane, ethyl methyl derivitives	68610-17-3
plumbane, ethyltrimethyl-	1762-26-1
plumbane, tetrabutyl-	1920-90-7
plumbane, tetrakis(1-methylethyl)-	14846-40-3
plumbane, tetrakis(1-methylpropyl)-	65151-08-8
plumbane, triethylmethyl-	1762-28-3
plumbate (PbO22-), disodium	12034-30-9
plumbate (PbO44-), calcium (1:2), (T-4)-	12013-69-3
potassium pentadecaoxodiplumbatepentaniobate(1-)	12372-45-1
residues, copper-iron-lead-nickel matte, sulfuric acid-insol.	102110-49-6
salicylate, lead (II)	6107-93-3
silicic acid (H2sio3), calcium salt (1:1), lead and manganese-doped	100402-96-8
lead silicate / silicic acid (H2SiO3), lead(2+) salt (1:1)	10099-76-0
silicic acid (H4SiO4), lead salt	15906-71-5
silicic acid, calcium salt, lead and manganese-doped	102110-36-1
silicic acid, lead nickel salt	68130-19-8
slimes and sludges, lead sinter dust scrubber	70514-37-3
speiss,, lead-zinc	93821-72-8
spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 2',4',5',7'-tetrabromo-3',6'-dihydroxy-, lead salt	1326-05-2
lead stearate / stearic acid, lead (2+) salt	1072-35-1
sulfuric acid, barium lead salt	42579-89-5
sulfuric acid, barium salt (1:1), lead-doped	99328-54-8
sulfuric acid, lead salt, tetrabasic	52732-72-6
sulfuric acid, lead(2+) salt, basic	90583-07-6
sulfurous acid, lead salt, basic	52231-92-2
sulfurous acid, lead salt, dibasic	62229-08-7
sulfurous acid, lead(2+) salt, basic	90583-37-2

Substance Group name	
Substance	**CAS №**
sulfurous acid, lead(2++) salt (1:1)	7446-10-8
telluric acid (H2TeO3), lead(2+) salt (1:1)	15851-47-5
tetradecanoic acid, lead salt, basic	90583-65-6
lead, tetraethyl- / tetraethyllead	78-00-2
lead, tetramethyl- / tetramethyl lead	75-74-1
tetraphenyllead	595-89-1
tetrapropyl lead	3440-75-3
thiosulphuric acid, lead salt	26265-65-6
lead/Tin alloy	39412-44-7
trinitrophloroglucinol, lead salt	51325-28-1
naphthenic acid, cobalt lead manganese salt	61789-50-2
lead sub-carbonate / lead, bis(carbonato(2-))dihydroxytri	1344-36-1
lead borate / boric acid (HBO2), lead(2+) salt, monohydrate (8CI, 9CI)	10214-39-8
fatty acids, C6-19-branched, lead salts, basic	68603-83-8
pigment Lightfast lead-molybdate orange OS (9CI)	78690-68-3
lead compounds	AL12
hexavalent chromium compounds	
lead sulfochromate yellow	1344-37-2
ammonium dichromate	7789/9/5
ammonium chromate	7788-98-9
barium chromate	10294-40-3
C.I. pigment orange 21	1344-38-3
calcium chromate	13765-19-0
cesium chromate	13454-78-9
chromate(1-), chlorotrioxo-, potassium, (T-4)-	16037-50-6
chromic acid	7738-94-5
chromic sulfuric acid / chromic acid (H2Cr2O7)	13530-68-2
chromic acid (H2Cr2O7), nickel(2+) salt (1:1)	15586-38-6
chromic acid (H2CrO4), lanthanum(3+) salt (3:2)	16565-94-9
chromic acid (H2CrO4), magnesium salt (1:1)	13423-61-5
chromic acid, ammonium salt	14445-91-1
chromic acid, barium potassium salt	27133-66-0
chromic acid, potassium zinc salt	41189-36-0
chromium (VI)	18540-29-9
chromium (VI) chloride	14986-48-2
chromium arsenide (Cr2As)	12254-85-2
chromium cobalt copper iron manganese oxide	102262-21-5
chromium cobalt iron manganese oxide	102262-22-6
chromium cobalt manganese oxide	102262-19-1
chromium cobalt oxide	37382-24-4
chromium cobalt oxide (Cr2CoO4)	12016-69-2
chromium hydroxide oxide silicate	68475-49-0
chromium nickel oxide (Cr2NiO4)	12018-18-7
chromium trioxide (CrO3)	1333-82-0
chromyl chloride	14977-61-8
cobalt chromate	13455-25-9
cobalt chromium alloy	11114-92-4
copper chromate	13548-42-0
copper dichromate	13675-47-3
dithallium dichromate	13453-35-5
lead chromate	7758-97-6
lead chromate oxide	18454-12-1
lithium chromate	14307-35-8
magnesium dichromate	14104-85-9
lead chromate molybdate sulphate red / molybdate orange (lead chromate pigment)	12656-85-8
nickel chromate	14721-18-7
nitric acid, barium salt, reaction products with ammonia, chromic acid (H2CrO4) diammonium salt and copper(2+) dinitrate, calcined	99328-50-4
nitric acid, copper(2+) salt, reaction products with ammonia, chromic acid (H2CrO4) diammonium salt and manganese(2+) dinitrate, kilned	100402-65-1
potassium chromate	7789-00-6
potassium dichromate	7778-50-9
silver chromate	7784-01-2
disodium dichromate dihydrate	7789-12-0
dichromium tris(chromate)	24613-89-6

Substance Group name	
Substance	**CAS №**
sodium chlorate	7775-11-3
sodium dichromate	10588-01-9
strontium chromate	7789-06-2
thallium (I) chromate	13473-75-1
zinc chromate	1328-67-2
zinc chromate	13530-65-9
zinc chromate hydroxide	15930-94-6
zinc dichromate	14018-95-2
zinc potassium chromate	11103-86-9
zinc yellow (zinc chromate pigment)	37300-23-5
dihydroxy-dioxo-chromium	11115-74-5
potassium; dioxido-dioxo-chromium	12433-50-0
pentazinc chromate octahydroxide	49663-84-5
acids generated from chromium trioxide and their oligomers:	AL13-1
oligomers of chromic acid and dichromic acid	AL13-2
hexavalent cromium compounds	AL13
organiostannic compounds	
tributyltin carboxylate(C=9-15)	HSC380309
bis(tri-n-butyltin) dibromosuccinate	31732-71-5
bis (tributyltin) phthalate	4782-29-0
bis (tributyltin) fumarate	6454-35-9
bis (tributyltin) maleate	14275-57-1
(2-biphenyloxy)tributyltin	3644-37-9
triphenyltin chloroacetate / (chloroacetoxy)triphenylstannane	7094-94-2
tributyltin abietate / [1R-(1.alpha.,4a.beta.,4b.alpha.,10a.alpha.)]-tributyl[[[1,2,3,4,4a,4b,5,6,10,10a-decahydro-7-isopropyl-1,4a-dimethyl-1-phenanthryl]carbonyl]oxy]stannane	26239-64-5
1,3,5-tris(tributyltin)-S-triazine-2,4,6-trione	752-58-9
2-butenoic acide, 4-oxo-4-[(tributylsyannyl)oxy]-	4027-18-3
acetic acid, 2,2',2"-[(methylstannylidyne)tris(thio)]tris-, triisooctyl ester	54849-38-6
5,5,12,12-tetrabutyl-8-methylene-7,10-dioxo-6,11-dioxa-5,12-distannahexadecane	25711-26-6
bis(tri-n-butyltin)oxide / bis(tributyltin)oxide	56-35-9
bromotrimethylstannane	1066-44-0
p-nitropphenoxytributyltin	3644-32-4
fentin acetate / stannane, acetoxytriphenyl-	900-95-8
stannane, bromotriethyl-	2767-54-6
triphenyltin fluoride / stannane, fluorotriphenyl-	379-52-2
tributyltin fluoride / stannane, tributylfluoro-	1983-10-4
tributyltin laurate / tributyl(lauroyloxy)stannane	3090-36-6
tributyl(neodecanoyloxy)stannane	28801-69-6
tributyl(oleoyloxy)stannane	3090-35-5
tributyltin	56573-85-4
tributyltin (and salts and esters)	688-73-3
tributyltin .alpha.-(2,4,5-trichlorophenoxy) propionate	73940-89-3
tributyltin .beta.-iodopropionate	73927-95-4
tributyltin 2-ethylhexanoate	5035-67-6
(acetyloxy)tributylstannane / tributyltin acetate	56-36-0
tributyltin acrylate	13331-52-7
tributyltin benzoate	4342-36-3
tributyltin bromide	1461-23-0
tributylchlorostannane / tributyltin chloride	1461-22-9
tributyltin chloroacetate	5847-52-9
tributyltin cinnamate	27147-18-8
tributyltin cyanate	4027-17-2
tributyltin cyanide	2179-92-2
tributyltin dimethyldithiocarbamate	20369-63-5
tributyltin gamma-chlorobuthrate	33550-22-0
tributyltin hydroxide	1067-97-6
tributyltin iodide	7342-47-4
tributyltin iodoacetate	73927-91-0
tributyltin isooctylthioacetate	73927-97-6
tributyltin isopropylsuccinate	53404-82-3
tributyltin isothiocyanate	681-99-2
tributyltin linoleate	24124-25-2
tributyltin methacrylate	2155-70-6
tributyltin methanesulphonate	13302-06-2

Substance Group name	
Substance	**CAS №**
tributyltin methoxide	1067-52-3
tributyltin monopropylene glycol maleate	53466-85-6
tributyltin naphthenate	36631-23-9
tributyltin naphthenate	85409-17-2
tributyltin nonanoate	4027-14-9
tributyltin o-iodobenzoate	73927-93-2
tributyltin p-iodobenzonate	73940-88-2
tributyltin sulfamate	6517-25-5
tributyltin undecylenate	69226-47-7
triethyltin acetate	1907-13-7
triethyltin chloride	994-31-0
triethyltin hydroxide	994-32-1
triethyltin iodide	2943-86-4
triethyltin phenoxide	1529-30-2
trimethyltin acetate	1118-14-5
trimethyltin azide	1118-03-2
trimethyltin chloride	1066-45-1
trimethyltin hydroxide	56-24-6
trimethyltin iodide	811-73-4
trimethyltin sulphate	63869-87-4
trimethyltin thiocyanate	4638-25-9
tri-n-butyl tin salicylate	4342-30-7
triphenyltin chloride	639-58-7
triphenyltin n,n-dimethyldithiocarbamate / triphenyltin dimethyldithiocarbamate	1803-12-9
triphenyltin hydride	892-20-6
triphenyltin hydroxide	76-87-9
triphenyltin iodide	894-09-7
tripropyltin acetate	3267-78-5
tripropyltin bromide	2767-61-5
tripropyltin chloride	2279-76-7
tripropyltin iodide	7342-45-2
tripropyltin iodoacetate	73927-92-1
tripropyltin laurate	57808-37-4
tripropyltin methacrylate	4154-35-2
tricyclohexyl tin compounds	AL52-1
triethyltin compounds	AL52-2
trihexyltin compounds	AL52-3
trimethyltin compounds	AL52-4
trioctyltin compounds	AL52-5
tripentyltin compounds	AL52-6
triphenyltin compounds	AL14
tripropyltin compounds	AL52-7
tributyltin compounds	AL15
tri-substituted organiostannic compounds	AL52
2-butenoic acid, 4,4'-[(dibutylstannylene)bis(oxy)]bis[4-oxo-, diisooctyl ester, (2z,2'z)-	25168-21-2
butoxydibutylchlorostannane	14254-22-9
3,8,10-trioxa-9-stannatetradeca-5,12-dien-14-oic acid, 9,9-dibutyl-2-methyl-4,7,11-trioxo-, 1-methylethyl ester, (Z,Z)-	22535-42-8
3,8,10-trioxa-9-stannatetradeca-5,12-dien-14-oic acid, 9,9-dibutyl-4,7,11-trioxo-, ethyl ester, (Z,Z)-	13173-04-1
5,7,12-trioxa-6-stannatetracosa-2,9-dienoic acid, 6,6-dibutyl-4,8,11-trioxo-, dodecyl ester, (Z,Z)-	33466-31-8
acetate, S,S'-bisoctylmercapto-, dibutyltin	32011-18-0
bis (acetato) dibutyltin	17523-06-7
dibutyl tin	1002-53-5
dibutylbis(ethyl 3-oxobutyrato-O1',O3)tin	54581-65-6
dibutyltin bis(2-ethylhexyl-3-mercaptopropionate)	53202-61-2
benzyl (z,z)-8,8-dibutyl-3,6,10-trioxo-1-phenyl-2,7,9-trioxa-8-stannatrideca-4,11-dien-13-oate / dibutyltin bis(benzyl maleate)	7324-74-5
dibutyltin bis(cyclohexyl maleate)	5587-52-0
dibutyltin bis(isooctyl mercaptoacetate)	25168-24-5
dibutyltin bis(lauryl β-mercaptopropionate)	51287-83-3
dibutyltin bis(octylthioglycolate)	2781-09-1
dibutyltin bis(oleyl maleate)	29881-72-9
dibutyltin di(isooctyl 3-mercaptopropionate)	26761-46-6

Substance Group name	
Substance	**CAS №**
dibutyltin diacetate	1067-33-0
dibutyltin dibenzoate	5847-54-1
dibutyltin dibutoxide	3349-36-8
dibutyltin dichloride	683-18-1
dibutyltin dihexanoate	19704-60-0
dibutyltin dilaurate	77-58-7
dibutyltin dilauryl mercaptide	1185-81-5
dibutyltin dimaleate	10192-92-4
dibutyldimethoxystannane	1067-55-6
dibutyltin dioctanoate	4731-77-5
dibutyltin dioleate	13323-62-1
dibutyltin dipalmitate	13323-63-2
dibutyltin disalicylate	14214-24-5
dibutyltin distearate	5847-55-2
dibutyltin hydrogen borate	75113-37-0
dibutyltin isooctanoate	85702-74-5
dibutyltin linoleate	85391-79-3
dibutyltin linolenate	95873-60-2
dibutyltin maleate	78-04-6
dibutyltin mercaptoacetate	78-20-6
dibutyltin mercaptopropionate	78-06-8
dibutyltin oxide	818-08-6
dibutyltin S,S'-bis (isooctyl mercaptoacetate)	26636-01-1
dibutytin di(2-ethylhexyl maleate)	15546-12-0
di-n-butyltin bis(methyl maleate)	15546-11-9
di-n-butyltin di(monobutyl)maleate	15546-16-4
di-n-butyltin di-2-ethylhexanoate	2781-10-4
tin, dibutyl(1,2-ethanediamine-N,N')bis(monoisooctyl 2-butenedioato-O')-	163206-28-8
tin, dibutyl[N-(carboxymethyl)-N-(2-hydroxyethyl)glycinato(2-)]-	68239-46-3
tin, dibutylbis(2,4-pentanedionato-O,O')-, (OC-6-11)-	22673-19-4
Tin, dibutylbis(methyl 3-mercaptopropanoato-O,S)-	32011-19-1
tin, dibutylbis(N,N-diethylethanamine)difluoro-	67924-24-7
dibutyltin compounds	AL53
dioctyl tin	26401-97-8
dioctyltin bis(2-ethylhexyl thioglycolate)	15571-58-1
dioctyltin bis(isooctyl maleate)	33568-99-9
dioctyltin dichloride	3542-36-7
dioctyltin maleate	16091-18-2
dioctyltin oxide	870-08-6
dioctyl tin compounds	AL54
diisobutyltin oxide	61947-30-6
dimethoxybis(pentane-2,4-dionato-O,O')tin	66779-19-9
Tin, dichloro[29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, (OC-6-12)-	18253-54-8
diorganotin compounds	AL55
Other organiostannic compounds	AL56
beryllium and its compounds	
beryl ore	1302-52-9
beryllate(2-), tetrafluoro-, diammonium	14874-86-3
beryllium	7440-41-7
beryllium aluminum alloy	12770-50-2
beryllium boride (Be2B)	12536-51-5
beryllium boride (Be4B)	12536-52-6
beryllium boride (BeB2)	12228-40-9
beryllium boride (BeB6)	12429-94-6
beryllium bromide (BeBr2)	7787-46-4
beryllium carbide (Be2C)	506-66-1
beryllium carbonate	13106-47-3
bis[carbonato-(2-)]dihydroxy-triberyllium	66104-24-3
beryllium chloride	7787-47-5
beryllium di(acetate)	543-81-7
beryllium fluoride	12323-05-6
beryllium fluoride	7787-49-7
beryllium hydroxide	13327-32-7
beryllium iodide (BeI2)	7787-53-3
beryllium nitrate	13597-99-4

Substance Group name	
Substance	**CAS №**
beryllium nitrate trihydrate	7787-55-5
beryllium nitride (Be3N2)	1304-54-7
beryllium oxide	1304-56-9
beryllium phosphate	13598-15-7
beryllium phosphide	58127-61-0
beryllium phosphide (BeP2)	57620-29-8
beryllium selenide (BeSe)	12232-25-6
beryllium sulfate	13510-49-1
beryllium sulfate tetrahydrate	7787-56-6
beryllium sulfide (BeS)	13598-22-6
beryllium telluride (BeTe)	12232-27-8
beryllium zinc silicate	25638-88-4
beryllium zinc silicate	39413-47-3
bis(pentane-2,4-dionato-O,O')beryllium	10210-64-7
diethylberyllium	542-63-2
disodium tetrafluoroberyllate	13871-27-7
hexakis[.mu.-(acetato-O:O')]-.mu.4-oxotetraberyllium	19049-40-2
nitric acid, beryllium salt, tetrahydrate	13510-48-0
phosphoric acid, beryllium salt	35089-00-0
phosphoric acid, beryllium salt (2:3)	13598-26-0
silicic acid (H4SiO4), beryllium salt (1:2)	15191-85-2
silicic acid, beryllium salt	58500-38-2
beryllium compounds	AL16
asbestos	
actinolite	77536-66-4
amosite	12172-73-5
anthophylite	77536-67-5
chrysotile	12001-29-5
crocidolite	12001-28-4
tremolite	77536-68-6
asbestos	1332-21-4
actinolite	13768-00-8
tremolite	14567-73-8
anthophyllite	17068-78-9
actinolite	12172-67-7
chrysotile	132207-32-0
crocidolite	132207-33-1
asbestos	AL17
specified brominated flame retardants	
2-bromobiphenyl	2052-07-5
3-bromobiphenyl	2113-57-7
4-bromobiphenyl	92-66-0
tetrabromobiphenyl	40088-45-7
pentabromobiphenyl	56307-79-0
heptabromobiphenyl	35194-78-6
nonabromo-1,1'-biphenyl	27753-52-2
[1,1'-biphenyl]-ar,ar'-diol, tetrabromo-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol,]	68758-75-8
1,1'-biphenyl, 2,2',3,4',5'-pentabromo-	73141-48-7
1,1'-biphenyl, 2,2',3,4,6-pentabromo-	77910-04-4
1,1'-biphenyl, 2,2',3,5',6-pentabromo-	88700-05-4
1,1'-biphenyl, 2,2',4,4',5-pentabromo-	81397-99-1
1,1'-biphenyl, 2,2',4,4',6-pentabromo-	97038-97-6
1,1'-biphenyl, 2,2',4,4'-tetrabromo-	66115-57-9
1,1'-biphenyl, 2,2',4,5,5'-pentabromo-	67888-96-4
1,1'-biphenyl, 2,2',4,5',6-pentabromo-	59080-39-6
1,1'-biphenyl, 2,2',4,5,6'-pentabromo-	80274-92-6
1,1'-biphenyl, 2,2',4,5'-tetrabromo-	60044-24-8
1,1'-biphenyl, 2,2',4,6,6'-pentabromo-	97063-75-7
1,1'-biphenyl, 2,2',4,6'-tetrabromo-	97038-95-4
1,1'-biphenyl, 2,2',5,5'-tetrabromo-	59080-37-4
1,1'-biphenyl, 2,2',5,6'-tetrabromo-	60044-25-9
2,2',5-tribromobiphenyl / 1,1'-biphenyl, 2,2',5-tribromo-	59080-34-1
1,1'-biphenyl, 2,2',6,6'-tetrabromo-	97038-96-5
1,1'-biphenyl, 2,2'-dibromo-	13029-09-9

Substance Group name	
Substance	**CAS №**
1,1'-biphenyl, 2,3,4,4',5-pentabromo-	96551-70-1
1,1'-biphenyl, 2',3,4,4',5-pentabromo-	74114-77-5
1,1'-biphenyl, 2,3',4,4'-tetrabromo-	84303-45-7
1,1'-biphenyl, 2,3,4,5,6-pentabromo-	38421-62-4
1,1'-biphenyl, 2,3',4',5-tetrabromo-	59080-38-5
1,1'-biphenyl, 2,3',5-tribromo-	59080-35-2
1,1'-biphenyl, 2,3'-dibromo-	49602-90-6
1,1'-biphenyl, 2,4,4',6-tetrabromo-	64258-02-2
1,1'-biphenyl, 2,4',5-tribromo-	59080-36-3
1,1'-biphenyl, 2,4,6-tribromo-	59080-33-0
1,1'-biphenyl, 2,4',6-tribromo-	64258-03-3
1,1'-biphenyl, 2,4'-dibromo-	49602-91-7
1,1'-biphenyl, 2,4-dibromo-	53592-10-2
1,1'-biphenyl, 2,5-dibromo-	57422-77-2
1,1'-biphenyl, 2,6-dibromo-	59080-32-9
1,1'-biphenyl, 3,3',4,4'-tetrabromo-	77102-82-0
1,1'-biphenyl, 3,3',4,5'-tetrabromo-	97038-98-7
1,1'-biphenyl, 3,3',5,5'-tetrabromo-	16400-50-3
1,1'-biphenyl, 3,3'-dibromo-	16400-51-4
1,1'-biphenyl, 3,4,4',5-tetrabromo-	59589-92-3
1,1'-biphenyl, 3,4'-dibromo-	57186-90-0
1,1'-biphenyl, 3,4-dibromo-	60108-72-7
4,4'-dibromobiphenyl / 1,1'-biphenyl, 4,4'-dibromo-	92-86-4
2,2',3,3',5,5',6,6'-octabromo-4-phenoxy-1,1'-biphenyl	83929-69-5
4,4',6,6'-tetrabromo[1,1'-biphenyl]-2,2'-diol	14957-65-4
perbromobiphenyl	13654-09-6
hexabrominated biphenyls / firemaster BP-6	59536-65-1
firemaster FF 1	67774-32-7
hexabromobiphenyl	36355-01-8
octabromobiphenyl	27858-07-7
octabromobiphenyl / bromkal 80	61288-13-9
PBB	AL18
monobrominated diphenyl ethers	101-55-3
dibrominated diphenyl ethers	2050-47-7
tribrominated diphenyl ethers	49690-94-0
pentabromo(tetrabromophenoxy)benzene	63936-56-1
decabrominated diphenyl ethers / decabromodiphenyl ether ('deca'; decabromodiphenyl oxide)	1163-19-5
octabrominated diphenyl ethers / octabromodiphenyl ether ('octa')	32536-52-0
pentabrominated diphenyl ethers / pentabromodiphenyl ether ('penta')	32534-81-9
hexabrominated diphenyl ethers / hexabromodiphenyl ether	36483-60-0
heptabromodiphenylether	68928-80-3
tetrabrominated diphenyl ethers / tetrabromodiphenylether	40088-47-9
PBDE	AL19
polychlorinated naphthalene	
alpha-chloronaphthalene	90-13-1
octachloronaphthalene	2234-13-1
tetrachloronaphthalene	1335-88-2
trichloronaphthalene	1321-65-9
hexachloronaphthalene	1335-87-1
heptachloro naphthalene	32241-08-0
naphthalene, chloro derivatives	70776-03-3
pentachloronaphthalene	1321-64-8
polychlorinated naphthalene	38289-27-9
polychloronaphthalene	AL20
poly chlorinated biphenyl : PCB / poly chlorinated terphenyls : PCT	
1,1'-biphenyl, 2,4',5-trichloro-	16606-02-3
2,2',4,4'-tetrachlorobiphenyl	2437-79-8
2,3',4,4',5,5'-hexachlorobiphenyl	52663-72-6
2,4,5,2',4',5'-hexachlorobiphenyl	35065-27-1
3,3',4,4'-tetrachlorobiphenyl	32598-13-3
3,4,5,3',4',5'-hexachlorobiphenyl	32774-16-6
aroclor 1016	12674-11-2
aroclor 1221	11104-28-2
aroclor 1232	11141-16-5

Substance Group name	
Substance	**CAS №**
aroclor 1242	53469-21-9
aroclor 1248	12672-29-6
aroclor 1254	11097-69-1
aroclor 1260	11096-82-5
heptachloro-1,1'-biphenyl	28655-71-2
nonachloro-1,1'-biphenyl	53742-07-7
pentachloro[1,1'-biphenyl]	25429-29-2
polychlorinated biphenyls	1336-36-3
tetrachloro(tetrachlorophenyl)benzene	31472-83-0
polychlorinated terphenyls / terphenyl, chlorinated	61788-33-8
chlorinated paraffins	
short chain chlorinated paraffins (C10-13, 48% chlorine)	AL22
chloroalkane(C10-13) （short chain chlorinated paraffins）	85535-84-8
alkanes, C12-13, chloro medium chain (MCCP), by definition: chloroparaffins, unbranched, CxH(2x-y+2)Cly, where x = 14-17 and y = 1-17	71011-12-6
alkanes, C14-17, chloro OTHER: may or may not be short or medium chain.	85535-85-9
alkanes, C10-21, chloro	84082-38-2
alkanes, chloro; chloroparaffins	61788-76-9 51990-12-6
paraffin waxes, chloro	63449-39-8
chlorinated n-paraffins (C6-18)	68920-70-7
alkane, C10-14-, chloro-	85681-73-8
alkane, C12-14-, chloro-	85536-22-7
alkane, C16-27-, chloro-	84776-07-8
alkane, C16-35-, chloro-	85049-26-9
alkane, C12-24-, chloro-	68527-02-6
azo dye/pigment	
2,4,5-trimethylaniline	137-17-7
2-naphthylamine	91-59-8
3,3'-dichlorobenzidine	91-94-1
3,3'-dimethoxybenzidine	119-90-4
3,3'-dimethylbenzidine	119-93-7
4,4'-methylenebis-(2-chlorobenzenamine)	101-14-4
4,4'-methylenedianiline / diamino-diphenylmethane (4,4'-diaminodiphenylmethane)	101-77-9
4,4'-methylenedi-o-toluidine	838-88-0
4,4'-oxydianiline	101-80-4
4,4'-thiodianiline	139-65-1
biphenyl-4-ylamine	92-67-1
4-chloroaniline	106-47-8
4-chloro-o-toluidine	95-69-2
4-methoxy-1,3-phenylenediamine	615-05-4
toluene-2,4-diamine	95-80-7
2-methyl-5-nitroaniline	99-55-8
benzidine	92-87-5
2-methyl-4-(2-tolyldiazenyl)aniline	97-56-3
aniline, 2-methoxy-	90-04-0
ortho-toluidine	95-53-4
6-methoxy-m-toluidine	120-71-8
4-aminoazobenzene	60-09-3
N,N-diethanolamin	111-42-2
N,N-diethylamin	109-89-7
N,N-di-i-propylamin	108-18-9
N,N-dimethylamin	124-40-3
N,N-di-n-propylamin	142-84-7
N,N-di-n-butylamin	111-92-2
N,N-ethylphenylamin	103-69-5
N,N-methylethylamin	624-78-2
N-methyl-N-phenylamin	100-61-8
morpholin	110-91-8

Substance Group name	
Substance	**CAS №**
piperidin	110-89-4
pyrrolidin	123-75-1
p-aminobiphenyl hydrochloride	2113-61-3
benzidine acetate	36341-27-2
benzidine salt	531-86-2
benzidine sulphate	21136-70-9
benzidine, Ni(2+) salt	67632-50-2
[1,1'-biphenyl]-4,4'-diamine, dihydrochloride	531-85-1
[1,1'-biphenyl]-4,4'-diamine, 2,2'-dichloro-, sulfate (1:1)	70146-07-5
3,3'-dichlorobenzidine dihydrochloride	612-83-9
3,3'-dimethylbenzidine dihydrochloride	612-82-8
4,4'-diaminodiphenyl-2,2'-disulfonic acid disodium salt	27336-24-9
acid black 7	8004-59-9
C.I. acid red 85	3567-65-5
C.I. direct black 38	1937-37-7
C.I. direct black 4, disodium salt	2429-83-6
C.I. direct blue 6	2602-46-2
C.I. direct blue 2, trisodium salt	2429-73-4
C.I. direct brown 1	3811-71-0
C.I. direct brown 2, disodium salt	2429-82-5
C.I. direct brown 154	6360-54-9
C.I. direct brown 31, tetrasodium salt	2429-81-4
C.I. direct brown 59, disodium salt	3476-90-2
C.I. direct brown 6, disodium salt	2893-80-3
C.I. direct brown 95	16071-86-6
C.I. direct green 1, disodium salt	3626-28-6
C.I. direct green 6, disodium salt	4335-09-5
C.I. direct green 8, trisodium salt	5422-17-3
C.I. direct red 1, disodium salt	2429-84-7
C.I. direct red 28	573-58-0
C.I. direct red 37	3530-19-6
C.I. direct violet 22, trisodium salt	6426-67-1
direct orange 1	13164-93-7
benzoic acid, 5-[[4'-[(1-amino-4-sulfo-2-naphthalenyl)azo][1,1'-biphenyl]-4-yl]azo]-2-hydroxy-,	2429-79-0
Trypan blue (C.I. direct blue 14)	72-57-1
benzoic acid, 3,3'-[(3,7-disulfo-1,5-naphthalenediyl)bis[azo(6-hydroxy-3,1-phenylene)azo[6(or 7)-sulfo-4,1-naphthalenediyl]azo[1,1'-biphenyl]-4,4'-diylazo]]bis[6-hydroxy-, hexasodium salt	8014-91-3
salts from 3,3'-dimethoxybenzidine	AL23-1
dipotassium O,O'-(4,4'-diaminobiphenyl-3,3'-ylene)diglycollate	74220-10-3
salts from 3,3'-dimethoxybenzidin	AL23-2
2-naphthylammoniumacetat	553-00-4
1,2-di-o-tolylguanidine, DOTG	97-39-2
radioactive substances	AL44
americium	AL44-4
cesium	AL44-6
strontium	AL44-7
plutonium	7440-07-5
radon / radium	7440-14-4
thorium	7440-29-1
thorium dioxide	1314-20-1
uranium	7440-61-1
uranium compounds	AL44-1
xylene	
xylene	1330-20-7

Substance Group name	
Substance	**CAS №**
toluene	
toluene	108-88-3
antimony and its compounds	
antimony	7440-36-0
stibine ; hydrogen antimonide	7803-52-3
antimony pentafluoride	7783-70-2
antimony pentachloride	7647-18-9
antimony pentoxide	1314-60-9
antimony pentasulfide	1315-04-4
antimony trifluoride	7783-56-4
antimony (III) iodide	7790-44-5
antimony trichloride	10025-91-9
antimony trisulfide	1345-04-6
antimony potassium tartrate, trihydrate	28300-74-5
antimony trioxide	1309-64-4
antimony compounds	AL27
chromium and its compounds（except hexavalent chromium compounds）	
chromium	7440-47-3
chromic acetate	1066-30-4
basic chromic sulfate	64093-79-4
chromium oxide	1308-38-9
chromic hydroxide	1308-14-1
chromium compounds	AL29
selenium and its compounds	
selenium disulfide	7488-56-4
selenium sulfide	7446-34-6
barium selenite	13718-59-7
dihydrogen selenide / hydrogen selenide	7783-07-5
iron selenide	1310-32-3
selenic acid	7783-08-6
selenious acid	7783-00-8
selenium	7782-49-2
selenium dioxide	7446-08-4
selenium hexafluoride	7783-79-1
zinc selenide	1315-09-9
selenium compounds	AL31
nickel and its compounds	
(2-ethylhexanoato-O)(isodecanoato-O)nickel	84852-39-1
(2-ethylhexanoato-O)(isononanoato-O)nickel	85508-45-8
(2-ethylhexanoato-O)(isooctanoato-O)nickel	84852-38-0
(2-ethylhexanoato-O)(neodecanoato-O)nickel	85135-77-9
(isodecanoato-O)(isononanoato-O)nickel	84852-36-8
(isodecanoato-O)(isooctanoato-O)nickel	85166-19-4
(isodecanoato-O)(neodecanoato-O)nickel	85508-42-5
(isononanoato-O)(isooctanoato-O)nickel	85508-46-9
(isononanoato-O)(neodecanoato-O)nickel	85551-28-6
(isooctanoato-O)(neodecanoato-O)nickel	84852-35-7
(neononanoato-O)(neoundecanoato-O)nickel	93920-08-2
[.mu.-[[1,1',1",1'"-[benzene-1,2,4,5-tetrayltetrakis(nitromethylidyne)]naphth-2-olato](4-)]]dinickel	22484-07-7
[.mu.-[carbonato(2-)-O:O']]dihydroxydinickel	65405-96-1
[[2,2'-(4,8-dichlorobenzo[1,2-d:4,5-d']bisoxazole-2,6-diyl)bis[4,6-dichlorophenol,ato]](2-)]nickel	47726-62-5
[[2,2'-Thiobis[3-octylphenol,ato]](2-)-O,O',S]nickel	33882-09-6
[[N,N',N",N'"-[29H,31H-Phthalocyaninetetrayltetrakis(sulphonylimino-3,1-phenylene)]tetrakis[3-oxobutyramidato]](2-)-N29,N30,N31,N32]nickel	97404-22-3
[[N,N',N"-[29H,31H-Phthalocyaninetriyltris(sulphonylimino-3,1-phenylene)]tris[3-oxobutyramidato]](2-)-N29,N30,N31,N32]nickel	97404-21-2
[2,3'-bis[[(2-hydroxyphenyl)methylene]amino]but-2-enedinitrilato(2-)-N2,N3,O2,O3]nickel	64696-98-6
1,2,3-propanetricarboxylic acid, 2-hydroxy-, ammonium nickel(2+) salt (2:2:1)	68025-13-8
1,2,3-propanetricarboxylic acid, 2-hydroxy-, nickel(2+) salt (2:3)	6018-92-4
1,2,3-propanetriol, 1-(dihydrogen phosphate), nickel(2+) salt (1:1)	68391-37-7
1,2,3-propanetriol, mono(dihydrogen phosphate), nickel(2+) salt (1:1)	67952-69-6
1,2-benzenedicarboxylic acid, 3,4,5,6-tetrabromo-, nickel(2+) salt (1:1)	18824-79-8

Substance Group name	
Substance	**CAS №**
2,7-naphthalenedisulfonic acid, nickel(2+) salt (1:1)	72319-19-8
2-ethylhexanoic acid, nickel salt	7580-31-6
acetic acid, nickel(2+) salt, polymer with formaldehyde and 4-(1,1,3,3-tetramethylbutyl)phenol,	71050-57-2
aluminum nickel oxide (Al2NiO4)	12004-35-2
aluminum, compound with nickel (1:1)	12003-78-0
aluminum, triethyl-, reaction products with nickel(2+) bis(2-ethylhexanoate)	79357-65-6
antimony oxide (Sb2O3), solid solution with nickel oxide (NiO) and titanium oxide (TiO2)	73892-02-1
antimony, compound with nickel (1:1)	12035-52-8
antimony, compound with nickel (1:3)	12503-49-0
benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, nickel(2+) salt (2:1)	55868-93-4
benzoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, nickel(2+) salt (2:1)	52625-25-9
bis(1,1,1,5,5,5-hexafluoropentane-2,4-dionato-O,O')nickel	14949-69-0
bis(1,5-cyclooctadiene)nickel	1295-35-8
bis(1H-1,2,4-triazole-3-sulphonato-N2,O3)nickel	85586-46-5
bis(1-nitroso-2-naphtholato)nickel	12794-26-2
bis(4-benzoyl-2,4-dihydro-5-methyl-2-phenyl-3H-pyrazol-3-onato-O,O')(2,2,4,4-tetramethyl-7-oxa-3,20-diazadispiro[5.1.11.2]henicosan-21-one-O21)nickel	79121-51-0
bis(4-benzoyl-2,4-dihydro-5-methyl-2-phenyl-3H-pyrazol-3-onato-O,O')nickel	69524-96-5
bis(5-oxo-DL-prolinato-N1,O2)nickel	85026-81-9
bis(5-oxo-L-prolinato-N1,O2)nickel	70824-02-1
bis(butanedione dioximato)nickel	13478-93-8
bis(D-gluconato-O1,O2)nickel	71957-07-8
bis(diethyldithiocarbamato-S,S')nickel	52610-81-8
bis(quinolin-8-olato-N1,O8)nickel	14100-15-3
bis[(2-hydroxyethyl)dithiocarbamato-S,S']nickel	52486-98-3
bis[2-hydroxy-4-(octyloxy)benzophenonato]nickel	15843-91-1
bis[bis(2-hydroxyethyl)dithiocarbamato-S,S']nickel	52486-99-4
bis[di(3,5,5-trimethylhexyl)dithiocarbamato-S,S']nickel	84604-95-5
bis[N-(2,4-dimethoxyphenyl)-2,3-bis(hydroxyimino)butyramidato-N2,N3]nickel	85269-39-2
bis[N-(2-hydroxyethyl)-N-methylglycinato-N,O,on]nickel	76625-10-0
bismuth, compound with nickel (1:1)	12688-64-1
butanedioic acid, 2,3-dihydroxy- [R-(R*,R*)]-, nickel(2+) salt (2:1)	67952-41-4
C.I. Reactive green 12	72152-45-5
carbonic acid, nickel salt	16337-84-1
carbonic acid, nickel(2+) salt (2:1)	17237-93-3
cassiterite, cobalt manganese nickel grey	99749-23-2
chloric acid, nickel(2+) salt	67952-43-6
citric acid , ammonium nickel salt	18283-82-4
citric acid, nickel salt	22605-92-1
cobalt molybdenum nickel oxide (CoMo2NiO8)	68016-03-5
cobalt nickel oxide (CoNiO2)	58591-45-0
cobalt(2+) dinickel(2+) bis[2-hydroxypropane-1,2,3-tricarboxylate]	94232-44-7
copper(2+), bis(1,2-ethanediamine-N,N')-, (SP-4-1)-tetrakis(cyano-C)nickelate(2-) (1:1)	63427-32-7
copper, compound with lanthanum and nickel (4:1:1)	51912-52-8
cyclohexanebutanoic acid, nickel(2+) salt	3906-55-6
di-.mu.-carbonylbis(.eta.5-2,4-cyclopentadien-1-yl)dinickel	12170-92-2
diammonium tetrachloronickelate(2-)	99587-11-8
dicobalt(2+) nickel(2+) bis[2-hydroxypropane-1,2,3-tricarboxylate]	94232-84-5
diiron nickel tetraoxide	12168-54-6
diiron nickel zinc tetraoxide	97435-21-7
dimethoxy[29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]nickel	83898-70-8
dimethylhexanoic acid, nickel salt	93983-68-7
dinickel hexacyanoferrate	14874-78-3
dinickel orthosilicate	13775-54-7
diphosphoric acid, nickel(2+) salt	19372-20-4
diphosphoric acid, nickel(2+) salt (1:2)	14448-18-1
dipotassium tetrafluoronickelate(2-)	13859-60-4
dipotassium tris(cyano-c)nickelate(2-)	39049-81-5
dysprosium, compound with nickel (1:2)	12175-27-8
ethanedioic acid, nickel(2+) salt (1:1)	547-67-1
ethyl hydrogen sulphate, nickel(2+) salt	71720-48-4
fatty acids, C6-19-branched, nickel salts	91697-41-5
fatty acids, C8-18 and C18-unsaturated, nickel salts	84776-45-4
formic acid, copper nickel salt	68134-59-8

Substance Group name	
Substance	**CAS №**
formic acid, nickel(2+) salt	3349-06-2
hexaamminenickel(2+) bis[tetrafluoroborate(1-)]	13877-20-8
hexanoic acid, 2-ethyl-, nickel(2+) salt	4454-16-4
iron alloy, base,(Fe.Ni)(ferronickel)	11133-76-9
isononanoic acid, nickel(2+) salt	84852-37-9
Lanthanum, compound with nickel (1:5)	12196-72-4
leach residues, nickel-vanadium ore - residues from basic leaching of nickel-bearing vanadium ores. Composed primarily of silica and insoluble compounds of nickel and vanadium with minor quantities of other metals, such as arsenic, lead, tin and zinc.	84144-92-3
lithium nickel oxide (liniO2)	12031-65-1
molybdenum nickel oxide	12673-58-4
molybdenum nickel oxide (MoNiO4)	14177-55-0
naphthenic acids, nickel salts	61788-71-4
neodecanoic acid, nickel salt	51818-56-5
nickel	7440-02-0
nickel [R(R*,R*)]-tartrate	52022-10-3
nickel acetate	14998-37-9
nickel di(acetate) tetrahydrate / nickel acetate tetrahydrate	6018-89-9
nickel acrylate	51222-18-5
nickel alloy, base , Ni,Al	12635-29-9
nickel ammonium sulfate	15699-18-0
nickel arsenide (NiAs)	27016-75-7
nickel bis(benzenesulphonate)	39819-65-3
nickel bis(dihydrogen phosphate)	18718-11-1
nickel bis(phosphinate)	14507-36-9
nickel bis(piperidine-1-carbodithioate)	41476-75-9
nickel bisphosphinate	36026-88-7
nickel boride	12619-90-8
nickel boride (Ni2B)	12007-01-1
nickel boride (Ni3B)	12007-02-2
nickel boride (NiB)	12007-00-0
nickel bromide (NiBr2)	13462-88-9
nickel bromide (NiBr2), trihydrate	7789-49-3
nickel carbide	12710-36-0
nickel carbonate	3333-67-3
nickel carbonyl	12612-55-4
nickel carbonyl	13463-39-3
nickel cyanide	557-19-7
nickel diarsenide	12068-61-0
nickel dibenzoate	553-71-9
nickel dibromate	14550-87-9
nickel bis(dimethyldithiocarbamate) / nickel dimethyldithiocarbamate	15521-65-0
nickel dipotassium bis(sulphate)	13842-46-1
nickel dithiocyanate	13689-92-4
nickel fluoride (NiF2)	10028-18-9
nickel fluoride (NiF2), tetrahydrate	13940-83-5
nickel formate	15843-02-4
nickel hydrogen phosphate	14332-34-4
nickel hydroxide	11113-74-9
nickel hydroxide	12054-48-7
nickel hydroxide	12125-56-3
nickel isooctanoate	27637-46-3
nickel methacrylate	94275-78-2
nickel nitrate	14216-75-2
nickel nitrate / nickel nitrate (2+ salt)	13138-45-9
nickel nitrite	17861-62-0
nickel oxide	11099-02-8
nickel monoxide / nickel oxide	1313-99-1
dinickel trioxide / nickel oxide (Ni2O3)	1314-06-3
nickel oxide (NiO2)	12035-36-8
nickel perchlorate	13637-71-3
nickel phosphide (Ni2P)	12035-64-2
nickel potassium cyanide	14220-17-8
nickel selenate	15060-62-5

Substance Group name	
Substance	**CAS №**
nickel selenide	1314-05-2
nickel silicide (Ni2Si)	12059-14-2
nickel silicide (NiSi)	12035-57-3
nickel silicide (NiSi2)	12201-89-7
nickel subsulfide	12035-72-2
nickel sulfate	7786-81-4
nickel sulfide (Ni2S3)	12259-56-2
nickel sulfide (NiS)	16812-54-7
nickel telluride	12142-88-0
nickel tin trioxide	12035-38-0
nickel titanium oxide	12035-39-1
nickel titanium oxide	12653-76-8
nickel titanium tungsten oxide (NiTi20W2O47)	69011-05-8
nickel tungsten oxide (NiWO4)	14177-51-6
nickel uranium oxide (NiU3O10)	15780-33-3
nickel uranyl tetraacetate, of uranium depleted in uranium-235	71767-12-9
nickel vanadium oxide (NiV2O6)	52502-12-2
nickel zirconium oxide (NiZrO3)	70692-93-2
nickel(1+), [1-(2-amino-4-imino-5(4H)-thiazolylidene)-N-[1-(2-amino-4-imino-5(4H)-thiazolylidene)-1H-isoindol-3-yl]-1H-isoindol-3-aminato]-, chloride	53199-85-2
nickel(2+) acrylate	60700-37-0
nickel(2+) hydrogen citrate	18721-51-2
nickel(2+) methacrylate	52496-91-0
nickel(2+) neodecanoate	85508-44-7
nickel(2+) neononanoate	93920-10-6
nickel(2+) neoundecanoate	93920-09-3
nickel(2+) oleate	13001-15-5
nickel(2+) palmitate	13654-40-5
nickel(2+) propionate	3349-08-4
nickel(2+) selenite	10101-96-9
nickel(2+) silicate	21784-78-1
nickel(2+) sulphite	7757-95-1
nickel(2+) trifluoroacetate	16083-14-0
nickel(2+), bis(1,2-ethanediamine-N,N')-, bis[bis(cyano-C)aurate(1-)]	68958-89-4
nickel(2+), bis(1,2-ethanediamine-N,N')-, salt with dimethylbenzenesulfonic acid (1:2)	71215-98-0
nickel(2+), bis(1,2-propanediamine)-, bis[dicyanoaurate(1-)]	18972-69-5
nickel(2+), bis(ethylenediamine)-, sulfate (1:1)	21264-77-7
nickel(2+), hexaammine-, (OC-6-11)-, diformate	68758-60-1
nickel(2+), hexakis(1H-imidazole-N3)-, (OC-6-11)-, 1,2-benzenedicarboxylate (1:1)	108818-89-9
nickel(2+), tris(1,2-ethanediamine-N,N')-, (OC-6-11)-, salt with dimethylbenzenesulfonic acid (1:2)	71215-97-9
nickel(2+), tris(4,7-diphenyl-1,10-phenanthroline-N1,N10)-, (OC-6-11)-, bis[tetrafluoroborate(1-)]	68309-97-7
nickel(2+), tris(4,7-diphenyl-1,10-phenanthroline-N1,N10)-, (OC-6-11)-, dinitrate	38780-90-4
nickel(2++), hexaammine-, (OC-6-11)-, carbonate (1:1)	67806-76-2
nickel(2++), hexaammine-, dihydroxide, (OC-6-11)-	51467-07-3
nickel(II) acetate	373-02-4
nickel chloride / nickel(II) chloride	7718-54-9
nickel(II) chloride hexahydrate (1:2:6)	7791-20-0
nickel(II) fluoborate	14708-14-6
nickel(II) fluosilicate	26043-11-8
nickel(II) fumarate	6283-67-6
nickel(II) iodide	13462-90-3
nickel(II) isodecanoate	85508-43-6
nickel(II) isooctanoate	29317-63-3
nitric acid, nickel(2+) salt, hexahydrate / nickel(II) nitrate, hexahydrate (1:2:6)	13478-00-7
nickel(II) sulfate hexahydrate (1:1:6)	10101-97-0
nickel, (2-ethylhexanoato-O)(trifluoroacetato-O)-	70776-98-6
nickel, (2-propanol)[[2,2'-thiobis[4-(1,1,3,3-tetramethylbutyl)phenol,ato]](2-)-O,O',S]-	67763-27-3
nickel, (carbonato(2-))tetrahydroxytri-, tetrahydrate	39430-27-8
nickel, [(2-amino-2-oxoethoxy)acetato(2-)]-	68133-84-6
nickel, [.mu.-(piperazine-N1:N4)]bis[3-[1-[(4,5,6,7-tetrachloro-1-oxo-1H-isoindol-3-yl)hydrazono]ethyl]-2,4(1H,3H)-quinolinedionato(2-)]di-	71889-22-0
nickel, [[1,1'-[1,2-phenylenebis(nitrilomethylidyne)]bis[2-naphthalenolato]](2-)-N,N',O,O']-, (SP-4-2)-	20437-10-9

Substance Group name	
Substance	**CAS №**
nickel, [[2,2'-[methylenebis(thio)]bis[acetato]](2-)]-	71215-73-1
nickel, [[2,2'-sulfonylbis[4-(1,1,3,3-tetramethylbutyl)phenol,ato]](2-)-O1,O1',O2]-	16432-37-4
nickel, [[2,2'-thiobis[4-(1,1,3,3-tetramethylbutyl)phenol,ato]](2-)-O,O',S]-	27574-34-1
nickel, [1,3-dihydro-5,6-bis[[(2-hydroxy-1-naphthalenyl)methylene]amino]-2H-benzimidazol-2-onato(2-)-N5,N6,O5,O6]-, (SP-4-2)-	42844-93-9
nickel, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, (SP-4-1)-	14055-02-8
nickel, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, [[3-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]phenyl]amino]sulfonyl sulfo derivitives, sodium salts	90459-35-1
nickel, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, chlorosulfonyl derivitives, reaction products with 2-[(4-aminophenyl)sulfonyl]ethyl hydrogen sulfate monosodium salt, potassium sodium salts, compounds with pyridine	93573-17-2
nickel, [29H,31H-phthalocyanine-C,C,C,C-tetrasulfonyl tetrachloridato(2)-N29,N30,N31,N32]-	28680-76-4
nickel, [2-hydroxybenzoic acid [3-[1-cyano-2-(methylamino)-2-oxoethylidene]-2,3-dihydro-1H-isoindol-1-ylidene]hydrazidato(2-)]-	85958-80-1
nickel, [carbonato(2-)]hexahydroxytetra-	12334-31-5
nickel, [N-(4-chlorophenyl)-2-[3-[[[1-(4-chlorophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]methylene]hydrazino]-1H-isoindol-1-ylidene]-2-cyanoacetamidato(2-)]-	71889-20-8
nickel, [N-(carboxymethyl)glycinato(2-)-N,O,ON]-	13869-33-5
nickel, [N,N',N'',N'''-tetrakis[4-(4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-1-yl)phenyl]-29H,31H-phthalocyanine-C,C,C,C-tetrasulfonamidato(2-)-N29,N30,N31,N32]-	72986-45-9
nickel, [N,N',N''-tris[4-(4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-1-yl)phenyl]-29H,31H-phthalocyanine-C,C,C-trisulfonamidato(2-)-N29,N30,N31,N32]-	72252-57-4
nickel, 2,2'-thiobis[4-nonylphenol,] complexes	85480-75-7
nickel, acetate carbonate C8-10-branched fatty acids C9-11-neofatty acids complexes	90459-30-6
nickel, acetylacetone 6-methyl-2,4-heptanedione complexes	90459-34-0
nickel, aqua[2-[(4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl)azo]benzoato(2-)]-	106316-55-6
nickel, bis(2,4-pentanedionato-O,O')-, (SP-4-1)-	3264-82-2
nickel, bis(2-heptadecyl-1H-imidazole-N3)bis(octanoato-O)-	68912-08-3
nickel, bis(3-amino-4,5,6,7-tetrachloro-1H-isoindol-1-one oximato-N2,O1)-	70833-37-3
nickel, bis(dibutylcarbamodithioato-S,S')-, (SP-4-1)-	13927-77-0
nickel, bis(diethylcarbamodithioato-S,S')-, (SP-4-1)-	14267-17-5
nickel, bis(diisononylcarbamodithioato-,')-	85298-61-9
nickel, bis(dipentylcarbamodithioato-S,S')-, (SP-4-1)-	36259-37-7
nickel, bis(phenyldiazenecarbothioic acid 2-phenylhydrazidato)-	36545-21-8
nickel, bis[(2-hydroxy-4-octylphenyl)phenylmethanonato-O,O']-	68189-15-1
nickel, bis[(cyano-C)triphenylborato(1-)-N]bis(hexanedinitrile-N,N')-	83864-02-2
nickel, bis[[didecyl (1,2-dicyano-1,2-ethenediyl)bis[carbamato]](2-)]-	77245-35-3
nickel, bis[1,2-bis(4-methoxyphenyl)-1,2-ethenedithiolato(2-)-S,S']-, (SP-4-1)-	38951-97-2
nickel, bis[1,2-diphenyl-1,2-ethenedithiolato(2-)-S,S']-, (SP-4-1)-	28984-20-5
nickel, bis[1-[4-(diethylamino)phenyl]-2-phenyl-1,2-ethenedithiolato(2-)-S,S']-	51449-18-4
nickel, bis[1-[4-(dimethylamino)phenyl]-2-phenyl-1,2-ethenedithiolato(2-)-S,S']-	38465-55-3
nickel, bis[2,3-bis(hydroxyimino)-N-(2-methoxyphenyl)butanamidato]-	42739-61-7
nickel, bis[2,3-bis(hydroxyimino)-N-phenylbutanamidato-N2,N3]-	29204-84-0
nickel, bis[2,4-dihydro-5-methyl-4-(1-oxodecyl)-2-phenyl-3H-pyrazol-3-onato-O,O']-	56557-00-7
nickel, bis[2-butene-2,3-dithiolato(2-)-S,S']-, (SP-4-1)-	38951-94-9
nickel, bis[3-[(4-chlorophenyl)azo]-2,4(1H,3H)-quinolinedionato]-	51931-46-5
nickel, bis[bis(2-methylpropyl)carbamodithioato-S,S']-, (SP-4-1)-	15317-78-9
nickel, bis[N-hydroxy-3-(hydroxyimino)-N'-(2-methoxyphenyl)butanimidamidato-N',N3]-	71605-83-9
nickel, borate C8-10-branched carboxylate complexes	90459-31-7
nickel, borate neodecanoate complexes	92502-55-1
nickel, C4-10 fatty acids naphthenate complexes	93573-15-0
nickel, C4-10 fatty acids octanoate complexes	93573-16-1
nickel, C5-23-branched carboxylate C4-10 fatty acids complexes	93762-59-5
nickel, C5-23-branched carboxylate C4-10-fatty acids naphthenate complexes	93573-14-9
nickel, C5-23-branched carboxylate naphthenate complexes	92200-98-1
nickel, C5-25-branched carboxylate naphthenate octanoate complexes	92200-99-2
nickel, C5-C23-branched carboxylate octanoate complexes	90459-32-8
nickel, compound with niobium (1:1)	12034-55-8
nickel, compound with tin (3:1)	12059-23-3
nickel, compound with zirconium (1:2)	12142-92-6
nickel, dichlorobis(triphenylphosphine)-	14264-16-5
nickel, isodecanoate naphthenate complexes	85585-97-3
nickel, isononanoate naphthenate complexes	85585-98-4
nickel, isooctanoate naphthenate complexes	90459-33-9

Substance Group name	
Substance	**CAS №**
nickel, naphthenate neodecanoate complexes	85585-99-5
nickel, tetrakis(triphenyl phosphite-P)-, (T-4)-	14221-00-2
nickel, tetrakis[tris(methylphenyl) phosphite-P]-	35884-66-3
nickel,[6,8,16,18-tetrachloro-1,11-bis(2-furanylmethyl)-1,10,11, 20-tetrahydrodibenzo[c,j]dipyrazolo[3,4-f:3',4'-m][1,2,5,8,9,12] hexaazacyclotetradecinato(2-)-	79745-01-0
nickelate(1-), [[N,N'-1,2-ethanediylbis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON,ON']-, potassium, (OC-6-21)-	67906-12-1
nickelate(1-), [3,4-bis[[(2-hydroxy-1-naphthalenyl)methylene]amino]benzoato(3-)-N3,N4,O3,O4]-,	61300-98-9
nickelate(1-), [N,N-bis(carboxymethyl)glycinato(3-)-N,O,O',O'']-, hydrogen, (T-4)-	34831-03-3
nickelate(1-), trichloro-, ammonium	24640-21-9
nickelate(2-), [[N,N'-1,2-ethanediylbis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON,ON']-, dihydrogen, (OC-6-21)-	25481-21-4
nickelate(2-), tetrakis(cyano-C)-, disodium, (SP-4-1)-	14038-85-8
nickelate(3-), [22-[[[3-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]phenyl]amino]sulfonyl]-29H,31H-phthalocyanine-1,8,15-trisulfonato(5-)-N29,N30,N31,N32]-, trisodium, (SP-4-2)-	71243-96-4
nickelate(3-), [5-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-4-hydroxy-3-[(2-hydroxy-3-nitro-5-sulfophenyl)azo]-2,7-naphthalenedisulfonato(5-)]-, trisodium	79817-91-7
nickelate(3-), [C-[[[3-[(4-amino-6-chloro-1,3,5-triazin-2-yl)amino]phenyl]amino]sulfonyl]-C,C,C-tris(aminosulfonyl)-29H,31H-phthalocyanine-C,C,C-trisulfonato(5-)-N29,N30,N31,N32]-, trisodium	72229-81-3
nickelate(3-), [N,N-bis(phosphonomethyl)glycinato(5-)]-, triammonium, (T-4)-	68025-40-1
nickelate(3-), [N,N-bis(phosphonomethyl)glycinato(5-)]-, tripotassium, (T-4)-	63597-34-2
nickelate(3-), [N,N-bis(phosphonomethyl)glycinato(5-)]-, trisodium,(T-4)-	68025-41-2
nickelate(4-), [[[nitrilotris(methylene)]tris[phosphonato]](6-)-N,OP,OP',OP'']-, tetrapotassium, (T-4)-	63588-33-0
nickelate(4-), [[[nitrilotris(methylene)]tris[phosphonato]](6-)-N,OP,OP',OP'']-, tetrasodium, (T-4)-	68052-00-6
nickelate(4-), [[[nitrilotris(methylene)]tris[phosphonato]](6-)-N,OP,OP',OP'']-, triammonium	67968-22-3
nickelate(4-), [22-[[(4-sulfophenyl)amino]sulfonyl]-29H,31H-phthalocyanine-1,8,15-trisulfonato(6-)-N29,N30,N31,N32]-, tetrahydrogen, (SP-4-2)-	70729-79-2
nickelate(4-), [bis[[[3-[[4,5-dihydro-3-methyl-5-oxo-1-[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]-1H-pyrazol-4-yl]azo]phenyl]amino]sulfonyl]-29H,31H-phthalocyaninedisulfonato(6-)-	90459-36-2
nickelate(6-), [4-[[5-[[(3,6-dichloro-4-pyridazinyl)carbonyl]amino]-2-sulfophenyl]azo]-4,5-dihydro-5-oxo-1-[2-sulfo-5-[[(trisulfo-29H,31H-phthalocyaninyl)sulfonyl]amino]phenyl]-1H-pyrazole-3-carboxylato(8-)-N29,N30,N31,N32]-, hexasodium	93891-86-2
nickelate(6-), [4-[[5-[[(3,6-dichloro-4-pyridazinyl)carbonyl]amino]-2-sulfophenyl]azo]-4,5-dihydro-5-oxo-1-[5-[[(trisulfo-29H,31H-phthalocyaninyl)sulfonyl]amino]-2-sulfophenyl]-1H-pyrazole-3-carboxylato(8-)-N29,N30,N31,N32]-,hexahydrogen	68698-80-6
nickelate(6-), [C-[[[3-[[4,5-dihydro-3-methyl-5-oxo-1-[3-sulfo-4-[2-[2-sulfo-4-[(2,5,6-trichloro-4-pyrimidinyl)amino]phenyl]ethenyl]phenyl]-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]sulfonyl]-29H,31H-phthalocyanine-C,C,C-trisulfonato(8-)-N29,N30,N31,N32]-,	72453-55-5
nickelate(6-),[[[1,2-ethanediylbis[nitrilobis(methylene)]]tetrakis[phosphonato]](8-)], pentaammonium hydrogen,(OC-6-21)-	68958-86-1
nickelate(6-),[[[1,2-ethanediylbis[nitrilobis(methylene)]]tetrakis[phosphonato]](8-)], pentapotassium hydrogen,(OC-6-21)-	68958-87-2
nickelate(6-),[[[1,2-ethanediylbis[nitrilobis(methylene)]]tetrakis[phosphonato]](8-)], pentasodium hydrogen,(OC-6-21)-	68958-88-3
nickelate(8-), bis[3-[(2-amino-8-hydroxy-6-sulfo-1-naphthalenyl)azo]-2-hydroxy-5-sulfobenzoato(5-)]-, hexasodium dihydrogen	72139-08-3
nickelocene	1271-28-9
octadecanoic acid, nickel(2+) salt	2223-95-2
octanoic acid, nickel(2+) salt	4995-91-9
Oxalic acid, nickel salt	20543-06-0
perchloric acid, nickel(2+) salt, hexahydrate	13520-61-1

Substance Group name	
Substance	**CAS №**
phosphonic acid, [[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methyl]-, monoethyl ester, nickel(2+) salt (2:1)	30947-30-9
phosphoric acid, calcium nickel salt	17169-61-8
nickel phosphate / phosphoric acid, nickel(2+) salt (2:3)	10381-36-9
potassium [N,N-bis(carboxymethyl)glycinato(3-)-N,O,O',O'']nickelate(1-)	63640-18-6
Rammelsbergite (NiAs2)	1303-22-6
silicic acid (H2SiO3), nickel(2+) salt (4:3)	31748-25-1
Spinels, cobalt nickel zinc grey	95046-47-2
Sulfamic acid, nickel(2+) salt (2:1)	13770-89-3
sulfuric acid, ammonium nickel(2+) salt	7785-20-8
sulfuric acid, nickel salt, reaction products with sulfurized calcium phenol,ate	72162-32-4
nickel(II) sulfate heptahydrate / sulfuric acid, nickel(2+) salt (1:1), heptahydrate	10101-98-1
sulfuric acid, nickel(2+) salt (1:1), reaction products with nickel and nickel oxide (NiO)	68585-48-8
telluric acid (H2TeO3), nickel(2+) salt (1:1)	15851-52-2
telluric acid (H2TeO4), nickel(2+) salt (1:1)	15852-21-8
tetrahydrogen [[[(3-amino-4-sulphophenyl)amino]sulphonyl]-29H,31H-phthalocyaninetrisulphonato(6-)-N29,N30,N31,N32]nickelate(4-)	79102-62-8
tetrakis(trifluorophosphine)nickel	13859-65-9
tetrasodium [[[(3-amino-4-sulphophenyl)amino]sulphonyl]-29H,31H-phthalocyaninetrisulphonato(6-)-N29,N30,N31,N32]nickelate(4-)	93939-76-5
tetrasodium [bis[[[4-[[2-(sulphooxy)ethyl]sulphonyl]phenyl]amino]sulphonyl]-29H,31H-phthalocyaninedisulphonato(6)-N29,N30,N31,N32]nickelate(4-)	97280-68-7
Titanate(2-), hexafluoro-, nickel(2+), (1:1), (OC-6-11)-	34109-80-3
trinickel bis(arsenate)	13477-70-8
Zirconate(2-), hexafluoro-, nickel(2+) (1:1), (OC-6-11)-	30868-55-4
Zirconium alloy, base, Zr 40-82, Ni 18-60	42612-06-6
Aluminiummagnesiumnickelsiliziumoxide	198831-12-8
antimony nickel titanium oxide yellow	8007-18-9
iron nickel zinc oxide	12645-50-0
methyl 3-chlorobenzothiophene-2-carboxylate	14406-71-4
5,5-azobis(2,4,6-pyrimidinetriol), nickel complex	68511-62-6
chrome iron nickel black spinel	71631-15-7
nickel niobium titanium yellow rutile	68611-43-8
nickel phosphate	14396-43-1
nickel sulfide	11113-75-0
phosphoric acid,compounds,nickel(2+) zinc salt (2:1:2)	90053-13-7
phosphoric acid,compounds,nickel(2+) zinc salt (2:1:2) tetrahydrate	501953-51-1
nickel compounds	AL34
arsenic and its compounds	
monoammonium methane arsonate	2321-53-1
dimethylarsinic acid ; cacodylic acid	75-60-5
benzenearsonic acid	98-05-5
arsenic pentafluoride	7784-36-3
arsenic pentachloride	22441-45-8
triethyl arsenate	15606-95-8
2,6-dimethyl-4-(1-naphthyl)pyrylium hexafluoroarsenate	84282-36-0
2,6-dimethyl-4-phenylpyrylium hexafluoroarsenate	84304-15-4
4-cyclohexyl-2,6-dimethylpyrylium hexafluoroarsenate	84304-16-5
6,6'-dihydroxy-3,3'-diarsene-1,2-diyldianilinium dichloride	139-93-5
aluminum arsenide (AlAs)	22831-42-1
aluminum gallium arsenide ((Al,Ga)As)	37382-15-3
ammonium arsenate	7784-44-3
ammonium-magnesium-arsenat	14644-70-3
antimony arsenate	28980-47-4
antimony arsenic oxide	64475-90-7
antimony arsenide (Sb3As)	12255-36-6
antimony oxide (Sb2O3), mixed with arsenic oxide (As2O3)	68951-38-2
arsenargentite (Ag3As)	12417-99-1
arsenate(1-), hexafluoro-, hydrogen	17068-85-8
arsenate(1-), hexafluoro-, lithium	29935-35-1

Substance Group name	
Substance	**CAS №**
arsenate(1-), hexafluoro-, potassium	17029-22-0
arsenate, dimethyl, sodium	6131-99-3
arsenenous acid, lithium salt	72845-34-2
arsenic acid	1327-52-2 7778-39-4
arsenic acid (H3AsO4), ammonium copper(2+) salt (1:1:1)	32680-29-8
arsenic acid (H3AsO4), barium salt (2:3)	13477-04-8
arsenic acid (H3AsO4), bismuth salt (1:1)	13702-38-0
arsenic acid (H3AsO4), cobalt(2+) salt (2:3)	24719-19-5
arsenic acid (H3AsO4), copper salt	10103-61-4
arsenic acid (H3AsO4), copper(2+) salt (2:3)	7778-41-8
arsenic acid (H3AsO4), dipotassium salt	21093-83-4
arsenic acid (H3AsO4), magnesium salt, manganese-doped	102110-21-4
arsenic acid (H3AsO4), monoammonium salt	13462-93-6
arsenic acid (H3AsO4), strontium salt (2:3)	13464-68-1
arsenic acid (H3AsO4), trilithium salt	13478-14-3
arsenic acid (H3AsO4), trisilver(1+) salt	13510-44-6
arsenic acid, lead (4+) salt	53404-12-9
arsenic acid, trisodium salt	13464-38-5
arsenic bromide	64973-06-4 7784-33-0
arsenic chloride	37226-49-6
arsenic disulfide	1303-32-8 56320-22-0
arsenic pentoxide	1303-28-2
arsenic selenide (As2Se3)	1303-36-2
arsenic sulfide	12612-21-4
arsenic sulfide (As2S4)	12344-68-2
arsenic telluride (As2Te3)	12044-54-1
arsenic trichloride	60646-36-8
arsenic trioxide	1327-53-3
arsenic trisulfide	1303-33-9
arsenic, elemental	7440-38-2
arsenous acid, trisodium salt	13464-37-4
arsenous trichloride	7784-34-1
arsenous trifluoride	7784-35-2
arsenous triiodide	7784-45-4
barium arsenide (Ba3As2)	12255-50-4
benzenediazonium, 3-methyl-4-(1-pyrrolidinyl)-, hexafluoroarsenate(1-)	27569-09-1
benzenediazonium, 4-(diethylamino)-2-ethoxy-, hexafluoroarsenate(1-)	63217-33-4
benzenediazonium, 4-(ethylamino)-2-methyl-, hexafluoroarsenate(1-)	63217-32-3
benzenesulfonic acid, 4-arsenoso-	71130-51-3
benzenesulfonic acid, 4-arsenoso-, sodium salt	71130-50-2
boron(1+), bis(2,4-pentanedionato-O,O')-, (T-4)-, hexafluoroarsenate(1-)	68892-01-3
calcium arsenate	10103-62-5 7778-44-1
calcium arsenide (Ca3As2)	12255-53-7
calcium arsenite	52740-16-6
calcium arsenite (2:1)	15194-98-6
calcium arsenite (2:3)	27152-57-4
cobalt arsenide (CoAs)	27016-73-5
cobalt arsenide (CoAs2)	12044-42-7
cobalt arsenide (CoAs3)	12256-04-1
copper acetoarsenite	12002-03-8
copper arsenate	29871-13-4
copper arsenate hydroxide (Cu2(AsO4)(OH))	12774-48-0
copper arsenide (Cu3As)	12005-75-3
copper arsenite	10290-12-7 33382-64-8
copper diarsenite	16509-22-1
diarsenic acid	13453-15-1
diphenyldiarsenic acid	4519-32-8
disodium hydrogen arsenate	10048-95-0 7778-43-0
dysprosium arsenide (DyAs)	12005-81-1

Substance Group name	
Substance	**CAS №**
erbium arsenide (ErAs)	12254-88-5
europium arsenide (EuAs)	32775-46-5
ferric arsenate	10102-49-5
ferric arsenite	63989-69-5
ferrous arsenate	10102-50-8
gadolinium arsenide (GdAs)	12005-89-9
gallium arsenide	1303-00-0
gallium arsenide phosphide (Ga2AsP)	12044-20-1
gallium zinc triarsenide	98106-56-0
germanium arsenide (GeAs)	12271-72-6
holmium arsenide (HoAs)	12005-92-4
indium arsenide (InAs)	1303-11-3
iodonium, diphenyl-, hexafluoroarsenate(1-)	62613-15-4
iron arsenide (Fe2As)	12005-88-8
iron arsenide (FeAs)	12044-16-5
iron arsenide (FeAs2)	12006-21-2
lanthanum arsenide (LaAs)	12255-04-8
lithium arsenide (Li3As)	12044-22-3
lutetium arsenide (LuAs)	12005-94-6
magnesium arsenate	10103-50-1
magnesium arsenide (Mg3As2)	12044-49-4
manganese arsenide (Mn2As)	12005-96-8
manganese arsenide (MnAs)	12005-95-7
manganese hydrogenarsenate	7784-38-5
metaarsenic acid	10102-53-1
methylium, triphenyl-, hexafluoroarsenate(1-)	437-15-0
n-(p-Arsenosophenyl)-1,3,5-triazine-2,4,6-triamine	21840-08-4
neodymium arsenide (NdAs)	12255-09-3
nickel arsenide (NiAs)	27016-75-7
nickel diarsenide	12068-61-0
niobium arsenide (NbAs)	12255-08-2
platinum arsenide (PtAs2)	12044-52-9
potassium arsenate	7784-41-0
potassium arsenide (K3As)	12044-21-2
potassium arsenite	10124-50-2 13464-35-2
praseodymium arsenide (PrAs)	12044-28-9
samarium arsenide (SmAs)	12255-39-9
silicic acid (H4SiO4), tetraethyl ester, polymer with arsenic oxide(As2O3)	68957-75-5
silicon(1+), tris(2,4-pentanedionato-O,O')-, (OC-6-11)-, hexafluoroarsenate(1-)	67251-38-1
silver arsenide (Ag2As)	70333-07-2
silver arsenite	7784-08-9
sodium arsenate	7631-89-2
sodium arsenide (Na3As)	12044-25-6
sodium arsenite	7784-46-5
sodium metaarsenate	15120-17-9
strontium arsenide (Sr3As2)	39297-24-0
strontium arsenite	15195-06-9 91724-16-2
strychnidin-10-one, arsenite (1:1)	100258-44-4
strychnine arsenate	10476-82-1
sulfonium, triphenyl-, hexafluoroarsenate(1-)	57900-42-2
terbium arsenide (TbAs)	12006-08-5
thallium arsenide (TlAs)	12006-09-6
thallium triarsenide	84057-85-2
thulium arsenide (TmAs)	12006-10-9
triammonium arsenate	24719-13-9
triethyl arsenite	3141-12-6
trimanganese arsenide	61219-26-9
trinickel bis(arsenate)	13477-70-8
tris[(8a)-6'-methoxycinchonan-9(R)-ol] arsenite	94138-87-1
tris[(8a,9R)-6'-methoxycinchonan-9-ol] bis(arsenate)	549-59-7
vanadium(4+) diarsenate (1:1)	99035-51-5
ytterbium arsenide (YbAs)	12006-12-1
yttrium arsenide (YAs)	12255-48-0

Substance Group name	
Substance	**CAS №**
zinc arsenate	1303-39-5
zinc arsenate	13464-44-3
zinc arsenide (Zn3As2)	12006-40-5
zinc arsenide (ZnAs2)	12044-55-2
zinc arsenite	10326-24-6
zirconium arsenide (ZrAs)	60909-47-9
arsorous acid	13464-58-9
arsin	7784-42-1
diphenoxarsin-10-yloxid	58-36-6
arsenic compounds	AL36
bismuth	7440-69-9
bismuth trioxide	1304-76-3
bismuth nitrate	10361-44-1
bismuth compounds	AL45
organophosphorus compounds	
triphenyl phosphate	115-86-6
tritolyl phosphate	1330-78-5
triethyl phosphate	78-40-0
diphenyl tolyl phosphate	26444-49-5
tris(2-chloroethyl)phosphate	115-96-8
phosphoric acid tributylester	126-73-8
phosphoric acid, tris(2-methylphenyl) ester	78-30-8
trimethylphosphate	512-56-1
tris-(1-aziridinyl) phosphine oxide	545-55-1
tris(2,3-dibromopropyl)phosphate [tris]	126-72-7
organic phosphorus compounds	AL39
polyvinyl chloride	
poly(vinyl chloride)	9002-86-2 25037-47-2 26793-37-3
brominated flame retardants	
brominated flame retardant which comes under notation of iso 1043-4 code number FR(14) [aliphatic/alicyclic brominated compounds]	FR(14)
brominated flame retardant which comes under notation of iso 1043-4 code number FR(15) [aliphatic/alicyclic brominated compounds in combination with antimony compounds]	FR(15)
brominated flame retardant which comes under notation of iso 1043-4 code number FR(16) [aromatic brominated compounds（excluding brominated diphenyl ether and biphenyls）]	FR(16)
brominated flame retardant which comes under notation of iso 1043-4 code number FR(17) [aromatic brominated compounds（excluding brominated diphenyl ether and biphenyls）in combination with antimony compounds]	FR(17)
brominated flame retardant which comes under notation of iso 1043-4 code number FR(22) [aliphatic/alicyclic chlorinated and brominated compounds]	FR(22)
brominated flame retardant which comes under notation of iso 1043-4 code number FR(42) [brominated organic phosphorus compounds]	FR(42)
poly(2,6-dibromo-phenylene oxide)	69882-11-7
tetra-decabromo-diphenoxy-benzene	58965-66-5
1,2-bis(2,4,6-tribromo-phenoxy) ethane	37853-59-1
TBBA, unspecified	30496-13-0
TBBA-epichlorhydrin oligomer	40039-93-8
TBBA-TBBA-diglycidyl-ether oligomer	70682-74-5
TBBA carbonate oligomer	28906-13-0
TBBA carbonate oligomer, phenoxy end capped	94334-64-2
TBBA carbonate oligomer, 2,4,6-tribromo-phenol, terminated	71342-77-3
TBBA-bisphenol, a-phosgene polymer	32844-27-2
brominated epoxy resin end-capped with tribromophenol,	139638-58-7
brominated epoxy resin end-capped with tribromophenol,	135229-48-0
TBBA-(2,3-dibromo-propyl-ether)	21850-44-2
TBBA bis-(2-hydroxy-ethyl-ether)	4162-45-2
TBBA-bis-(allyl-ether)	25327-89-3
TBBA-dimethyl-ether	37853-61-5
4,4'-sulphonylbis[2,6-dibromophenol,]	39635-79-5
TBBS-bis-(2,3-dibromo-propyl-ether)	42757-55-1
2,4-dibromo-phenol,	615-58-7
2,4,6-tribromo-phenol,	118-79-6

Substance Group name	
Substance	**CAS №**
pentabromo-phenol,	608-71-9
2,4,6-tribromo-phenyl-alltl-ether	3278-89-5
tribromo-phenyl-allyl-ether, unspecified	26762-91-4
1,1,2,2-tetrabromoethane	79-27-6
hexabromobenzene	87-82-1
bis(methyl)tetrabromo-phtalate	55481-60-2
phthalic acid, 3,4,5,6-tetrabromo-, bis(2-ethylhexyl) ester	26040-51-7
2-(2-hydroxyethoxy)ethyl 2-hydroxypropyl 3,4,5,6-tetrabromophthalate	20566-35-2
TBPA, glycol-and propylene-oxide esters	75790-69-1
1h-isoindole-1,3(2H)-dione, 2,2'-(1,2-ethanediyl)bis[4,5,6,7-tetrabromo-	32588-76-4
n,n'-(ethylene)bis[4,5-dibromohexahydro-3,6-methanophthalimide]	52907-07-0
2,3-dibromo-2-butene-1,4-diol	3234-02-4
3-bromo-2,2-bis(bromomethyl)propan-1-ol	36483-57-5
poly(tribromostyrene)	57137-10-7
tribromostyrene	61368-34-1
benzene, ethenyl-, ar-bromo derivs., polymers with propene, graft	171091-06-8
dibromostyrene	31780-26-4
alkanes, C10-18, bromo chloro	68955-41-9
bromo-/chloro-alpha-olefin	82600-56-4
bromoethylene	593-60-2
1,3,5-tris(2,3-dibromopropyl)-1,3,5-triazine-2,4,6(1h,3h,5h)-trione	52434-90-9
tris(dibromophenyl) phosphate	49690-63-3
tris[3-bromo-2,2-bis(bromomethyl)propan-1-yl] phosphate	19186-97-1
phosphoric acid, mixed 3-bromo-2,2-dimethylpropyl and 2-bromoethyl and 2-chloroethyl esters	125997-20-8
2,3,4,5,6-pentabromotoluene	87-83-2
2,3,4,5,6,alpha-hexabromotoluene	38521-51-6
1,3-butadiene, homopolymer, brominated	68441-46-3
(pentabromophenyl)methyl acrylate	59447-55-1
2-propenoic acid, (2,3,4,5,6-pentabromophenyl)methyl ester, homopolymer	59447-57-3
1,1'-(ethane-1,2-diyl)bis[2,3,4,5,6-pentabromobenzene]	84852-53-9
1h-pyrrole-2,5-dione, 1-(2,4,6-tribromophenyl)-	59789-51-4
tetrabromocyclooctane	31454-48-5
1,2-dibromo-4-(1,2-dibromoethyl)cyclohexane	3322-93-8
disodium tetrabromophthalate	25357-79-3
3,5,3',5'-tetrabromo-bisphenol, A (TBBA)	79-94-7
1,2,5,6,9,10-hexabromocyclodecane	25637-99-4 3194-55-6 134237-51-7 134237-50-6 134237-52-8
phthalic anhydride, tetrabromo-	632-79-1
monomethyldibromodiphenylmethane	99688-47-8
monomethyldichlorodiphenylmethane	81161-70-8
dodecabromoterphenyl	79596-31-9
undecabromoterphenyl	83929-80-0
4-bromo-p-terphenyl	1762-84-1
2-bromo-p-terphenyl	3282-24-4 75295-57-7
4,4'-dibromo-p-terphenyl	17788-94-2
3-bromo-p-terphenyl	1762-87-4
brominated flame retardants	AL42
phthalic esters	
Specified phthalic esters（Group Ⅰ）	
benzyl butan-1-yl phthalate / benzylbutylphthalate (BBP) / bis(2-methoxyethyl)phthalate	85-68-7
bis(2-ethylhexan-1-yl) phthalate / di(2-ethylhexyl)phthalate (DEHP)	117-81-7
dibutan-1-yl phthalate / dibutylphthalate (DBP)	84-74-2
Specified phthalic esters（Group Ⅱ）	
di-isononyl phthalate, phthalic acid, di-C8-10 branched alkyl esters C9 rich	28553-12-0 68515-48-0
1,2-benzenedicarboxylic acid diisodecyl ester （di-isodecyl phthalate） phthalic acid, di-C9-11 branched alkyl esters C10 rich	26761-40-0 68515-49-1

Substance Group name	
Substance	**CAS №**
di-n-octyl phthalate	117-84-0
other phthalic esters	
di-ethyl phthalate	84-66-2
di-cyclohexyl phthalate	84-61-7
di-n-propyl phthalate	131-16-8
di-n-hexyl phthalate	84-75-3
di-methyl phthalate	131-11-3
di-n-heptyl phthalate	3648-21-3
bis(2-methoxyethyl)phthalate	117-82-8
d-iisobutyl phthalate / diisobutylphthatlate (DIBP)	84-69-5
diisopentylphthalate (DIPP)	605-50-5
Heptylundecylphthalt	68515-42-4
(1,2-benzenedicarboxylic acid, diundecyl ester)	3648-20-2
(1,2-benzenedicarboxylic acid, diheptyl ester, branched and linear)	68515-44-6
(1,2-benzenedicarboxylic acid, dinonyl ester, branched and linear)	68515-45-7
(1,2-benzenedicarboxylic acid, heptyl nonyl ester, branched and linear)	111381-89-6
(1,2-benzenedicarboxylic acid, heptyl undecyl ester, branched and linear)	111381-90-9
(1,2-benzenedicarboxylic acid, nonyl undecyl ester, branched and linear)	111381-91-0
di-n-pentyl phthalate	131-18-0
phthalic esters	AL43
perfluorooctane sulfonate and its related substances	
PFOS related substances	AL46
perfluoroctane sulfonate acid	1763-23-1
perfluoroctane sulfonate anion	45298-90-6
perfluoro-1-octanesulfonyl fluoride	307-35-7
2-propenoic acid, 2-methyl-, dodecyl ester, polymers with 2-[methyl[(perfluoro-C4-8-alkyl)-sulfonyl]amino]ethyl acrylate and vinylidene chloride	306975-62-2
glycine, N-ethyl-N-[(heptadecafluorooctyl)sulfonyl]-, potassium salt	2991-51-7
perfluorooctane sulufonate / perfluorooctane sulfonate potasium salt	2795-39-3
perfluorooctane sulfonate ammonium salt	29081-56-9
perfluorooctane sulfonate lithium salt	29457-72-5
tetraethylammoniumheptadecafluoroctansulfonate	56773-42-3
polycyclic aromatic hydrocarbons and its mixtures	
anthracene oil	90640-80-5
anthracene oil, anthracene paste, distn. lights	91995-17-4
anthracene oil, anthracene paste, anthracene fraction	91995-15-2
anthracene oil, anthracene-low	90640-82-7
anthracene oil, anthracene paste	90640-81-6
acenaphthylene	208-96-8
acenaphthene	83-32-9
fluorene	86-73-7
phenanthrene	85-01-8
fluoranthene	206-44-0
pyrene	129-00-0
benzo[ghi]fluoranthene	203-12-3
cyclopenta[cd]pyrene	27208-37-3
perylene	198-55-0
indeno[1,2,3-c,d]pyrene	193-39-5
benzo[g,h,i]perylene	191-24-2
dibenzo[def,mno]chrysene	191-26-4
coronene	191-07-1
naphthalene	91-20-3
9,10-anthracenedione, 1-[(5,7-dichloro-1,9-dihydro-2-methyl-9-oxopyrazolo[5,1-b]quinazolin-3-yl)azo]-	74336-60-0
polycyclic aromatic hydrocarbons (PAH; PCAH) in extender oils and extender oils in tyres, selected	AL49-1
polycyclic aromatic hydrocarbons (PAH; PCAH) in polymers, selected	AL49-2
benzo[a]pyrene	50-32-8
benzo[e]pyrene	192-97-2
anthracene	120-12-7
benzo[a]anthracene	56-55-3
chrysene	218-01-9
benz(j)fluoranthene	205-82-3
benzo[k]fluoranthene	207-08-9
dibenz[a,h]anthracene	53-70-3
benzo[b]fluoranthene / benz(e)acephenanthrylene	205-99-2

Substance Group name	
Substance	**CAS №**
Other polycyclic aromatic hydrocarbons and its mixtures	AL49
cobalt and its compounds	
sodium [4-[[6-[(4-amino-6-chloro-1,3,5-triazin-2-yl)amino]-1-hydroxy-3-sulpho-2-naphthyl]azo]-3-hydroxy-7-nitronaphthalene-1-sulphonato(4-)]cobaltate(1-)	100231-59-2
(ethylenediamine-N)(1-imino-1H-isoindol-3-aminato-N2)[29H,31H-phthalocyaninato-	83898-69-5
cobalt(II) sulphate / sulfuric acid, cobalt(2+) salt (1:1)-	10124-43-3
[.mu.-[carbonato(2-)-O:O']]dihydroxydicobalt	12069-68-0
[5,10,15,20-tetraphenyl-21H,23H-porphinato(2-)-N21,N22,N23,N24]cobalt	14172-90-8
1,2,4-benzenetricarboxylic acid, cobalt(2+) salt (1:1)	67801-57-4
1,4-benzenedicarboxylic acid, cobalt salt	34262-88-9
1,4-benzenedicarboxylic acid, monomethyl ester, cobalt(2+) salt	51084-32-3
benzothiazole-2(3H)-thione, cobalt (2+) salt	29904-98-1
cobalt(2+) methacrylate	67952-53-8
cobalt(2+) acrylate	58197-53-8
cobalt (9Z,12Z)-octadeca-9,12-dienoate	14666-96-7
cobalt oleate	14666-94-5
acetic acid, bromo-, cobalt(2+) salt	54846-43-4
cobalt(II) acetate tetrahydrate	6147-53-1
cobalt triacetate	917-69-1
adipic acid, cobalt salt	54437-56-8
aluminum cobalt oxide (AlCoO)	12672-27-4
aluminum cobalt oxide (Al2CoO4)	1333-88-6
ammonium bis[4-hydroxy-3-[(5-hydroxynaphth[2,1-d]-1,3-oxathiol-4-yl)azo]-N-methylbenzenesulphonamide S,S-dioxidato(2-)]cobaltate(1-)	83847-05-6
ammonium cobalt orthophosphate	36835-61-7
antimony, compound with cobalt (1:1)	12052-42-5
arsenic acid (H3AsO4), cobalt(2+) salt (2:3)	24719-19-5
benzoic acid, 4-amino-, cobalt(2+) salt (2:1)	68123-03-5
benzoic acid, methyl-, cobalt salt	42978-77-8
bis(1,3-diphenylpropane-1,3-dionato-O,O')cobalt	14405-50-6
bis(1-phenylbutane-1,3-dionato-O,O')cobalt	14128-95-1
bis(6-methylheptane-2,4-dionato-O,O')cobalt	79215-59-1
bis(D-gluconato-O1,O2)cobalt	71957-08-9
bis(dibutyldithiocarbamato-S,S')cobalt	14591-57-2
bis(diethyldithiocarbamato-S,S')cobalt	15974-34-2
bis(N,N-dimethylpropane-1,3-diamine-N')[2,3,9,10,16,17,23,24-octahydro-29H,31H-tetrakis[1,4]dithiino[2,3-b:2',3'-g:2'',3''-l:2''',3'''-q]porphyrazinato(2-)-N29,N30,N31,N32]cobalt	83863-98-3
bis(N,N-dimethylpropane-1,3-diamine-N')[29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]cobalt	83863-97-2
bis[2-[(5-chloro-2-pyridyl)azo]-5-(diethylamino)phenol,ato]cobalt(1+) chloride	81342-98-5
carbonic acid, cobalt salt	7542-09-8
cassiterite, cobalt manganese nickel grey	99749-23-2
cerium, compound with cobalt (1:5)	12214-13-0
cerium, compound with cobalt (2:7)	12515-29-6
chloro[2,2',2''-nitrilotris[ethanolato]-N,O,O',O'']cobalt	36217-04-6
chloropentakis(methylamine)cobalt dichloride	15392-59-3
cobalt (II) chloride, hexahydrate	7791-13-1
cobalt arsenide (CoAs)	27016-73-5
cobalt arsenide (CoAs2)	12044-42-7
cobalt arsenide (CoAs3)	12256-04-1
cobalt bis(2-ethylhexanoate)	136-52-7
cobalt bis(nonylphenol,ate)	83970-30-3
cobalt bis[citrato(3-)]di-.mu.-oxodioxodimolybdate(2-)	93776-58-0
cobalt boride (Co2B)	12045-01-1
cobalt boride (Co3B)	12006-78-9
cobalt(II) carbonate / cobalt carbonate	513-79-1
cobalt carbonyl	10210-68-1
cobalt chloride (CoCl3)	10241-04-0
cobalt cyanide (Co(CN)2)	542-84-7
cobalt cyanide (Co(CN)3)	14965-99-2
cobalt dilactate	16039-54-6
cobalt dilaurate	14960-16-8
cobalt dilinoleate	6401-84-9
cobalt dinicotinate	28029-53-0

Substance Group name	
Substance	**CAS №**
cobalt dioctanoate	1588-79-0
cobalt dioleate	19192-71-3
cobalt dipalmitate	14582-18-4
cobalt disodium ethylenediaminetetraacetate	15137-09-4
cobalt distearate	1002-88-6
cobalt disulfide	12013-10-4
cobalt fluoride (CoF3)	10026-18-3
cobalt glycinate	17829-66-2
cobalt hexafluorosilicate(2-)	12021-67-9
cobalt hydroxide	21041-93-0
cobalt hydroxide (Co(OH)3)	1307-86-4
cobalt hydroxide oxide (Co(OH)O)	12016-80-7
cobalt iodide (CoI2)	15238-00-3
cobalt iron oxide (CoFe2O4)	12052-28-7
cobalt metasilicate	25139-08-6
cobalt molybdenum nickel oxide (CoMo2NiO8)	68016-03-5
cobalt naphthenate	61789-51-3
cobalt neodecanoate	27253-31-2
cobalt nickel oxide (CoNiO2)	58591-45-0
cobalt nitrate	10026-22-9
cobalt octoate	13586-82-8
cobalt oxide	1307-96-6
cobalt oxide (Co2O3)	1308-04-9
cobalt oxide (Co3O4)	1308-06-1
cobalt phosphide (Co2P)	12134-02-0
cobalt propionate	1560-69-6
cobalt selenide (CoSe)	1307-99-9
cobalt silicate	26686-74-8
cobalt silicide (CoSi2)	12017-12-8
cobalt succinate	3267-76-3
cobalt sulfate heptahydrate	10026-24-1
cobalt sulfide (Co2S3)	1332-71-4
cobalt tallate	61789-52-4
cobalt telluride (CoTe)	12017-13-9
cobalt tetra(2-ethylhexyl) bis(phosphate)	24828-46-4
cobalt tin oxide (CoSnO3)	1345-19-3
cobalt titanium oxide (Co2TiO4)	12017-38-8
cobalt titanium trioxide	12017-01-5
cobalt titanium tungsten oxide ((Co,Ti,W)O2)	144437-67-2
cobalt tungsten oxide (CoWO4)	10101-58-3
cobalt zirconium oxide (CoZrO3)	69011-09-2
cobalt(2+) dibromate	14732-58-2
cobalt(2+) dinickel(2+) bis[2-hydroxypropane-1,2,3-tricarboxylate]	94232-44-7
cobalt(2+) ethanolate	19330-29-1
cobalt(2+) hydrogen citrate	18727-04-3
cobalt(2+) selenite	10026-23-0
cobalt(2+) tert-decanoate	84195-99-3
cobalt(2+), bis(1,2-ethanediamine-N,N')-, bis[bis(cyano-C)aurate(1-)]	68958-90-7
cobalt(2+), bis(1,2-propanediamine-N,N')-, bis[bis(cyano-C)aurate(1-)]	67906-18-7
cobalt(2+), pentaamminechloro-, dichloride, (OC-6-22)-	13859-51-3
cobalt(3+), hexaammine-, (OC-6-11)-, phosphate (1:1)	55494-92-3
cobalt(3+), hexaammine-, (OC-6-11)-, salt with trifluoroacetic acid(1:3)	59561-55-6
cobalt(3+), hexaammine-, (OC-6-11)-, triacetate	14023-85-9
cobalt(3+), hexaammine-, (OC-6-11)-, trinitrate	10534-86-8
cobalt(3+), hexaammine-, trichloride, (OC-6-11)-	10534-89-1
cobalt(3+), tris(1,2-ethanediamine-N,N')-, trichloride, (OC-6-11)-	13408-73-6
cobalt(II) diacetate / cobalt(II) acetate	71-48-7
cobalt(II) fluoborate	26490-63-1
cobalt(II) fluoride	10026-17-2
cobalt(II) molybdate	13762-14-6
cobalt(II) sulfide	1317-42-6
cobalt, ((2,2'-(1,2-ethanediylbis(nitrilomethylidyne))bis(6-fluorophenol,ato))(2-)-N,N',O,O')-	62207-76-5
cobalt, [(2-amino-2-oxoethoxy)acetato(2-)]-	68133-85-7
cobalt, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, (SP-4-1)-	3317-67-7
cobalt, [29H,31H-phthalocyanine-C,C-disulfonyl dichloridato(2-)-N29,N30,N31,N32]-	68189-40-2

Substance Group name	
Substance	**CAS №**
cobalt, [29H,31H-phthalocyanine-C-sulfonyl chloridato(2-)-N29,N30,N31,N32]-	67875-38-1
cobalt, [3-hydroxy-4-[[1-(p-mercaptophenyl)-3-methyl-5-oxo-2-pyrazolin-4-yl]azo]-o-benzenesulfonanisididato(2-)]-, S-(hydrogen sulfate), monosodium salt	18285-21-7
cobalt, [4-hydroxy-3-[[1-(p-mercaptophenyl)-3-methyl-5-oxo-2-pyrazolin-4-yl]azo]-o-benzenesulfonophenetidato(2-)]-, S-(hydrogen sulfate), monosodium salt	19052-32-5
cobalt, [N-(carboxymethyl)glycinato(2-)-N,O,ON]-	13869-30-2
cobalt, bis(2,4-pentanedionato-O,O')-, (T-4)-	14024-48-7
cobalt, bis(acetato-O)(1,4-diazabicyclo[2.2.2]octane-N1)-, homopolymer	68239-56-5
cobalt, bis(D-glycero-D-ido-heptonato)-	68475-45-6
cobalt, bis(dicyclohexylphosphinodithioato-S,S')-	40621-10-1
cobalt, bis[(2,3-butanedione dioximato)(1-)-N,N']-, (SP-4-1)-	3252-99-1
cobalt, bis[.alpha.-(1-oxo-1H-isoindol-3-yl)-1H-benzimidazole-2-acetonitrilato]-, (T-4)-	60109-88-8
cobalt, bis[2-[[2-hydroxy-5-[(methylamino)sulfonyl]phenyl]azo]-3-oxo-N-phenylbutanamidato(2-)]-	69178-42-3
cobalt, bis[3-(1H-benzimidazol-2-ylamino)-1H-isoindol-1-onato]-, (T-4)-	63287-28-5
cobalt, bis[carbonato(2-)]hexahydroxypenta-	12602-23-2
cobalt, C4-10-fatty acid naphthenate complexes	84066-85-3
cobalt, C5-23-branched carboxylate C4-10-fatty acid naphthenate complexes	83711-42-6
cobalt, C5-23-branched carboxylate naphthenate complexes	83711-43-7
cobalt, C5-23-branched carboxylate naphthenate octanoate complexes	83711-44-8
cobalt, compound with gadolinium (3:1)	12017-50-4
cobalt, compound with gadolinium (5:1)	12017-61-7
cobalt, compound with gadolinium (7:2)	11139-24-5
cobalt, compound with lanthanum (3:1)	61419-68-9
cobalt, compound with lanthanum (5:1)	12297-66-4
cobalt, compound with lanthanum (7:2)	12268-07-4
cobalt, compound with neodymium (3:1)	12187-43-8
cobalt, compound with neodymium (5:1)	12017-65-1
cobalt, compound with neodymium (7:2)	12516-51-7
cobalt, compound with praseodymium (5:1)	12017-67-3
cobalt, compound with praseodymium (7:2)	12516-52-8
cobalt, compound with samarium (17:2)	12052-78-7
cobalt, compound with samarium (2:1)	12017-43-5
cobalt, compound with samarium (3:1)	12187-46-1
cobalt, compound with samarium (5:1)	12017-68-4
cobalt, compound with samarium (7:2)	12305-84-9
cobalt, compound with yttrium (3:1)	12052-62-9
cobalt, compound with yttrium (5:1)	12017-71-9
cobalt, compound with yttrium (7:2)	12052-70-9
cobalt, dibromobis(triphenylphosphine)-, (T-4)-	14126-32-0
cobalt, dibromobis[tris(3,5-dimethylphenyl)phosphine]-, (T-4)-	69198-43-2
cobalt, dibromobis[tris(3-methylphenyl)phosphine]-, (T-4)-	49651-10-7
cobalt, dichloro(1,4-diazabicyclo[2.2.2]octane-N1)-, homopolymer	68239-58-7
cobalt, elemental	7440-48-4
cobalt, tetrakis[(2,3-butanedione dioximato)(1-)-N,N']bis(pyridine)di-, (Co-Co)	25971-15-7
cobalt, tris(2,4-pentanedionato-O,O')-, (OC-6-11)-	21679-46-9
cobalt, tris(3-bromo-2,4-pentanedionato-O,O')-, (OC-6-11)-	15218-44-7
cobalt-acetate	5931-89-5
cobaltate (6-), [[[1,2-ethanediylbis[nitrilobis(methylene)]]tetrakis[phosphonato]](6-)-N,N',O,O'',O''',O''''']-,pentaammonium hydrogen, (OC-6-21)-	68025-39-8
cobaltate (6-), [[[1,2-ethanediylbis[nitrilobis(methylene)]]tetrakis[phosphonato]](8-)-N,N',O,O'',O''',O''''']-,pentapotassium hydrogen, (OC-6-21)-	67924-23-6
cobaltate (6-), [[[1,2-ethanediylbis[nitrilobis(methylene)]]tetrakis[phosphonato]](8-)-N,N',O,O',O''',O''''']-,pentasodium hydrogen, (OC-6-21)-	67969-67-9
cobaltate (CoO21-), lithium	12190-79-3
cobaltate(1-), [1-[[5-(ethylsulfonyl)-2-hydroxyphenyl]azo]-2-naphthalenolato(2-)][methyl[8-[(5-ethylsulfonyl)-2-hydroxyphenyl]azo]-7-hydroxy-2- naphthalenyl]methylcarbamato(2-)]-, sodium	103241-62-9
cobaltate(1-), [2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3 -onato(2-)][1-[(2-hydroxyphenyl)azo]-2-naphthalenolato(2-)]-, hydrogen, compound with 1-tridecanamine (1:1)	70815-19-9
cobaltate(1-), [2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)][1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]-, hydrogen	55668-56-9

Substance Group name	
Substance	**CAS №**
cobaltate(1-), [2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)][1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium	73507-67-2
cobaltate(1-), [2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)][1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, hydrogen	52277-73-3
cobaltate(1-), [2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)][1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium	73507-66-1
cobaltate(1-), [2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)][3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-4-	73324-02-4
cobaltate(1-), [2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)][4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]benzenesulfonamidato(2-)]-, hydrogen	72845-76-2
cobaltate(1-), [2,4-dihydro-4-[[2-hydroxy-5-(methylsulfonyl)phenyl]azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)][N-[7-hydroxy-8-[[2-hydroxy-5-(methylsulfonyl)phenyl]azo]-1-	70236-41-8
cobaltate(1-), [29H,31H-phthalocyanine-C-sulfonato(3-)-N29,N30,N31,N32]-, hydrogen	30638-08-5
cobaltate(1-), [29H,31H-phthalocyanine-C-sulfonato(3-)-N29,N30,N31,N32]-, sodium	52729-67-6
cobaltate(1-), [3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-4-hydroxybenzenesulfonamidato(2-)][1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]-, hydrogen	72928-77-9
cobaltate(1-), [3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-4-hydroxybenzenesulfonamidato(2-)][1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, hydrogen	72928-76-8
cobaltate(1-), [3-[[1-(4-chlorophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-hydroxy-N-methylbenzenesulfonamidato(2-)][N-[7-hydroxy-8-[[2-hydroxy-5-[(methylamino)sulfonyl]phenyl]azo]-1-naphthalenyl]acetamidato(2-)]-, hydrogen	68413-61-6
cobaltate(1-), [3-[[1-(4-chlorophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-hydroxy-N-methylbenzenesulfonamidato(2-)][N-[7-hydroxy-8-[[2-hydroxy-5-[(methylamino)sulfonyl]phenyl]azo]-1-naphthalenyl]acetamidato(2-)]-, sodium	74499-63-1
cobaltate(1-), [3-[4-[(5-chloro-2-hydroxyphenyl)azo]-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-1-yl]benzenesulfonamidato(2-)][4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]benzenesulfonamidato(2-	72403-33-9
cobaltate(1-), [3-[4-[(5-chloro-2-hydroxyphenyl)azo]-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-1-yl]benzenesulfonamidato(2-)][4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]-N-(1-methylethyl)benzenesulfonamidato(2-)]-, sodium	72391-10-7
cobaltate(1-), [4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]benzenesulfonamidato(2-)][4-hydr oxy-3-[(5-hydroxynaphth[2,1-d]-1,3-oxathiol-4-yl)azo]benzenesulfonamide ,-dioxidato(2-)]-, ammonium	83864-24-8
cobaltate(1-), [4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]benzenesulfonamidato(2-)][4-hydr oxy-3-[(5-hydroxynaphth[2,1-d]-1,3-oxathiol-4-yl)azo]benzenesulfonamide ,-dioxidato(2-)]-, sodium	83817-76-9
cobaltate(1-), [4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]benzenesulfonamidato(2-)][4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]-N-(1-methylethyl)benzenesulfonamidato(2-)]-, sodium	72403-32-8
cobaltate(1-), [4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]benzenesulfonamidato(2-)][8-[(2-hydroxyphenyl)azo]-2-naphthalenolato(2-)]-, hydrogen, compound with 3-[(2-ethylhexyl)oxy]-1-propanamine (1:1)	73297-17-3
cobaltate(1-), [6-amino-5-[(2-hydroxy-4-nitrophenyl)azo]-N-(2-hydroxypropyl)-2-naphthalenesulfonamidato(2-)][1-[(5-chloro-2-hydroxyphenyl)azo]-2-naphthalenolato(2-)]-, sodium	73195-17-2
cobaltate(1-), [C-(chlorosulfonyl)-29H,31H-phthalocyanine-C-sulfonato(3-)-N29,N30,N31,N32]-,	68213-72-9
cobaltate(1-), [N,N-bis(carboxymethyl)glycinato(3-)-N,O,O',O'']-, hydrogen, (T-4)-	53108-50-2
cobaltate(1-), [N-[8-[[5-(aminosulfonyl)-2-hydroxyphenyl]azo]-7-hydroxy-1-naphthalenyl]acetamidato(2-)][3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-4-	68239-47-4
cobaltate(1-), [N-[8-[[5-(aminosulfonyl)-2-hydroxyphenyl]azo]-7-hydroxy-1-naphthalenyl]acetamidato(2-)][3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-4-	68966-96-1
cobaltate(1-), [N-[8-[[5-(aminosulfonyl)-2-hydroxyphenyl]azo]-7-hydroxy-1-naphthalenyl]acetamidato(2-)][3-[4,5-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-3-methyl-5-oxo-1H-	59487-93-3
cobaltate(1-), bis(2,4-dihydro-4-((2-hydroxy-4-nitrophenyl)azo)-5-methyl-2-phen yl-3H-pyrazol-3-onato(2-)), sodium	67486-73-1
cobaltate(1-), bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium	64611-71-8
cobaltate(1-), bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, hydrogen	52277-69-7
cobaltate(1-), bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, sodium	73297-09-3
cobaltate(1-), bis[1-[(2-hydroxyphenyl)azo]-2-naphthalenolato(2-)]-, sodium	75752-30-6
cobaltate(1-), bis[1-[(5-chloro-2-hydroxyphenyl)azo]-2-naphthalenolato(2-)]-, hydrogen	31586-68-2
cobaltate(1-), bis[1-[(5-chloro-2-hydroxyphenyl)azo]-2-naphthalenolato(2-)]-, sodium	18639-97-9

Substance Group name	
Substance	**CAS №**
cobaltate(1-), bis[2-(3-chlorophenyl)-2,4-dihydro-4-[[2-hydroxy-5-(methylsulfonyl)phenyl]azo]-5-methyl-3H-pyrazol-3-onato(2-)]-, hydrogen, compound with [1R-(1.alpha.,4a.beta.,10a.alpha.)]-1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-1-ph	20506-24-5
cobaltate(1-), bis[2-(3-chlorophenyl)-2,4-dihydro-4-[[2-hydroxy-5-(methylsulfonyl)phenyl]azo]-5-methyl-3H-pyrazol-3-onato(2-)]-, sodium	70236-44-1
cobaltate(1-), bis[2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)]-, hydrogen	52256-38-9
cobaltate(1-), bis[2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)]-, hydrogen, compound with cyclohexanamine (1:1)	71566-27-3
cobaltate(1-), bis[2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)]-, sodium	71839-88-8
cobaltate(1-), bis[2,4-dinitro-6-[[2-(phenylamino)-1-naphthalenyl]azo]phenol,ato(2-)]-, sodium	125378-91-8
cobaltate(1-), bis[2-[(2-amino-1-naphthalenyl)azo]-5-nitrophenol,ato(2-)]-, hydrogen	71566-34-2
cobaltate(1-), bis[2-[(2-amino-1-naphthalenyl)azo]-5-nitrophenol,ato(2-)]-, sodium	68966-98-3
cobaltate(1-), bis[2-[(2-hydroxy-4-nitrophenyl)azo]-1-naphthalenolato(2-)]-, hydrogen	6421-64-3
cobaltate(1-), bis[2-[(2-hydroxy-4-nitrophenyl)azo]-3-oxo-N-phenylbutanamidato(2-)]-, sodium	81361-02-6
cobaltate(1-), bis[2-[(2-hydroxy-5-nitrophenyl)azo]-3-oxo-N-phenylbutanamidato(2-)]-, hydrogen	13011-62-6
cobaltate(1-), bis[2-[(2-hydroxy-5-nitrophenyl)azo]-3-oxo-N-phenylbutanamidato(2-)]-, hydrogen, compound with 1-butanamine (1:1)	72797-14-9
cobaltate(1-), bis[2-[(2-hydroxy-5-nitrophenyl)azo]-3-oxo-N-phenylbutanamidato(2-)]-, sodium	71566-26-2
cobaltate(1-), bis[2-[[2-hydroxy-5-[(phenylamino)sulfonyl]phenyl]azo]-3-oxo-N-phenylbutanamidato(2-)]-, ammonium	125408-78-8
cobaltate(1-), bis[2-[[2-hydroxy-5-[(phenylamino)sulfonyl]phenyl]azo]-3-oxo-N-phenylbutanamidato(2-)]-, sodium	71562-83-9
cobaltate(1-), bis[2-[[4-(aminosulfonyl)-2-hydroxyphenyl]azo]-3-oxo-N-phenylbutanamidato(2-)]-,	66104-83-4
cobaltate(1-), bis[2-[[5-(aminosulfonyl)-2-hydroxyphenyl]azo]-3-oxo-N-phenylbutanamidato(2-)]-,	72928-91-7
cobaltate(1-), bis[2-[[5-(aminosulfonyl)-2-hydroxyphenyl]azo]-3-oxo-N-phenylbutanamidato(2-)]-,	72496-88-9
cobaltate(1-), bis[2-[[5-(aminosulfonyl)-2-hydroxyphenyl]azo]-N-(2-chlorophenyl)-3-oxobutan amidato(2-)]-, sodium	34735-28-9
cobaltate(1-), bis[2-[[5-(aminosulfonyl)-2-hydroxyphenyl]azo]-N-(2-ethylhexyl)-3-	72403-31-7
cobaltate(1-), bis[2-[4-[(5-chloro-2-hydroxyphenyl)azo]-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-1-yl]benzenesulfonamidato(2-)]-, sodium	74082-15-8
cobaltate(1-), bis[2-chloro-5-hydroxy-4-[(2-hydroxy-1-naphthalenyl)azo]-N-methylbenzenesulfonamidato(2-)]-, hydrogen, compound with cyclohexanamine (1:1)	71839-87-7
cobaltate(1-), bis[2-chloro-5-hydroxy-4-[(2-hydroxy-1-naphthalenyl)azo]-N-methylbenzenesulfonamidato(2-)]-, sodium	70179-69-0
cobaltate(1-), bis[3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-4-hydroxybenzenesulfonamidato(2-)]-, hydrogen	68568-52-5
cobaltate(1-), bis[3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-4-hydroxybenzenesulfonamidato(2-)]-, sodium, (OC-6-22')-	34664-47-6
cobaltate(1-), bis[3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-4-hydroxy-N-(1-methylethyl)benzenesulfonamidato(2-)]-, hydrogen, compound with 2-propanamine (1:1)	71839-74-2
cobaltate(1-), bis[3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-4-hydroxy-N-[3-(1-methylethoxy)propyl]benzenesulfonamidato(2-)]-, sodium	72479-33-5
cobaltate(1-), bis[3-[(8-hydroxy-5-quinolinyl)azo]benzenesulfonato(2-)]-, sodium	72905-57-8
cobaltate(1-), bis[3-[[1-(2,5-dichlorophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-hydroxybenzenesulfonamidato(2-)]-, sodium	75214-67-4
cobaltate(1-), bis[3-[[1-(3-chlorophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-hydroxybenzenesulfonamidato(2-)]-, sodium	73612-40-5
cobaltate(1-), bis[3-[[1-(3-chlorophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-hydroxy-N-methylbenzenesulfonamidato(2-)]-, sodium	71701-14-9
cobaltate(1-), bis[3-[[1-(4-chlorophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-hydroxy-N-methylbenzenesulfonamidato(2-)]-, hydrogen	67952-74-3
cobaltate(1-), bis[3-[[1-(4-chlorophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-hydroxy-N-methylbenzenesulfonamidato(2-)]-, sodium	71566-39-7
cobaltate(1-), bis[3-[[4,5-dihydro-3-methyl-1-(4-methylphenyl)-5-oxo-1H-pyrazol-4-yl]azo]-4-hydroxy-N-methylbenzenesulfonamidato(2-)]-, sodium	70281-40-2
cobaltate(1-), bis[3-[4-[(5-chloro-2-hydroxyphenyl)azo]-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-1-yl]benzenesulfonamidato(2-)]-, sodium	72403-34-0
cobaltate(1-), bis[4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)amino]-N-(3-methoxypropyl)benzenesulfonamidato(2-)-N3,O3,O4]-, sodium	71735-52-9
cobaltate(1-), bis[4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]benzenesulfonamidato(2-)]-,	63971-70-0

Substance Group name	
Substance	**CAS №**
cobaltate(1-), bis[4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]benzenesulfonamidato(2-)]-, hydrogen	50525-57-0
cobaltate(1-), bis[4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]benzenesulfonamidato(2-)]-, hydrogen, compound with 2-propanamine (1:1)	71839-84-4
cobaltate(1-), bis[4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]benzenesulfonamidato(2-)]-, lithium	125252-57-5
cobaltate(1-), bis[4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]benzenesulfonamidato(2-)]-, sodium	58302-43-5
cobaltate(1-), bis[4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]-N-(1-methylethyl)benzenesulfonamidato(2-)]-, sodium	72391-09-4
cobaltate(1-), bis[4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]-N-(2-methoxyethyl)benzenesulfonamidato(2-)]-, sodium	70247-76-6
cobaltate(1-), bis[4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]-N-(3-methoxypropyl)benzenesulfonamidato(2-)]-, sodium	71735-61-0
cobaltate(1-), bis[4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]-N-methylbenzenesulfonamidato (2-)]-, ammonium	83847-06-7
cobaltate(1-), bis[4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]-N-methylbenzenesulfonamidato (2-)]-	83804-08-4
cobaltate(1-), bis[4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]-N-methylbenzenesulfonamidato (2-)]-	83804-07-3
cobaltate(1-), bis[4-hydroxy-3-[(5-hydroxynaphth[2,1-d]-1,3-oxathiol-4-yl)azo]benzenesulfon amide ,-dioxidato(2-)]-, ammonium	83864-23-7
cobaltate(1-), bis[4-hydroxy-3-[(5-hydroxynaphth[2,1-d]-1,3-oxathiol-4-yl)azo]benzenesulfon amide ,-dioxidato(2-)]-, sodium	83817-79-2
cobaltate(1-), bis[5-[(5-chloro-2-hydroxyphenyl)azo]-6-hydroxy-N-(2-hydroxyethyl)-N-methyl-2-naphthalenesulfonamidato(2-)]-, sodium	70236-43-0
cobaltate(1-), bis[6-amino-5-[(2-hydroxy-4-nitrophenyl)azo]-N-methyl-2-	70236-59-8
cobaltate(1-), bis[hydrogen 3-hydroxy-4-[(2-hydroxy-1-naphthyl)azo]-7-nitro-1-	26921-01-7
cobaltate(1-), bis[methyl [8-[[4-(aminosulfonyl)-2-hydroxy-5-methoxyphenyl]azo]-7-hydroxy-1-naphthalenyl]carbamato(2-)]-, sodium	73507-63-8
cobaltate(1-), bis[N-(2-chlorophenyl)-2-[[2-hydroxy-5-[(methylamino)sulfonyl]ph enyl]azo]-3-oxobutanamidato(2-)]-, sodium	70247-73-3
cobaltate(1-), bis[N-(2-chlorophenyl)-2-[[2-hydroxy-5-[(methylamino)sulfonyl]phenyl]azo]-3-oxobutanamidato(2-)]-, sodium	70247-74-4
cobaltate(1-), bis[N-[(2-chlorophenyl)-2-[[2-hydroxy-5-[(methylamino)sulfonyl]p henyl]phenyl]azo]-3-oxobutanamidato(2)]-, hydrogen	55963-70-7
cobaltate(1-), bis[N-[2-hydroxy-3-[(2-hydroxy-5-nitrophenyl)azo]-5-methylphenyl]acetamidato(2-)]-,	71735-59-6
cobaltate(1-), bis[N-[7-hydroxy-8-[[2-hydroxy-5-[(methylamino)sulfonyl]phenyl]azo]-1-naphthalenyl]acetamidato(2-)]-, hydrogen, compound with 2-propanamine (1:1)	71839-76-4
cobaltate(1-), bis[N-[8-[[5-(aminosulfonyl)-2-hydroxyphenyl]azo]-7-hydroxy-1-naphthalenyl]acetamidato(2-)]-, sodium	68966-95-0
cobaltate(2-), [[N,N'-1,2-ethanediylbis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON,ON']-, (OC-	14931-83-0
cobaltate(2-), [1-[(5-chloro-2-hydroxyphenyl)azo]-2-naphthalenolato(2-)][3-hydroxy-4-[(2-hy droxy-1-naphthalenyl)azo]-7-nitro-1-naphthalenesulfonato(3-)]-, disodium	125378-88-3
cobaltate(2-), [1-[(5-chloro-2-hydroxyphenyl)azo]-2-naphthalenolato(2-)][3-hydroxy-4-[(2-hydroxy-1-naphthalenyl)azo]-7-nitro-1-naphthalenesulfonato(3-)]-, sodium hydrogen	71243-97-5
cobaltate(2-), [2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3 -onato(2-)][2-[[[4-hydroxy-3-[[2-(phenylamino)-1-naphthalenyl]azo]phenyl]sul	82556-13-6
cobaltate(2-), [2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)][2-[[[4-hydroxy-3-[[2-(phenylamino)-1-	73455-76-2
cobaltate(2-), [2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)][3-hydroxy-4-[(2-hydroxy-1-naphthalenyl)azo]-7-nitro-1-naphthalenesulfonato(3-)]-,	72987-06-5
cobaltate(2-), [2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)][3-hydroxy-4-[(2-hydroxy-1-naphthalenyl)azo]-7-nitro-1-naphthalenesulfonato(3-)]-, dihydrogen, compound with 2,2'-iminobis[ethanol] (1:2)	72987-07-6
cobaltate(2-), [2,4-dinitro-6-[[2-(phenylamino)-1-naphthalenyl]azo]phenol,ato(2-)][3-hydroxy-4-[(2-hydroxy-1-naphthalenyl)azo]-7-nitro-1-naphthalenesulfonato(3-)]-, sodium hydrogen	72102-52-4
cobaltate(2-), [2-[[5-(aminosulfonyl)-2-hydroxyphenyl]azo]-N-(2-ethylhexyl)-3-oxobutanamidato(2-)][4-[[1-[(2-hydroxy-3,5-dinitrophenyl)azo]-2-naphthalenyl]amino]benzenesulfonato(3-)]-,	68928-31-4
cobaltate(2-), [29H,31H-phthalocyanine-C,C-disulfonato(4-)-N29,N30,N31,N32]-, dihydrogen	29383-29-7
cobaltate(2-), [29H,31H-phthalocyanine-C,C-disulfonato(4-)-N29,N30,N31,N32]-, disodium	61045-13-4
cobaltate(2-), [6-amino-5-[(2-hydroxy-4-nitrophenyl)azo]-N-methyl-2-naphthalenesulfonamidato(2-)][6-amino-5-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenesulfonato(3-)]-, disodium	75314-27-1
cobaltate(2-), bis[2-[[5-(aminosulfonyl)-2-hydroxyphenyl]azo]-3-oxo-N-phenylbutanamidato(2-)]-,	12715-61-6
cobaltate(2-), bis[2-[[5-(aminosulfonyl)-2-hydroxyphenyl]azo]-3-oxo-N-phenylbutanamidato(2-)]-,	67906-22-3
cobaltate(2-), bis[2-[[5-(aminosulfonyl)-2-hydroxyphenyl]azo]-3-oxo-N-phenylbutanamidato(2-)]-,	75522-91-7

Substance Group name	
Substance	**CAS №**
cobaltate(2-), bis[3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-4-hydroxybenzenesulfonamidato(2)]-, dilithium, (OC-6-22')-	67906-23-4
cobaltate(2-), bis[3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-4-hydroxybenzenesulfonamidato(2-)]-, disodium, (OC-6-22')-	72208-07-2
cobaltate(2-), bis[3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-4-hydroxybenzenesulfonamidato(2-)]-, lithium sodium, (OC-6-22')-	75557-21-0
cobaltate(2-), bis[3-[[1-(3-chlorophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-hydroxybenzenesulfonamidato(2-)]-, disodium	70529-03-2
cobaltate(2-), bis[4-hydroxy-3-[(2-hydroxy-1-naphthalenyl)azo]benzenesulfonamidato(2-)]-, disodium	71060-75-8
cobaltate(3-), [4-amino-3-[(2-hydroxy-3,5-dinitrophenyl)azo]-1-naphthalenesulfonato(3-)][5-amino-6-[(2-hydroxy-3,5-dinitrophenyl)azo]-1-naphthalenesulfonato(3-)]-, trisodium	82457-28-1
cobaltate(3-), [N,N-bis(phosphonomethyl)glycinato(5-)]-, triammonium, (T-4)-	67968-65-4
cobaltate(3-), [N,N-bis(phosphonomethyl)glycinato(5-)]-, tripotassium, (T-4)-	63597-33-1
cobaltate(3-), [N,N-bis(phosphonomethyl)glycinato(5-)]-, trisodium,(T-4)-	67968-66-5
cobaltate(3-), bis[2-[[[3-[[1-[[(2-chlorophenyl)amino]carbonyl]-2-oxopropyl]azo]-4-hydroxyphenyl]sulfonyl]amino]benzoato(3-)]-, trisodium	73612-41-6
cobaltate(3-), bis[2-[[[4-hydroxy-3-[[2-(phenylamino)-1-naphthalenyl]azo]phenyl]sulfonyl]amino]benzoato(3-)]-, trisodium	82556-12-5
cobaltate(3-), bis[2-[[[4-hydroxy-3-[[2-(phenylamino)-1-naphthalenyl]azo]phenyl]sulfonyl]amino]benzoato(3-)]-, sodium dihydrogen	72829-33-5
cobaltate(3-), bis[2-[[[4-hydroxy-3-[[2-oxo-1-[(phenylamino)carbonyl]propyl]azo]phenyl]sulfonyl]amino]benzoato(3-)]-, sodium dihydrogen	73018-84-5
cobaltate(3-), bis[2-hydroxy-5-nitro-3-[[2-oxo-1-[(phenylamino)carbonyl]propyl]azo]benzenesulfonato(3-)]-, sodium dihydrogen	73507-73-0
cobaltate(3-), bis[3-hydroxy-4-[(2-hydroxy-1-naphthalenyl)azo]-7-nitro-1-naphthalenesulfona to(3-)]-,	125378-89-4
cobaltate(3-), bis[3-hydroxy-4-[(2-hydroxy-1-naphthalenyl)azo]-7-nitro-1-naphthalenesulfonato(3-)]-, trihydrogen	72797-08-1
cobaltate(3-), bis[3-hydroxy-4-[(2-hydroxy-1-naphthalenyl)azo]-7-nitro-1-naphthalenesulfonato(3-)]-, trihydrogen, compound with 2,2'-iminobis[ethanol] (1:3)	72797-09-2
cobaltate(3-), bis[3-hydroxy-7-nitro-4-[(1,2,3,4-tetrahydro-2,4-dioxo-3-quinolinyl)azo]-1-naphthalenesulfonato(3-)]-, trisodium	74196-11-5
cobaltate(3-), bis[4-[[2-[(2-hydroxy-5-nitrophenyl)azo]-1,3-dioxobutyl]amino]-5-methoxy-2-methylbenzenesulfonato(3-)]-, trihydrogen	62598-42-9
cobaltate(3-), bis[4-[4-[[4-[[[3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-4-hydroxyphenyl]sulfonyl]amino]phenyl]azo]-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-1-yl]benzenesulfonato(3-)]-, trisodium	75234-42-3
cobaltate(3-), bis[4-[4-[[4-[4-[[5-(aminosulfonyl)-2-hydroxyphenyl]azo]-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-1-yl]phenyl]azo]-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-1-yl]benzenesulfonato(3-)]-,	75214-72-1
cobaltate(3-), bis[5-chloro-2-hydroxy-3-[[2-oxo-1-[(phenylamino)carbonyl]propyl]azo]benzenesulfonato(3-)]-, trisodium	73324-01-3
cobaltate(3-), bis[6-amino-5-[(2-hydroxy-3,5-dinitrophenyl)azo]-1-naphthalenesulfonato(3-)]-, sodium dihydrogen	73297-10-6
cobaltate(3-), bis[6-amino-5-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenesulfonato(3-)]-, trisodium	77630-54-7
cobaltate(3-), hexakis(cyano-C)-, cobalt(2+) (2:3), (OC-6-11)-	14123-08-1
cobaltate(3-), hexakis(cyano-C)-, tripotassium, (OC-6-11)-	13963-58-1
cobaltate(3-), hexakis(cyano-C)-, trisodium, (OC-6-11)-	14039-23-7
cobaltate(3-), hexakis(cyano-C)-, zinc (2:3), (OC-6-11)-	14049-79-7
cobaltate(3-), hexakis(nitrito-N)-, tripotassium, (OC-6-11)-	13782-01-9
cobaltate(3-), hexakis(nitrito-O)-, trisodium, (OC-6-11)-	14649-73-1
cobaltate(3-), tris[6-hydroxy-5-nitroso-2-naphthalenesulfonato(2-)]-, trisodium	67815-64-9
cobaltate(4-), [[[nitrilotris(methylene)]tris[phosphonato]](6-)-N,OP,OP',OP"]-, tetrapotassium, (T-4)-	63588-34-1
cobaltate(4-), [[[nitrilotris(methylene)]tris[phosphonato]](6-)-N,OP,OP',OP"]-, tetrasodium, (T-4)-	68000-01-1
cobaltate(4-), [[[nitrilotris(methylene)]tris[phosphonato]](6-)-N,OP,OP',OP"]-, triammonium	67968-64-3
cobaltate(4-), [29H,31H-phthalocyanine-2,9,16,23-tetrasulfonato(6-)-N29,N30,N31,N32]-,	14285-59-7
cobaltate(4-), bis[2-[[[3-[[1-[[(2-chlorophenyl)amino]carbonyl]-2-oxopropyl]azo]-4-hydroxyphenyl]sulfonyl]amino]benzoato(3-)]-, tetrasodium	70851-34-2
cobaltate(4-), hexakis(cyano-C)-, tetrapotassium, (OC-6-11)-	14564-70-6
cobaltate(4-), hexakis(cyano-C)-, tetrasodium, (OC-6-11)-	14217-00-6
cobaltate(5-), bis[4-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]-2-[[4-chloro-6-[[4-[4,5-dihydro-4-[(2-hydroxy-5-sulfophenyl)azo]-3-methyl-5-oxo-1H-pyrazol-1-yl]phenyl]amino]-1,3,5-triazin-2-yl]amino]benzenesulfonato(4-)]-, pentasodium	83417-32-7

Substance Group name	
Substance	**CAS №**
cobaltate(5-), bis[4-[[6-[[4-chloro-6-(phenylamino)-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-3-hydroxy-7-nitro-1-naphthalenesulfonato(4-)]-, pentasodium	75284-36-5
cobaltate(5-), bis[4-[4-[[4-[[[3-[[4,5-dihydro-3-methyl-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-hydroxyphenyl]sulfonyl]amino]phenyl]azo]-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-1-yl]benzenesulfonato(4-)]-, pentasodium	75214-71-0
cobaltate(5-), bis[4-hydroxy-3-[(2-hydroxy-5-nitrophenyl)azo]-5-[(2,5,6-trichloro-4-pyrimidinyl)amino]-2,7-naphthalenedisulfonato(4-)]-, pentasodium	74196-19-3
cobaltate(5-), bis[5-[(4,6-dichloro-1,3,5-triazin-2-yl)amino]-4-hydroxy-3-[(2-h ydroxy-5-nitrophenyl)azo]-2,7-naphthalenedisulfonato(4-)]-, pentasodium	104815-53-4
cobaltate(5-), bis[5-[(4-amino-6-chloro-1,3,5-triazin-2-yl)amino]-4-hydroxy-3-[(2-hydroxy-5-nitrophenyl)azo]-2,7-naphthalenedisulfonato(4-)]-, pentasodium	79817-88-2
cobaltate(5-), bis[5-[(4-amino-6-chloro-1,3,5-triazin-2-yl)amino]-4-hydroxy-3-[(2-hydroxy-5-nitrophenyl)azo]-2,7-naphthalenedisulfonato(4-)]-, tetrapotassium sodium	73038-30-9
cobaltate(5-), bis[5-[(4-amino-6-chloro-1,3,5-triazin-2-yl)amino]-4-hydroxy-3-[(2-hydroxy-5-nitrophenyl)azo]-2,7-naphthalenedisulfonato(4-)]-, tetrasodium hydrogen	70776-55-5
cobaltate(5-), bis[5-[(4-chloro-6-methoxy-1,3,5-triazin-2-yl)amino]-4-hydroxy-3-[(2-hydroxy-5-nitrophenyl)azo]-2,7-naphthalenedisulfonato(4-)]-, tetrasodium hydrogen	68132-93-4
cobaltate(5-), bis[6-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]-4-hydroxy-3-[(2-hydroxy-5-nitro-3-sulfophenyl)azo]-2-naphthalenesulfonato(4-)]-,tetrapotassium sodium	74196-12-6
cobaltate(5-), bis[6-amino-5-[[2-hydroxy-5-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]azo]-1-naphthalenesulfonato(4-)]-, potassium sodium	72269-32-0
cobaltate(5-), bis[7-hydroxy-8-[(2-hydroxy-5-nitro-3-sulfophenyl)azo]-6-[(2,5,6-trichloro-4-pyrimidinyl)amino]-2-naphthalenesulfonato(4-)]-, pentasodium	74196-13-7
cobaltate(7-), [5-[[4-chloro-6-[[5-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino] -2-sulfophenyl]amino]-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[(2- hydroxy-5-sulfophenyl)azo]-2,7-naphthalenedisulfonato(6-)][4-[(5 -chloro-2,6-difluoro-4-pyrimidinyl)amino]-2-[	83417-33-8
cobaltate(7-), bis[4-hydroxy-3-[(2-hydroxy-5-nitrophenyl)azo]-7-[(3-phosphonophenyl)amino]-2-naphthalenesulfonato(5-)]-, disodium pentahydrogen	69898-68-6
cobaltate(7-), bis[4-hydroxy-5-[(2-hydroxy-1-naphthalenyl)azo]-3-[(2-hydroxy-3-nitro-5-sulfophenyl)azo]-2,7-naphthalenedisulfonato(5-)]-, heptasodium	74196-18-2
cobaltate(8-), bis[4-hydroxy-3-[(2-hydroxy-5-nitrophenyl)azo]-7-[(3-phosphonophenyl)amino]-2-naphthalenesulfonato(5-)]-, tetraammonium tetrahydrogen	70833-34-0
cobaltate(9-), bis[5-[[4-chloro-6-[[5-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]-2-sulfophenyl]amino]-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[(2-hydroxy-5-sulfophenyl)azo]-2,7-naphthalenedisulfonato(6-)]-, nonasodium	83417-34-9
cobalt(II) dinitrate / cobalt-dinitrate	10141-05-6
cobaltocene	1277-43-6
cobaltocenium hexafluorophosphate(1-)	12427-42-8
cobaltocenium, (T-4)-tetrachlorocobaltate(2-) (2:1)	11077-19-3
cobaltous bromide	7789-43-7
cobalt dichloride	7646-79-9
cobaltous formate	544-18-3
cobaltous sulfamate	14017-41-5
cyclohexanebutanoic acid, cobalt(2+) salt	38582-17-1
di(acetato-O)(1,4-diazabicyclo[2.2.2]octane-N1)cobalt	68239-55-4
di-.mu.-carbonyltetracarbonylbis(triphenylphosphine)dicobalt	24212-54-2

Substance Group name	
Substance	**CAS №**
diammonium pentahydrogen bis[4-hydroxy-3-[(2-hydroxy-5-nitrophenyl)azo]-7-[(3-phosphonophenyl)amino]naphthalene-2-sulphonato(5-)]cobaltate(7-)	83803-62-7
diboron cobalt(2+) tetraoxide	38233-75-9
dicarbonyl(.eta.5-2,4-cyclopentadien-1-yl)cobalt	12078-25-0
dichloro(1,4-diazabicyclo[2.2.2]octane-N1)cobalt	68239-57-6
dichlorobis(3-pyridylcarboxamide-N1)cobalt	6856-47-9
dicobalt edetate	36499-65-7
dicobalt orthosilicate	13455-33-9
dicobalt tris(sulphate)	13478-09-6
dicobalt(2+) nickel(2+) bis[2-hydroxypropane-1,2,3-tricarboxylate]	94232-84-5
dihydrogen bis[L-glutamato(2-)-N,O1]cobaltate(2-)	19224-80-7
diphosphoric acid, cobalt(2+) salt (1:2)	14640-56-3
dipotassium [[N,N'-ethylenebis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON,ON']cobaltate(2-)	14025-10-6
dipotassium disulphatocobaltate	13596-22-0
disodium [5-[[1-(anilinocarbonyl)-2-oxopropyl]azo]-4-hydroxy-3-nitrobenzenesulphonato(3-)][2-[(2-hydroxy-5-nitrophenyl)azo]-3-oxo-N-phenylbutyramidato(2-)]cobaltate(2-)	76762-27-1
Electrolytes, cobalt-manufacturing A solution used in the electrolytic refining of cobalt. The composition varies according to the particular process involved. The electrolyte generally contains high levels of cob alt ions and lower levels of impurity me	121053-28-9
ethanedioic acid, cobalt(2+) salt (1:1)	814-89-1
fatty acids, soya, polymers with acetic acid, fumaric acid, linseedoil, maleic anhydride, pentaerythritol, rosin, tall oil, tall-oil fatty acids and tripentaerythritol, cobalt salts	70131-61-2
formic acid, cobalt salt	15731-88-1
heptahydrogen bis[4-hydroxy-3-[(2-hydroxy-5-nitrophenyl)azo]-7-[(3-phosphonophenyl)amino]naphthalene-2-sulphonato(5-)]cobaltate(7-)	65335-15-1
hexa(cyano-c)cobaltate(4-)	23209-26-9
hexanoic acid, 3,5,5-trimethyl-, cobalt(2+) salt	49676-83-7
hydrazinium(1+), (OC-6-21)-[[N,N'-1,2-ethanediylbis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON,ON']cobaltate(2-) (2:1)	68201-98-9
hydrofluoric acid, reaction products with alumina and cobalt chloride (CoCl2)	68442-96-6
hydrogen [2,4-dihydro-4-[(2-hydroxy-4-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)][1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]cobaltate(1-)	52277-72-2
hydrogen [2-[[5-(aminosulphonyl)-2-hydroxyphenyl]azo]-3-oxo-N-phenylbutylamidato(2-)][3-[[1-(benzothiazol-2-yl)-2-oxopropyl]azo]-4-hydroxybenzenesulphonamidato(2-)]cobaltate(1-)	83249-70-1
hydrogen bis[1-[(2-hydroxy-4-nitrophenyl)azo]naphthalen-2-olato(2-)]cobaltate(1-)	32517-38-7
hydrogen bis[2,4-dihydro-4-[(2-hydroxy-4-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)]cobaltate(1-)	84030-59-1
hydrogen bis[2,4-dihydro-4-[[2-hydroxy-5-mesylphenyl]azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)]cobaltate(1-)	29998-71-8
hydrogen bis[2-[(2-hydroxy-5-nitrophenyl)azo]-3-oxo-N-phenylbutyramidato(2-)]cobaltate(1-), compound with 2,2'-dodecyliminobis[ethanol] (1:1)	84030-58-0
hydrogen bis[3-[[1-(benzothiazol-2-yl)-2-oxopropyl]azo]-4-hydroxybenzenesulphonamidato(2-	83249-73-4
hydrogen bis[5,8-dichloro-2-[(2-hydroxy-4-nitrophenyl)azo]-1-naphtholato(2-)]cobaltate(1-), compound with cyclohexylamine (1:1)	82338-72-5
hydrogen bis[5,8-dichloro-2-[(2-hydroxy-5-nitrophenyl)azo]-1-naphtholato(2-)]cobaltate(1-), compound with cyclohexylamine (1:1)	82338-74-7
hydrogen bis[N-[7-hydroxy-8-[[2-hydroxy-5-mesylphenyl]azo]-1-naphthyl]cobaltate(1-)	29616-23-7
isononanoic acid, cobalt salt	57364-75-7
leach residues, zinc ore-calcine, cobalt repulp	69012-71-1
leach residues, zinc ore-calcine, zinc cobalt	69012-72-2
lithium [2-[[5-(aminosulphonyl)-2-hydroxyphenyl]azo]-3-oxo-N-phenylbutylamidato(2-)][3-[[1-(benzothiazol-2-yl)-2-oxopropyl]azo]-4-hydroxybenzenesulphonamidato(2-)]cobaltate(1-)	83270-30-8
lithium bis[2-[(2-hydroxy-5-nitrophenyl)azo]-3-oxo-N-phenylbutyramidato(2-)]cobaltate(1-)	83733-13-5
lithium bis[2-[[5-(aminosulphonyl)-2-hydroxyphenyl]azo]-3-oxo-N-phenylbutyramidato(2-	83249-68-7
lithium bis[3-[[1-(benzothiazol-2-yl)-2-oxopropyl]azo]-4-hydroxybenzenesulphonamidato(2-	83249-72-3
molybdate (Mo7O246-), cobalt(3+) (2:1)	68647-47-2
molybdate(3-), tetracosa-.mu.-oxododecaoxo[.mu.12-[phosphato(3-)-O:O:O:O':O':O':O":O":O":O"':O"':O"']]dodeca-, cobalt(2+) (2:3)	12263-08-0
N,N'-ethylenebis(glycinato-O,N)cobalt	29977-10-4

Substance Group name	
Substance	**CAS №**
neodecanoic acid, cobalt(2+) salt	52270-44-7
nitric acid, cobalt salt	14216-74-1
nitric acid, cobalt(3+) salt	15520-84-0
octadecanoic acid, cobalt salt	13586-84-0
octanoic acid, cobalt salt	6700-85-2
pentapotassium bis[5-[(4-amino-6-chloro-1,3,5-triazin-2-yl)amino]-4-hydroxy-3-[(2-hydroxy-5-nitrophenyl)azo]naphthalene-2,7-disulphonato(4-)]cobaltate(5-)	79817-89-3
perchloric acid, cobalt(2+) salt	13455-31-7
phosphonic acid, (1-hydroxyethylidene)bis-, ammonium cobalt(2+) salt (1:2:1)	69178-34-3
phosphonic acid, (1-hydroxyethylidene)bis-, cobalt(2+) potassium salt (1:1:2)	69140-59-6
phosphonic acid, (1-hydroxyethylidene)bis-, cobalt(2+) sodium salt (1:1:2)	69140-60-9
phosphoric acid, ammonium cobalt(2+) salt (1:1:1)	14590-13-7
phosphoric acid, cobalt(2+) salt (1:1)	13596-21-9
phosphoric acid, cobalt(2+) salt (2:1)	18718-10-0
phosphoric acid, cobalt(2+) salt (2:3), hydrate	10101-56-1
potassium [N,N-bis(carboxymethyl)glycinato(3-)-N,O,O',O'']cobaltate(1-)	63640-17-5
propanoic acid, 2,2-dimethyl-, cobalt(2+) salt	15520-31-7
selenic acid, cobalt(2+) salt (1:1)	14590-19-3
sodium [2-[[5-(aminosulphonyl)-2-hydroxyphenyl]azo]-3-oxo-N-phenylbutylamidato(2-)][3-[[1-(benzothiazol-2-yl)-2-oxopropyl]azo]-4-hydroxybenzenesulphonamidato(2-)]cobaltate(1-)	83249-69-8
sodium bis[1-[[5-(ethylsulphonyl)-2-hydroxyphenyl]azo]-2-naphtholato(2-)]cobaltate(1-)	55870-94-5
sodium bis[3-[[1-(benzothiazol-2-yl)-2-oxopropyl]azo]-4-hydroxybenzenesulphonamidato(2-	83249-71-2
sodium bis[3-[[4,5-dihydro-3-methyl-1-(4-nitrophenyl)-5-oxo-1H-pyrazol-4-yl]azo]-4-hydroxybenzenesulphonamidato(2)]cobaltate(1-)	83803-65-0
sodium bis[4-[(4-chloro-1-hydroxy-2-naphthyl)azo]-N,N'-diethyl-5-hydroxybenzene-1,3-disulphonamidato(2-)]cobaltate(1-)	24215-94-9
sodium bis[4-hydroxy-3-[(5-hydroxynaphth[2,1-d]-1,3-oxathiol-4-yl)azo]-N-methylbenzenesulphonamide S,S-dioxidato(2-)]cobaltate(1-)	83817-78-1
sodium bis[methyl [8-[[5-(ethylsulphonyl)-2-hydroxyphenyl]azo]-7-hydroxy-2-naphthyl]methylcarbamato(2-)]cobaltate(1-)	55870-93-4
spinels, cobalt nickel zinc grey	95046-47-2
sulfuric acid, ammonium cobalt(2+) salt	13586-38-4
sulfuric acid, ammonium cobalt(2+) salt (2:2:1)	13596-46-8
sulfuric acid, cobalt salt, hydrate	65492-00-4
tetrakis[(decanoato-O)cobalt]tetra-.mu.-oxotitanium	84145-31-3
tetrakis[(octanoato-O)cobalt]tetra-.mu.-oxotitanium	84176-59-0
thiocyanic acid, cobalt(2+) salt	3017-60-5
tri-.mu.-carbonylnonacarbonyltetracobalt	17786-31-1
tri-.mu.-carbonyltetracarbonyl(pentacarbonyldicobalt)dirhodium	50696-78-1
tricarbonylnitrosylcobalt	14096-82-3
tricobalt bis(orthophosphate)	13455-36-2
tricopper bis[hexa(cyano-c)cobaltate(3-)]	14518-26-4
trihydrogen bis[5-[[[4-hydroxy-3-[[2-oxo-1-[(phenylamino)carbonyl]propyl]azo]phenyl]sulphonyl]amino]naphthalene-2-sulphonato(3-	72932-56-0
triphenyl(p,p,p-triphenylphosphine imidato-N)phosphorus(1+) tetracarbonylcobaltate(1-)	53433-12-8
tris(heptane-3,5-dionato-O,O')cobalt	15188-91-7
trisodium [N,N-bis[2-[bis(carboxymethyl)amino]ethyl]glycinato(5-)]cobaltate(3-)	6255-07-8
trisodium bis[3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-2-hydroxy-5-nitrobenzenesulphonato(3-)]cobaltate(3-)	84204-70-6
trisodium bis[3-[(5-amino-3-methyl-1-phenyl-1H-pyrazol-4-yl)azo]-5-chloro-4-hydroxy-N-[2-(sulphooxy)ethyl]benzenesulphonamidato(3-)]cobaltate(3-)	83804-04-0
trisodium bis[4-[4,5-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-3-methyl-5-oxo-1H-pyrazol-1-yl]benzene-1-sulphonato(3-)]cobaltate(3-)	79135-28-7
trisodium bis[4-hydroxy-3-nitro-5-[[2-oxo-1-[(phenylamino)carbonyl]propyl]azo]benzenesulphonato(3-)]cobaltate(3-)	83733-22-6
trisodium bis[5-chloro-2-hydroxy-3-[(2-hydroxy-1-naphthyl)azo]benzenesulphonato(3-)]cobaltate(3-)	6771-86-4
trisodium bis[6-amino-5-[(2-hydroxy-3,5-dinitrophenyl)azo]naphthalene-1-sulphonato(3-)]cobaltate(3-)	84057-73-8
trisodium bis[amino[(2-hydroxy-3,5-dinitrophenyl)azo]naphthalenesulphonato(3-)]cobaltate(3-)	74220-71-6
trisodium hexanitritocobaltate	13600-98-1
xanthylium, 9-(2-carboxyphenyl)-3,6-bis(diethylamino)-, bis[3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-4-hydroxy-N-[3-(1-methylethoxy)propyl]benzenesulfonamidato(2-)]cobaltate(1-)	71566-55-7
C.I. acid red 182	61901-42-6

Substance Group name	
Substance	**CAS №**
1-propanamin, N,N-dipropyl-, cobalt complex	75101-45-0
cobalt borate neodecanoate complexes,	68457-13-6
C.I. pigment blue 28	1345-16-0
cobalt aluminate blue spinel	68186-86-7
C.I. acid blue	51053-44-2
C.I. pigment blue 36	68187-11-1
C.I. pigment green 26	68187-49-5
C.I. pigment violet 47	68610-13-9
C.I. pigment green 50	68186-85-6
C.I. pigment blue 72	68186-87-8
C.I. pigment green 19	8011-87-8
C.I. pigment black 27	68186-97-0
cobalt(II) isoalkanoates(C6-C19)	68409-81-4
(C9-C13) neoalkanoic acids, cobalt(2+) salts	68955-83-9
trisodium bis(2-hydroxy-5-nitro-3-((2-oxo-1-((phenylamino)carbonyl)propyl) azo)benzenesulphonato(3-))cobaltate(3-)	85959-73-5
1-tert-Butyl-3,5-dimethyl-2,4,6-trinitrobenzene	
1-tert-butyl-3,5-dimethyl-2,4,6-trinitrobenzene 5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2
pitch, coal tar, high temperature	
coal tar pitch, high temperature	65996-93-2
Mineral fibres (Natural or Synthetic) except Continuous Filament Fibres	
aluminiosilicate, refractory ceramic fibres	AL57
zirconia aluminosilicate, refractory ceramic fiber	AL58
ceramic fibers	142844-00-6
calcium-magnesium-zirconium-silicate mixture	329211-92-9
aluminium chloride, basic reaction products with silica	675106-31-7
cristobalite	14464-46-1
2,4-dinitrotoluene	
2,4-dinitrotoluene	121-14-2
Biocidal coatings / biocidal additives	
1,2-benzisothiazoline-3-one	2634-33-5
diuron	330-54-1
dimethylfumarate	624-49-7
isothiazolinones, e.g.	AL60-1
5-chloro-2-methyl-4-thiazoline-3-ketone	26172-55-4
5-chloro-2-methyl-thiazol-3-one; 2-methylthiazol-3-one	AL60-2
3(2h)-isothiazolone, 5-chloro-2-methyl-, mixture. with 2-methyl-3(2h)-isothiazolone	55965-84-9
2-methyl-4-thiazoline-3-ketone	2682-20-4
acrylamide	
acrylamide	79-06-1
boric acid	
boric acid	10042-35-3 11113-50-1
tetraboron disodium heptaoxide	
tetraboron disodium heptaoxide	1330-43-4 12179-04-3 1303-96-4
tetraboron disodium heptaoxide hydrate	
tetraboron disodium heptaoxide hydrate	12267-73-1
volatile organic compounds (VOC)	
propan-2-ol	67-63-0
toluene	108-88-3
acetone	67-64-1
butyl acetate	123-86-4
methanol	67-56-1
xyrene	1330-20-7
2-butanone	78-93-3
dichloromethane	75-09-2
styrene	100-42-5
ethanol	64-17-5
ethylbenzene	100-41-4
tetrahydrofuran	109-99-9
2-propanol, 1-methoxy-	107-98-2

Substance Group name	
Substance	**CAS №**
1-butanol	71-36-3
chloroform / trichloromethane (chloroform)	67-66-3
methyl isobutyl ketone	108-10-1
heptane	142-82-5
ethyl acetate	141-78-6
trichloroethylene	79-01-6
cyclohexanone	108-94-1
acetamide	
acetamide	60-35-5
acetamide, n-methyl-	
acetamide, N-methyl-	79-16-3
acetonitrile	
acetonitrile	75-05-8
acrylonitrile	
acrylonitrile	107-13-1
ammonium perchlorate	
ammonium perchlorate	7790-98-9
aniline and its salts	
aniline	62-53-3
aniline chloride	142-04-1
anilinetrifluoroboron	660-53-7
benzenamine sulfate (2:1)	542-16-5
salts from 2,2'-dichloro-4,4'-methylendianilin	AL66-1
3,5-dichloro-4-(1,1,2,2-tetrafluroethoxy)aniline	104147-32-2
salts from 4,4'-carbonimidoylbis[N,N-dimethylanilin]	AL66-2
aromatic amines	
N-phenyl-2-naphthylamine	135-88-6
diethylmethylbenzenediamine	68479-98-1
bis(methylthio)toluenediamine	106264-79-3
diphenylamine	122-39-4
1,3-benzenediamine, 4,6-diethyl-2-methyl-	2095-01-4
1,3-benzenediamine, 2,4-diethyl-6-methyl-	2095-02-5
O-toluidine, 4-chloro-, hydrochloride	3165-93-3
anisole, 2,4-diamino-, sulphate	39156-41-7
benzenamine, 2-methyl-5-nitro-, monohydrochloride	51085-52-0
3,5-dichlor-4-(1,1,2,2-tetrafluorethoxy)anilin	104147-32-2
benzenamine, 4-[(4-aminophenyl)(4-imino-2,5-cyclohexadien-1-ylidene)methyl]-, monohydrochloride	569-61-9
barium compounds (organic or water soluble)	
barium	7440-39-3
barium 2-(2-hydroxy-3,6-disulphonato-1-naphthyl)azo benzoate (3:2)	15782-06-6
barium 4- (5-chloro-4-methyl-2-sulphonatophenyl)azo -3-hydroxy-2-naphthoate	7585-41-3
barium 4-(1,1-dimethylethyl)benzoate	10196-68-6
barium bis 5-chloro-4-ethyl-2- (2-hydroxy-1-naphthyl)azo benzenesulp...	67801-01-8
barium bis(2-ethylhexanoate)	2457-01-4
barium bis(dinonylnaphthalenesulphonate)	25619-56-1
barium bis(nonylphenol,ate)	28987-17-9
barium distearate	6865-35-6
barium oxide, obtained by calcining witherite	1304-28-5
barium(2+) hydrogen 2- (2-hydroxy-3,6-disulphonato-1-naphthyl)azo benzoate	1325-16-2
barium-chlorate	13477-00-4
barium-chloride	10361-37-2
barium-cyanide	542-62-1
barium-dilaurate	4696-57-5
barium-dioleate	591-65-1
barium-fluoride	7787-32-8
barium-hydroxide	17194-00-2
barium-hydroxide-octahydrate	12230-71-6
barium-neodecanoate	55172-98-0
barium-nitrate	10022-31-8
barium perchlorate	13465-95-7
barium-permanganate	7787-36-2
barium-peroxide	1304-29-6
barium-sebacate	19856-32-7
naphthenic acid, barium salts	61789-67-1

Substance Group name	
Substance	**CAS №**
benzenamine, N-phenyl-, reaction products with styrene and 2,4,4-trimethylpentene	
benzenamine, N-phenyl-, reaction products with styrene and 2,4,4-trimethylpentene	68921-45-9
1,4-benzenediamine, N,N' -mixed Ph and tolyl derivs	
1,4-benzenediamine, N,N' -mixed Ph and tolyl derivs	68953-84-4
2-benzothiazolesulphenamide, N, N-dicyclohexyl-	
2-benzothiazolesulphenamide, N, N-dicyclohexyl-	4979-32-2
butadiene, 1,3 -	
butadiene, 1,3 -	106-99-0
Chlorinated or brominated dibenzo-p-dioxins or dibenzofurans	
1,2,3,4,6,7,8-heptachlorodibenzofuran	67562-39-4
1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin	35822-46-9
1,2,3,4,7,8,9-hexachlorodibenzofuran	55673-89-7
1,2,3,4,7,8-hexachloro dibenzofuran	70648-26-9
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	39227-28-6
1,2,3,6,7,8-hexachloro dibenzofuran	57117-44-9
1,2,3,6,7,8-hexachlorodibenzo-p-dioxin	57653-85-7
1,2,3,7,8,9-hexachloro dibenzofuran	72918-21-9
1,2,3,7,8,9-hexachlorodibenzo-p-dioxin	19408-74-3
1,2,3,7,8-pentachloro dibenzofuran	57117-41-6
1,2,3,7,8-pentachlorodibenzo-p-dioxin	40321-76-4
2,3,4,6,7,8-hexachloro dibenzofurans	60851-34-5
2,3,4,7,8-pentachloro dibenzofurans	57117-31-4
2,3,7,8-tetrachloro dibenzofurans	51207-31-9
2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)	1746-01-6
2,7-dichlorodibenzo-p-dioxin	33857-26-0
hexachlorodibenzodioxin	34465-46-8
octachlorodibenzofuran	39001-02-0
octachlorodibenzo-p-dioxin	3268-87-9
spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 2',4',5',7'-tetrabromo-3',6'-dihydroxy-, lead salt	1326-05-2
colophony (rosin)	
rosin	8050-09-7
colophony resin	148499-15-4
resin acids and rosin acids, hydrogenated, esters with glycerol	65997-13-9
resin acids and rosin acids, hydrogenated, esters with pentaerythritol	64365-17-9
rosin, hydrogenated	65997-06-0
resin acids and rosin acids zinc salts	91081-53-7
copper	
copper (metallic)	7440-50-8
cyclohexane	
cyclohexane	110-82-7
2-cyclohexen-1-one, 3,5,5-trimethyl-	
2-cyclohexen-1-one, 3,5,5-trimethyl-	78-59-1
cyclopentasiloxane, decamethyl-	
cyclopentasiloxane, decamethyl-	541-02-6
cyclotetrasiloxane, heptamethylphenyl-	
cyclotetrasiloxane, heptamethylphenyl-	10448-09-6
cyclotetrasiloxane, octamethyl-	
cyclotetrasiloxane, octamethyl-	556-67-2
decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl)ester	
decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl)ester	41556-26-7
dimethylformamide (N,N-dimethylformamide)	
dimethylformamide (N,N-dimethylformamide)	68-12-2
dodecachloropentacyclo 1, 3, 4-metheno-1H-cyclobuta(cd)pentalene, mirex	
dodecachloropentacyclo 1, 3, 4-metheno-1H-cyclobuta(cd)pentalene, mirex	2385-85-5
epichlorohydrin (1-chloro-2,3-epoxypropane)	
epichlorohydrin (1-chloro-2,3-epoxypropane)	106-89-8
1-ethenylpyrrolidin-2-one (2-Pyrrolidione, 1-ethenyl-)	
1-ethenylpyrrolidin-2-one (2-Pyrrolidione, 1-ethenyl-)	88-12-0
fatty acids, C6-19-branched, zinc salts	
fatty acids, C6-19-branched, zinc salts	68551-44-0

Substance Group name	
Substance	**CAS №**
fluorotelomers (Some substances may not have CAS#s)	
8-2 telomer alcohol:	678-39-7
8-2 telomer olefin:	21652-58-4
2-(perflurooctyl)ethyl iodide, 8-2 telomer iodide:	2043-53-0
C8 iodide:	507-63-1
C10-2 fluorotelomer alcohol:	865-86-1
C10-2 telomer B iodide:	2043-54-1
2-furancarboxaldehyde	
2-Furancarboxaldehyde	98-01-1
hexanedioic acid, bis(2-ethylhexyl) ester	
hexanedioic acid, bis(2-ethylhexyl) ester	103-23-1
hexanoic acid, 2-ethyl-	
hexanoic acid, 2-ethyl-	149-57-5
hydrazine	
hydrazine	7803-57-8 302-01-2
methylacrylamidomethoxy-acetate	
methylacrylamidomethoxy-acetate	77402-03-0
1-methylpyrrolidin-2-one(2-pyrrolidinone, 1-methyl)	
1-methylpyrrolidin-2-one (2-Pyrrolidinone, 1-methyl)	872-50-4
chlorinated flame retardants	
monomethyltetrachlorodiphenylmethane	76253-60-6
2-naphthalenol, 1-[(4-methyl-2-nitrophenyl)azo]-	
2-naphthalenol, 1-[(4-methyl-2-nitrophenyl)azo]-	2425-85-6
nitrites	
ammonium nitrite	13446-48-5
amyl nitrite	110-46-3
barium nitrite hydrate	115216-77-8
butyl nitrite	544-16-1
calcium nitrite	13780-06-8
calcium nitrite hydrated	10031-34-2
ethyl nitrite	109-95-5
isobutyl nitrite	542-56-3
magnesium nitrite	15070-34-5
nickel nitrite	17861-62-0
potassium nitrite	7758-09-0
silver nitrite	7783-99-5
sodium nitrite	7632-00-0
tert-butyl nitrite	540-80-7
dicyclohexylammonium nitrite	3129-91-7
diethyldihexadecylammonium nitrite (6CI, 7CI)	105841-28-9
diisopropylammonium nitrite	34915-40-7
morpholin, nitrite (9CI)	62076-93-1
pentyl nitrite	463-04-7
butan-2-yl nitrite	924-43-6
4-nitrobiphenyl and its salts	
4-nitrobiphenyl (4-nitrodiphenyl)	92-93-3
nitrocellulose	
nitrocellulose	9004-70-0
N-nitrosamines	
N-nitroso diethanol amine	1116-54-7
N-nitroso diethyl amine	55-18-5
N-nitroso dimethyl amine	62-75-9
N-nitroso ethyl phenyl amine	612-64-6
N-nitroso methyl ethyl amine	10595-95-6
N-nitroso methyl phenyl amine	614-00-6
N-nitroso morpholine	59-89-2
N-nitroso pyrrolidine	930-55-2
N-nitrosodi-i-propyl amine	601-77-4
N-nitrosodi-n-butylamine	924-16-3
N-nitrosodi-n-propyl amine	621-64-7
N-nitrosopiperidine	100-75-4
nonylphenol	
nonylphenol,	25154-52-3

Substance Group name	
Substance	**CAS №**
nonylphenol, ethoxylates	
14-(Nonylphenoxy)-3,6,9,12-tetraoxatetradecan-1-ol	26264-02-8
3,6,9,12,15,18,21,24,27-Nonaoxanonacosan-1-ol, 29-(nonylphenoxy)-	27177-08-8
3,6,9,12,15,18,21,24-octaoxahexacosan-1-ol, 26-(nonylphenoxy)-	26571-11-9
3,6,9,12,15,18,21-heptaoxatricosan-1-ol, 23-(nonylphenoxy)-	27177-05-5
Decaethylene glycol, isononylphenyl ether	65455-72-3
ethanol, 2-[2-(nonylphenoxy)ethoxy]-	27176-93-8
ethanol, 2-[2-[2-[2-(4-nonylphenoxy)ethoxy]ethoxy]ethoxy]-	7311-27-5
ethylene oxide-nonylphenol, polymer	9016-45-9
nonylphenol, polyethylene glycol ether	20636-48-0
nonylphenol, polyethylene glycol ether	27177-01-1
poly (oxy-1,2-ethanediyl), alpha –(4-nonylphenyl)-omega-hydroxy -	26027-38-3
poly (oxy-1,2-ethanediyl), alpha –(nonylphenyl)-omega-hydroxy-, branched	68412-54-4
poly (oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched	127087-87-0
poly(oxy-1,2-ethanediyl), .alpha.-(2-nonylphenyl)-.omega.-hydroxy-	51938-25-1
poly(oxy-1,2-ethanediyl), .alpha.-(isononylphenyl)-.omega.-hydroxy-	37205-87-1
7-Oxa-3,20-diazadispiro[5.1.11.2]-heneicosan-21-one, 2,2,4,4-tetramethyl-	
7-Oxa-3,20-diazadispiro[5.1.11.2]-heneicosan-21-one, 2,2,4,4-tetramethyl-	64338-16-5
perchlorates	
ammonium perchlorate	7790-98-9
barium perchlorate	13465-95-7
lead perchlorate	13637-76-8
lithium Perchlorate	7791-03-9
magnesium perchlorate	10034-81-8
perchloric acid, reaction products with lead oxide (pbo) and triethanolamine	99749-31-2
perchloric acid, cobalt (2+) salt	13455-31-7
perchloric acid, mercury(2+) salt	7616-83-3
perchloric acid, nickel(2+) salt, hexahydrate	13520-61-1
nickel perchlorate	13637-71-3
potassium perchlorate	7778-74-7
sodium perchlorate	7601-89-0
thallium(3+) perchlorate	15596-83-5
PFOA and its salts, perfluorooctanoic acids $C_8F_{15}O_2X$ (X = H, NH_4, and Metal salts)	
PFOA - perfluorooctanoic acid	335-67-1
ammonium salt of PFOA	3825-26-1
sodium salt of PFOA	335-95-5
potassium salt of PFOA	2395-00-8
silver salt of PFOA	335-93-3
phenol	
phenol	108-95-2
phenol,, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethlethyl)-	
phenol,, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethlethyl)-	3846-71-7
phenol, 2,4,6-tris(1,1-dimethylethyl)-	
phenol,, 2,4,6-tris(1,1-dimethylethyl)-	732-26-3
phenol,, 2-(5-chloro-2H-benzotriazol-2-yl)-4,6-bis(1,1'-dimethylethyl)-	
phenol,, 2-(5-chloro-2H-benzotriazol-2-yl)-4,6-bis(1,1'-dimethylethyl)-	3864-99-1
phenylendiamines and its salts	
2,6-dichloro-p-phenylenediamine	609-20-1
2-ethoxy-N4,N4-diethyl-p-phenylenediamine	2359-46-8
2-methoxy-5-methyl-p-phenylenediamine	5307-00-6
2-nitro-p-phenylenediamine	5307-14-2
4-chloro-o-phenylenediamine	95-83-0
dimethyl-p-phenylenediamine	99-98-9
m-phenylenediamine	108-45-2
m-phenylenediamine dihydrochloride	541-69-5
N,N'-diphenyl-p-phenylenediamine	74-31-7
o-phenylenediamine	95-54-5
o-phenylenediamine dihydrochloride	615-28-1
phenylenediamines	25265-76-3
p-phenylenediamine	106-50-3
p-phenylenediamine dihydrochloride	624-18-0
p-phenylenediamine hydrochloride	55972-71-9
phosphonium, triphenyl(phenylmethyl)-, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis [phenol,] (1:1)	

Substance Group name	
Substance	**CAS №**
phosphonium, triphenyl(phenylmethyl)-, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol,] (1:1)	75768-65-9
polyamine curing agents	
bis-hexamethylenetriamine	143-23-7
triethyleneglycoldiamine	929-59-9
poly(propyleneglycol)triamine	64852-22-8
poly(propyleneglycol)diamine	9046-10-0
pentaethylenehexamine	4067-16-7
hexamethylenetetramine	100-97-0
silica, crystalline	
silica, crystalline	14808-60-7
siloxanes and silicones	
silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, reaction products with ammonia, octamethylcyclotetrasiloxane and silica	68937-51-9
siloxanes and silicones, di-Me, hydrogen-terminated	70900-21-9
siloxanes and Silicones, Me 3,3,3-trifluoropropyl, Me vinyl,hydroxy-terminated	68952-02-3
sodium azide	
sodium azide	26628-22-8
vinyl benzene	
styrene (vinyl benzene)	100-42-5
styrene oxide (epoxy styrene)	
styrene oxide (epoxy styrene)	96-09-3
thallium and its compounds	
(pentane-2,4-dionato-O,O')thallium	14219-90-0
thallium (III) acetate sesquihydrate (C2H4O2.1/3Tl)	2570-63-0
thallium(III) trifluoroacetate (C2HF3O2.1/3Tl)	23586-53-0
antimony, compound with thallium (1:1)	29095-38-3
bismuth, compound with thallium (1:1)	12048-36-1
dithallium telluride (TeTl2)	12040-13-0
thallium (I) ethanolate	20398-06-5
thallium formate	992-98-3
niobium thallium trioxide	12396-77-9
thallium trinitrate (HNO3.1/3Tl)	13746-98-0
silver thallium dinitrate	25822-21-3
thallic oxide	1314-32-5
thallium	7440-28-0
thallium(III) nitrate trihydrate	13453-38-8
thallium acetate	15843-14-8
thallium arsenide (TlAs)	12006-09-6
thallium bromide	7789-40-4
thallium bromide (TlBr3)	13701-90-1
thallium chlorate	13453-30-0
thallium chloride (TlCl3)	13453-32-2
thallium fluoride (TlF3)	7783-57-5
thallium hydrogen carbonate	29809-42-5
thallium hydroxide (Tl(OH))	12026-06-1
thallium iodate	14767-09-0
thallium iodide (TlI2)	57232-83-4
thallium nitrate (V.A.N.)	16901-76-1
thallium oxide (Tl2O)	1314-12-1
thallium phosphate	51833-34-2
thallium selenide (Tl2Se)	15572-25-5
thallium sulfate	10031-59-1
thallium sulfide (Tl2S)	1314-97-2
thallium sulfide (Tl2S3)	12039-17-7
thallium telluride (Tl2Te3)	12040-16-3
thallium telluride (TlTe)	12040-12-9
thallium thiocyanate	3535-84-0
thallium triarsenide	84057-85-2
thallium triiodide	13453-37-7
thallium(1+) propan-2-olate	39262-04-9
thallium(3+) perchlorate	15596-83-5
thallium(3+) triformate	71929-23-2
thallium(I) acetate	563-68-8
thallium(I) fluoride	7789-27-7

Substance Group name	
Substance	**CAS №**
thallium(I) iodide	7790-30-9
thallium(I) nitrate	10102-45-1
thallium(I) selenide	12039-52-0
thallium(III) sulfate	16222-66-5
thallium, 2,4-cyclopentadien-1-yl-	34822-90-7
thallous malonate	2757-18-8
thallous sulfate	7446-18-6
carbonic acid, dithallium(1+) salt (U215)	6533-73-9
thallous chloride (U216)	7791-12-0
thioperoxydicarbonic diamide([(H2N)C(S)]2S2), tetramethyl-	
thioperoxydicarbonic diamide ([(H2N)C(S)]2S2), tetramethyl-	137-26-8
vanadium(V) oxide	
vanadium(V) oxide	1314-62-1
vinyl chloride	
vinyl chloride	75-01-4

Appendix 6: Analytical Method

1. Analysis of cadmium in plastics

Pretreatment method	Plastic is decomposed and liquefied using either one of the following methods in (1) to (3). (1) Wet decomposition using nitric acid, sulfuric acid, hydrogen peroxide, fluorine, and hydrochloric acid (for example, EN1122-2001 “Plastic- Determination of cadmium – Wet decomposition method), (2) Pressure decomposition in sealed container using nitric acid, sulfuric acid, hydrogen peroxide, fluorine, and hydrochloric acid (microwave decomposition method, (3) After ashing under presence of sulfuric acid, acid is dissolved. If residues remain when methods (1) to (3) are used, they shall be liquefied by using any method.
Measuring method	When induced plasma emission spectral analyzer (ICP-AES) or induced plasma mass analyzer (ICP-MS) or atomic absorption spectrophotometer (AAS) is used, lower limit of quantification in either case. Cadmium of less than 5 ppm must be guaranteed.
Allowable concentration	Cadmium : less than 5 ppm

2. Analysis of lead in plastics

Pretreatment method	Plastic is decomposed and liquefied using either one of the following methods in (1) to (3). (It is preferable that analysis is performed without using sulfuric acid whenever possible.) (1) Wet decomposition using nitric acid, sulfuric acid, hydrogen peroxide, fluorine, and hydrochloric acid (for example, “Plastic- Determination of cadmium – Wet decomposition method), (2) Pressure decomposition in sealed container using nitric acid, sulfuric acid, hydrogen peroxide, fluorine, and hydrochloric acid (microwave decomposition method, (3) After ashing under presence of sulfuric acid, acid is dissolved. If residues remain when methods (1) to (3) are used, they shall be liquefied by using any method.
Measuring method	When induced plasma emission spectral analyzer (ICP-AES) or induced plasma mass analyzer (ICP-MS) or atomic absorption spectrophotometer (AAS) is used, lower limit of quantification in either case. Lead of less than 30 ppm must be guaranteed.
Allowable concentration	Lead: less than 100 ppm

3. Analysis of packaging materials (cadmium, lead, hexavalent chromium and mercury)

Pretreatment method (other than mercury)	Sample is decomposed and liquefied using either one of the following methods in (1) to (3). (1) Wet decomposition using nitric acid, sulfuric acid, hydrogen peroxide, fluorine, and hydrochloric acid (for example, EN1122-2001 “Plastic- Determination of cadmium – Wet decomposition method), (2) Pressure decomposition in sealed container using nitric acid, sulfuric acid, hydrogen peroxide, fluorine, and hydrochloric acid (microwave decomposition method, (3) After ashing under presence of sulfuric acid, acid is dissolved. If residues remain when methods (1) to (3) are used, they shall be liquefied by using any method.
Measuring method (other than mercury)	When induced plasma emission spectral analyzer (ICP-AES) or induced plasma mass analyzer (ICP-MS) or atomic absorption spectrophotometer (AAS) is used, lower limit of quantification in either case. Cadmium of less than 5 ppm, chromium of less than 2 ppm, and lead of less than 30 ppm must be guaranteed.
Pretreatment method (mercury)	Sample is decomposed and liquefied using either one of the following methods in (1) or (2). (1) Wet decomposition using nitric acid, sulfuric acid, hydrogen peroxide, fluorine, and hydrochloric acid, or (2) Pressure decomposition in sealed container using nitric acid, sulfuric acid, hydrogen peroxide, fluorine, and hydrochloric acid (microwave decomposition method. If residues remain when method (1) or (2) is used, they shall be liquefied by using any method.

Measuring method (mercury)	When exclusive mercury analyzer (atomic absorption for producing atomic vapor by reduction (reduction vaporization AAS), and atomic absorption for producing atomic vapor by heating (heating vaporization AAS), however, in case of atomic absorption for producing atomic vapor by heating, pretreatment of the above liquefaction is unnecessary), induced plasma emission spectral analyzer (ICP-AES) or induced plasma mass analyzer (ICP-MS) or atomic absorption spectrophotometer (AAS) is used, lower limit of quantification in either case. Confirmation is made if total of cadmium, lead, hexavalent chromium and mercury is less than 5 ppm.
Allowable concentration	If total of four elements exceeds 100 ppm, confirmation is made in reference to component tables or any other data whether the product contains hexavalent chromium.Confirmation is made if total of cadmium, lead, hexavalent chromium and mercury is 100 ppm or less.
Remarks	Chromium shall be analyzed as total chromium amount.

Appendix 7-1 Collective Registration Tool (For Electric)

Input Sheet

Operating

Creation Date		
Company Code		
Supplier	Company Name	
	Sector Name	
	Person in Charge	
	TEL	
	E-Mail	

For electric

Basic Product Information													Structure Parts Information			Chemical Substance Inclusion Data					Customer Information			
Division/ Factory Name (Mandatory)	Sector Name	Person in Charge	TEL	E-mail	Product No. (Mandatory)	Product Name (Mandatory)	Series Name	Category2 (Mandatory)	Product Mass (Mandatory)	Unit (Mandatory)	Ozone Layer Depleting Substance (Mandatory)	Memo	Parts/Material Name (Mandatory)	Mass (Mandatory)	Unit (Mandatory)	CAS No. (Mandatory)	Substance Name (Mandatory)	Content Amount /Rate (Mandatory)	Unit (Mandatory)	Purpose of Inclusion (Mandatory)	Company Name (ALPS) (Mandatory)	ALPS Site Name (Mandatory)	ALPS Parts No. (Mandatory)	ALPS Product Name

Appendix 7-2 Collective Registration Tool (For Automotive)

Input Sheet Operating

Creation Date		
Company Code		
Supplier	Company Name	
	Sector Name	
	Person in Charge	
	TEL	
	E-Mail	

For automotive

Basic Product Information													Structure Parts Information			Chemical Substance Inclusion Data					Customer Information			
Division/ Factory Name (Mandatory)	Sector Name	Person in Charge	TEL	E-mail	Product No. (Mandatory)	Product Name (Mandatory)	Series Name	Category2 (Mandatory)	Product Mass (Mandatory)	Unit (Mandatory)	Ozone Layer Depleting Substance (Mandatory)	Memo	Parts/Material Name (Mandatory)	Mass (Mandatory)	Unit (Mandatory)	CAS No. (Mandatory)	Substance Name (Mandatory)	Content Amount /Rate (Mandatory)	Unit (Mandatory)	Purpose of Inclusion (Mandatory)	Company Name (ALPS) (Mandatory)	ALPS Site Name (Mandatory)	ALPS Parts No. (Mandatory)	ALPS Product Name

Appendix8-1: Environmentally Hazardous Substance Inclusion Report (serving also as guarantee on non-use of substances prohibited of use) (For electric)

Environmentally Hazardous Substance Inclusion Report (serving also as guarantee on non-use of substances prohibited of use)

Abbreviation: Inclusion report

Investigation request No.

Date of submittal:
Day Month

Company Code

Company name

Responsible person

TEL

FAX

EMAIL

Company seal

Prohibited substances..
ozone depleting substances, greenhouse substances, chloroform, glycol ether and its acetates, organic brominated solvents, benzene,aldehyde compounds, organic chlorinated solvents, cadmium and its compounds, mercury and its compounds, lead and its compounds, hexavalent chromium compounds, "lead, mercury, cadmiun, and hexavalent chromium in wrapping material", organostannic compounds
, beryllium and its compounds, asbestos, specified brominated flame retardants
, polychlorinated naphthalene, poly chlorinated biphenyl : PCB
poly chlorinated terphenyls : PCT, chlorinated paraffins, azo dye / pigment, radioactive substances, phthalic esters, perfluorooctane sulfonate and its related substances, dimethylfumarate(DMFu), volatile organic compounds

For details, refer to the Green Procurement Standard

Receipt

The products delivered as described in the table below contain the environmentally hazardous substances among those specified by Alps Electric Company.
The environmentally hazardous substances not stated herein are not contained.
It is guaranteed that prohibited substances described below are not contained.

Columns for intra-company treatment

ALPS parts number	Supplier product number	Supplier product name	Product mass (g)	Parts/Material Name	Parts mass (g)	Package insert number	Substance name	CAS No	Purpose of inclusion	Content amount (mg)	Content rate (ppm)		Applied

NOTE

Entry method:
1. Investigate the delivered products in the position unit as to whether the environmentally hazardous substances are contained and state all data to the above-mentioned table.
2. State all position name of the delivered products, and state to become equal the product mass and the all position mass.
3. The positions shall be constituted with homogeneous parts. State the position name and material name.
4. If the environmentally hazardous substances are contained, enter the content amount by each position.
5. If inclusion value has a range, enter the maximum value.
6. State the component name by individual name whenever possible, and enter also CAS number.
   However, if disclosure is not possible because of manufacturing know-how, group name may be permitted.
   If the environmentally hazardous substances aren't contained, select "AL99".
7. State the purpose of inclusion briefly. Examples: Stabilizer, coloring agent, prevention of deterioration, and anti-corrosion. If the environmentally hazardous substances aren't contained, state "the environmentally hazardous substances aren't contained".
8. State metal compounds with mass of the compounds without performing metal conversion.
9. In case of alloy component, state content amount of the applicable hazardous substance.
10. For attached data of analysis data etc, state the applicable number in the individually applicable columns.
11. For details, refer to the Green Procurement Standards.

Note: Products containing the substances prohibited of use cannot be delivered.

Appendix8-2: Environmentally Hazardous Substance Inclusion Report (serving also as guarantee on non-use of substances prohibited of use) (For automotive)

Environmentally Hazardous Substance Inclusion Report (serving also as guarantee on non-use of substances prohibited of use)

Abbreviation: Inclusion report

Investigation request No.

Date of submittal:
Day Month

Company Code

Company name

Responsible person

TEL

FAX

EMAIL

Company seal

Prohibited substances..
ozone depleting substances, greenhouse substances, chloroform, glycol ether and its acetates, organic brominated solvents, benzene,aldehyde compounds, organic chlorinated solvents, cadmium and its compounds, mercury and its compounds, lead and its compounds, hexavalent chromium compounds, "lead, mercury, cadmiun, and hexavalent chromium in wrapping material", organostannic compounds
, beryllium and its compounds, asbestos, specified brominated flame retardants
, polychlorinated naphthalene, poly chlorinated biphenyl : PCB
poly chlorinated terphenyls : PCT, chlorinated paraffins, azo dye / pigment, radioactive substances, phthalic esters, perfluorooctane sulfonate and its related substances, dimethylfumarate(DMFu), volatile organic compounds, chlorinated or brominated dioxins or furans, "dodecachloropentacyclo 1, 3, 4-metheno-1H-cyclobuta(cd)pentalene, mirex", chlorinated flame retardants, 4-nitrobiphenyl and its salts, N-nitroso dimethyl amine, "phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethlethyl)-", phenylendiamines and its salts, vinyl chloride

For details, refer to the Green Procurement Standard

Receipt

The products delivered as described in the table below contain the environmentally hazardous substances among those specified by Alps Electric Company.
The environmentally hazardous substances not stated herein are not contained.
It is guaranteed that prohibited substances described below are not contained.

Columns for intra-company treatment

ALPS parts number	Supplier product number	Supplier product name	Product mass (g)	Parts/Material Name	Parts mass (g)	Package insert number	Substance name	CAS No	Purpose of inclusion	Content amount (mg)	Content rate (ppm)		Applied

NOTE

Entry method:
1. Investigate the delivered products in the position unit as to whether the environmentally hazardous substances are contained and state all data to the above-mentioned table.
2. State all position name of the delivered products, and state to become equal the product mass and the all position mass.
3. The positions shall be constituted with homogeneous parts. State the position name and material name.
4. If the environmentally hazardous substances are contained, enter the content amount by each position.
5. If inclusion value has a range, enter the maximum value.
6. State the component name by individual name whenever possible, and enter also CAS number. However, if disclosure is not possible because of manufacturing know-how, group name may be permitted. If the environmentally hazardous substances aren't contained, select "AL99".
7. State the purpose of inclusion briefly. Examples: Stabilizer, coloring agent, prevention of deterioration, and anti-corrosion. If the environmentally hazardous substances aren't contained, state "the environmentally hazardous substances aren't contained".
8. State metal compounds with mass of the compounds without performing metal conversion.
9. In case of alloy component, state content amount of the applicable hazardous substance.
10. For attached data of analysis data etc, state the applicable number in the individually applicable columns.
11. For details, refer to the Green Procurement Standards.

Note: Products containing the substances prohibited of use cannot be delivered.

Appendix 9:Reasons for Regulating the Environmentally Hazardous Substances (applicable laws and effects on human bodies)

	Substance	Reason for regulation
1	ozone depleting substances	Ozone layer protection law specified substance, JGPSSI Level A Fulminant substances in Poisonous Substance Law, Montreal Protocol, Appendix A Group I, Appendix B Group I, II, III, Appendix C, Group I, Organics Rule Category 1,2
2	greenhouse gas	Greenhouse gas in law to promote countermeasures against global warming, JEITA autonomous control and discharge suppression substances (target of reduction by 60% of 1995 base by 2010)
3	chloroform	Harmful discharge suppression substances with stress on atmospheric air specified by four electric and electronic organizations (target of reduction by 25% of 1999 base by 2003), Category 1 of PRTR Law, Specified by Chemical Examination Law, Organics Rule Category 1, fulminant substances in poisonous substance law, IARC=2B. Effects on human body: Strong anestheticity is given. Act as cytotoxin on liver, kidney ureter, and heart. Inhalation of high concentration vapor can cause excited state, loss of reflection function, sensory paralysis, loss of consciousness, and respiratory arrest, resulting in death. Symptoms include gastrointestinal injury, liver and kidney injury.
4	glycol ether and its acetates	PRTR Law, Category 1, Organics Rule, Category 2 Effects on human body: Women exposed to five items of glycol ethers are said to have lower fertility rate and higher abortion rate.
5	organic brominated solvent	Manufacturing permitted by Safety and Hygiene Law, PRTR Law, Category 1, Regulation（EC）No 1272/2008
6	benzene	PRTR Law, Special Category 1, Special Chemicals Rule, Special Category 2, IARC=1 Effects on human body: Human body subjected to exposure, in which in-air concentration exceeds 1000 ppm, can cause danger of incurring acute intoxication. At 2000 ppm or higher, people have risk of dying in five to ten minutes. In acute intoxication, anesthetic symptom appears strongly, causing headache and giddiness, followed by incurrence of sleepiness, ataxia, arrhythmia, dyspnea, and falling into coma. Exposure for extended period of time, though at low concentration, can cause blood injury, liver injury, and possibly aplastic anemia, and leukemia. Furthermore, absorption through skin may also occur.
7	aldehyde compounds	Harmful discharge suppression substances with stress on atmospheric air specified by four electric and electronic organizations,. Category 1 of PRTR Law, fulminant substances in poisonous substance law, IARC=2A. Household Appliance Regulation Law. Effects on human body: The substances stimulate and harden skin, causing cracks and ulcer. The vapor stimulates eyes to have tears shed. Inhalation stimulates mucous membrane causing coughs. Acute symptoms include liver and kidney injuries.
8	organic chlorinated solvents	Harmful air polluting substances, water polluting substances, and soil polluting substances. PRTR Law, Category 1, Chemicals Examination Law Category 2, Organics Rule Category 1, 2, IARC=2A, 2B, specified by Chemicals Examination Law.

	Substance	Reason for regulation
9	cadmium and its compounds	JGPSSI Level A, PRTR Law, Specific Category 1, Category 2 controlled by Special Chemicals Rule, fulminant substances in poisonous substance law, substances prohibited of use under European RoHS directive, substances prohibited of use under European ELV directive, substances regulated by European 76/769/EEC directive. IARC=1, Effects on human body: Acute gastroenteritis symptom may be caused if swallowed. Inhalation of dust and fume will cause coughing, pectoralgia, and dyspnea, and also possibly bronchitis and pneumonia. Furthermore, the symptom may accompany headache, giddiness, inappetence, and reduction of body weight. Chronic poisoning may include emphasyma, kidney injury, osteolysis, and protein urine.
10	mercury and its compounds	JGPSSI Level A, PRTR Law Category 1, fulminant substances in poisonous substance law, substances prohibited of use under European RoHS directive, substances prohibited of use under European ELV directive. Effects on human body: Inhalation of the vapor may cause inappetence, headache, carebaria, malaise in whole body, slight tremor, and other neuropathic symptoms. Absorption may occur also through skin. Mercury compounds have strong toxicity, whereas swallowing may cause vomiting mixed with blood. This is followed by prostration, facial achromasia, vasodepression, pulse increase, diarrhea, and enterospasma, resulting in early death or death in about ten days. Cases may present chronic intoxication.
11	lead and its compounds	JGPSSI Level A, fulminant substances in poisonous substance law, PRTR Law Category 1, substances prohibited of use under European RoHS directive, substances prohibited of use under European ELV directive. IARC=2B, Substances prohibited under European 76/769/EEC directive. REACH Substances of very high concern on the Candidate List of SVHC Effects on human body: Amount of lead ingested by human body constantly and amount of lead discharged are in equilibrium. However, if the lead ingestion amount increases, lead is deposited on osseous tissue, and presents toxicity when it is disengaged in blood. Ingestion of 0.5 mg or more per day will present the toxicity. Ingestion of 0.5 g is fatal. Acute intoxication symptom is characterized by numbness and colic arms and legs, which can cause facial achromasia, vomiting, diarrhea, bloody feces, and kidney injury result in death in one to two days. Chronic poisoning may include fatigue, headache, sensory injury ion arms and legs, convulsion, and urination injury.
12	hexavalent chromium compounds	JGPSSI Level A, PRTR Law, Specific Category 1, substances prohibited of use under European RoHS directive, substances prohibited of use under European ELV directive. REACH Substances of very high concern on the Candidate List of SVHC Effects on human body: Hexavalent chromium (chromate) has strong oxidation power, corrodes skin and mucous membrane severely, and causes dermatitis and chromium ulcer. Inhalation of dust and mist can cause inflammation and ulcer in tunica mucosa of nose, and nostril perforation. Furthermore, the substance is said to have danger of causing lung cancer.
13	mercury, cadmium, hexavament chromium, and lead in packaging materials.	Directive 94/82/EC in relation with packaging materials and package material wastes. U.S. State laws.
14	organostannic compounds	JGPSSI Level A, PRTR Law, Specific Category 1, substances prohibited of use under European 76/769/EEC directive. REACH Substances of very high concern on the Candidate List of SVHC Effects on human body: The substance has edema generation action in central nerve system, and particularly toward protein. It causes stimulation locally in skin, respiratory tracts, and comea, presenting brain edema systemically.

	Substance	Reason for regulation
15	beryllium and its compounds	JGPSSI Level B, manufacturing permission under Safety and Hygiene Law, Special Chemicals Rule Category 1, PRTR Law Specific Category 1, IARC=1 Effects on human body: Intoxication symptom is caused when the substance is inhaled through respiratory organs as vapor or dust. The intoxicating action is mainly in lung injury, and if acute, the symptom shows one like metal heat, bronchitis, dyspnea, and cyanosis, which can cure in a few days or a few weeks. Chronic injuries include, coughing, expectoration, dyspnea, and weight reduction, and can cause lung granuloma (beryllium lung). Local actions cause dermatitis, skin ulcer, conjunctivitis, and keratitis.
16	asbestos	JGPSSI Level A, PRTR Law, Specific Category 1, Special Chemicals Rule Control Category 2, substances regulated by European 76/769/EEC directive, IARC=1 Prohibited of manufacture under Safety and Hygiene Law, Special Chemicals Rule Control Category 2, Effects on human body: Inhalation of asbestos dust for many years causes asbestosis as chronic injury. The symptom accompanies bronchitis symptom such as coughing and expectoration, presenting dyspnea, cardiopalmus, and lung function injury. Asbestosis can accompany lung cancer and pneumoderma in pleura. Blue asbestos is especially said to have this trend.
17	specified brominated flame retardants	JGPSSI Level A, substances prohibited of use by European RoHS directive. Effects on human body: It is said that, when fired or heated severely, brominated dioxin/furan with strong toxicity are produced.
18	polychlorinated naphthalene	JGPSSI Level A, Chemicals Examination Law. Category 1 (chlorine number 3 or greater) Effects on human body: The substance shows toxicity very similar to PCB, and causes skin injury.
19	polychlorinated biphenyl : PCB polychlorinated terphenyl : PCT	Chemicals Examination Law. Category 1, manufacturing permitted by Safety and Hygiene Law, Special Chemicals Rule Category 1, IARC=2 Effects on human body: Intoxicating actions relate mainly to skin injury and liver injury. The skin injury causes blackheads known as chlorine acne, as well as black chromatosis, which suppurates when it is serious. In case acute illness, it may cause yellow hepatatrophia as liver injury. Symptoms include choloplaria, edema, bellyache, leading to coma and to death. Once taken into body, it is hard to be discharged, and repeated ingestion even in small amount causes chronic intoxication. Teratogenesis and oncogenesis are doubted too.
20	chlorinated paraffins	JGPSSI Level A , Ocean Pollution Prevention Law. Chemicals Examination Law Category 1. REACH Substances of very high concern on the Candidate List of SVHC Effects on human body: It is said that, when fired or heated severely, chlorinated dioxin/furan with strong toxicity are produced.
21	azo dye/pigment	Substances prohibited by German Daily Necessaries Rule, JGPSSI Level A REACH Substances of very high concern on the Candidate List of SVHC Effects on human body: If used in clothing, bedding articles, bracelets, eyeglass frames, face masks, and false eyelashes coming into contact with human body ultimately, the substance is taken into human body upon dissolving into sweat, saliva, oil and blood, and it is said that it may possibly produce carcinogenic amines.
22	radioactive substances	JGPSSI Level A
23	xylene	PRTR Law Category 1 Organics Rule Category 2, organic solvents. Fulminant substances in poisonous substance law. Malodor Prevention Law

	Substance	Reason for regulation
24	toluene	PRTR Law Category 2 ,Organics Rule Category 3, organic solvents. Fulminant substances in poisonous substance law. Malodor Prevention Law, Narcotic and Psychopharmaceutical Control Law
25	antimony and its compounds	Substances prohibited by German Daily Necessaries Rule, Substances being object of Unified Green Procurement Standards of 18 set companies. Fulminant substances in poisonous substance law. JGPSSI Level B Not applicable to fulminant substances in poisonous substance law. Effects on human body: Exposure to dust and fume may present stimulation symptom of mucous membrane in eyes, nostril, and throat, which may have relation with gingivitis, anaemia, and ulcer in nasal septum and throat. Acute oral toxicity symptoms include serious stimulation symptom in nostril, buccal cavity, stomach and small intestine, vomiting, bloody feces, and coma, which may lead to occasional death. Symptoms of chronic oral intoxication include vomiturition, headache, inappetence, and insomnia.
26	chromium and its compounds（except hexavalent chromium compounds）	PRTR Law Category 1, Effects on human body: Inhalation of chromium and chromium dust leads to danger of lung injury. Soluble chromium compounds cause allergic skin injury, as well as inflammation in eyes and digestive system.
27	selenium and its compounds	JGPSSI Level B, PRTR Law, Specific Category 1, fulminant substances in poisonous substance law Effects on human body: Selenium is free of irritant action and hard of being absorbed. However, when in salt, it presents strong toxicity. Entry into eyes will cause conjunctivitis and cornea necrosis. Deposition on skin will cause burn and eczema. Inhalation will cause hyposmia, irritant symptom in nostril and throat, bronchitis, pneumonia, and bronchitic asthma. Digestive organ symptoms include vomiturition, vomiting, bellyache, diarrhea, and liver thickening. Since selenium resembles arsenic chemically, all selenium compounds have toxicity and may cause contact dermatitis.
28	nickel and its compounds	JGPSSI Level B, PRTR Law Specific Category 1, substances Regulated by European 76/769/EEC directive., Effects on human body: In case where wearing wrist watch band made of nickel is constantly in contact with skin, nickel salt dissolved in sweat may cause skin inflammation Exposure to dust is said to often cause cancers in respiratory organ.
29	arsenic and its compounds	JGPSSI Level B, PRTR Law Specific Category 1, poisonous substances in poisonous substance law, IARC=1. REACH Substances of very high concern on the Candidate List of SVHC Effects on human body: Absorption at low temperatures may cause headache, lassitude, vomiturition, vomiting, and dyspnea. Inhalation at high concentrations may cause pulmonary edema. All its compounds show toxicity. Inhalation of vapor of hydrogen arsenide for semiconductor manufacture (arsine) stimulate throat, causing pulmonary edema. They may cause bellyache, backache, hemoglobinuria, turning skin and facial color to bronze. Absorbed also through skin causing intoxication.
30	bismuth and it's compounds	JGPSSI Level B
31	organophosphorus compounds	Substances being object of Unified Green Procurement Standards of 18 set companies. Effects on human body: Toxicity varies greatly by compounds. Toxicity has been known very well in parathion, methyl dimeton, and EPN having been used as agricultural chemicals. However, toxicity of phosphorated flame retardant is not idenfidied sufficiently.
32	polyvinyl chloride : PVC	JGPSSI Level B Effects on human body: If the substance is incinerated after use with other wastes, chlorinated dioxin/furan with extremely high toxicity is said to be generated.

	Substance	Reason for regulation
33	brominated flame retardants	Substances being object of Unified Green Procurement Standards of 18 set companies. Effects on human body: If fired or heated severely, generation of highly toxic brominated dioxin/furan is said possible.
34	phthalic esters	JGPSSI Level B Substances prohibited under European 76/769/EEC directive. Prohibit use to plastic materials of a toy and a child care article use REACH Substances of very high concern on the Candidate List of SVHC Effects on human body: The substance stimulates skin, eyes, and mucous membrane. It may cause reduction of function in central nerve system, and gastro-intestine injuries. The toxicity has been reported generally low, but there are reports on environmental hormone actions recently, which drives the movement of prohibiting inclusion in toys for infants.
35	perfluorooctane sulfonate and its related substances (PFOS) and its related substances	Substances prohibited of use under European 76/769/EEC directive. $C_8F_{17}SO_2X$ (X indicates hydroxyl, metal salt, halide. amide and derivatives including polymer.)
36	polycyclic aromatic hydrocarbons and its mixtures	REACH Substances of very high concern on the Candidate List of SVHC
37	cobalt and its compounds	REACH Substances of very high concern on the Candidate List of SVHC
38	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	REACH Substances of very high concern on the Candidate List of SVHC
39	coal tar pitch, high temperature	REACH Substances of very high concern on the Candidate List of SVHC
40	mineral fibres (natural or synthetic) except continuous filament fibres	REACH Substances of very high concern on the Candidate List of SVHC
41	2,4-dinitrotoluene	REACH Substances of very high concern on the Candidate List of SVHC
42	biocidal coatings / biocidal additives	Commission Decision 2009/251/EC
43	acrylamide	REACH Substances of very high concern on the Candidate List of SVHC
44	boric acid	REACH Substances of very high concern on the Candidate List of SVHC
45	tetraboron disodium heptaoxide	REACH Substances of very high concern on the Candidate List of SVHC
46	tetraboron disodium heptaoxide hydrate	REACH Substances of very high concern on the Candidate List of SVHC
47	volatile organic compounds (VOC)	Air Pollution Control Act
48	acetamide	GADSL
49	acetamide, n-methyl-	GADSL
50	acetonitrile	GADSL
51	acrylonitrile	GADSL
52	ammonium perchlorate	GADSL
53	aniline and its salts	GADSL
54	aromatic amines	GADSL

	Substance	Reason for regulation
55	barium compounds (organic or water soluble)	GADSL
56	benzenamine, N-phenyl-, reaction products with styrene and 2,4,4-trimethylpente	GADSL
57	1,4-benzenediamine, N,N' -mixed Ph and tolyl derivs	GADSL
58	2-benzothiazolesulphenamide, N, N-dicyclohexyl-	GADSL
59	butadiene, 1,3 -	GADSL
60	chlorinated or brominated dioxins or furans	GADSL
61	colophony (rosin)	GADSL
62	copper	GADSL
63	cyclohexane	GADSL
64	2-cyclohexen-1-one, 3,5,5-trimethyl-	GADSL
65	cyclopentasiloxane, decamethyl-	GADSL
66	cyclotetrasiloxane, heptamethylphenyl-	GADSL
67	cyclotetrasiloxane, octamethyl-	GADSL
68	decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl)ester	GADSL
69	dimethylformamide (N,N-dimethylformamide)	GADSL
70	dodecachloropentacyclo 1, 3, 4-metheno-1H-cyclobuta(cd)pentalene, mirex	GADSL
71	epichlorohydrin (1-chloro-2,3-epoxypropane)	GADSL
72	1-ethenylpyrrolidin-2-one(2-Pyrrolidione, 1-ethenyl-)	GADSL
73	fatty acids, C6-19-branched, zinc salts	GADSL
74	fluorotelomers	GADSL
75	2-furancarboxaldehyde	GADSL
76	hexanedioic acid, bis(2-ethylhexyl) ester	GADSL
77	hexanoic acid, 2-ethyl-	GADSL
78	hydrazine	GADSL
79	methylacrylamidomethoxy-acetate	GADSL
80	1-methylpyrrolidin-2-one(2-pyrrolidinone, 1-methyl)	GADSL
81	chlorinated flame retardants	GADSL
82	2-naphthalenol, 1-[(4-methyl-2-nitrophenyl)azo]-	GADSL
83	nitrites	GADSL
84	4-nitrobiphenyl and its salts	GADSL
85	nitrocellulose	GADSL
86	N-nitrosamines	GADSL
87	nonylphenol	GADSL
88	nonylphenol ethoxylates	GADSL
89	7-oxa-3,20-diazadispiro[5.1.11.2]-heneicosan-21-one, 2,2,4,4-tetramethyl-	GADSL
90	perchlorates	GADSL
91	PFOA and its salts	GADSL
92	phenol	GADSL
93	phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethlethyl)-	GADSL
94	phenol, 2,4,6-tris(1,1-dimethylethyl)-	GADSL
95	phenol, 2-(5-chloro-2H-benzotriazol-2-yl)-4,6-bis(1,1'-dimethylethyl)-	GADSL
96	phenylendiamines and its salts	GADSL
97	(phosphonium, triphenyl(phenylmethyl)-, salt with 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[phenol] (1:1))	GADSL
98	polyamine curing agents	GADSL
99	silica, crystalline	GADSL
100	siloxanes and silicones	GADSL
101	sodium azide	GADSL

	Substance	Reason for regulation
102	vinyl benzene	GADSL
103	styrene oxide (epoxy styrene)	GADSL
104	thallium and its compounds	GADSL
105	thioperoxydicarbonic diamide([(H2N)C(S)]2S2), tetramethyl-	GADSL
106	vanadium(V) oxide	GADSL
107	vinyl chloride	GADSL

Note.

1.	Organics Rule, Category 1: Organic Solvent Intoxication Prevention Rule Category 1, organic solvents.
2.	Organics Rule, Category 2: Organic Solvent Intoxication Prevention Rule Category 2, organic solvents.
3.	Special Chemicals Rule, Category 1: Rule to prevent injuries from specific chemical substances, Category 1 substances.
4.	Special Chemicals Rule, Category 2: Rule to prevent injuries from specific chemical substances, Category 2 substances.
5.	Special Chemicals Rule, Specific Category 2: Rule to prevent injuries from specific chemical substances, Category 2 substances.
6.	Special Chemicals Rule, Control Category 2: Rule to prevent injuries from specific chemical substances, Category 2 substances.
7.	Special Chemicals Rule, Category 3: Rule to prevent injuries from specific chemical substances, Category 3 substances.
8.	Poisonous substances in Poisonous Substance Law. Poisonous substances in Poisonous Substance Control Law.
9.	Fulminant substances in Poisonous Substance Law. Fulminant substances in Poisonous Substance Control Law.
10.	PRTR Law, Category 1: Law related to promotion of improvements in identification and control of amounts of specific chemical substances discharged into environment, “Category 1 specified chemical substances”.
11.	PRTR Law, Specific Category 1: Law related to promotion of improvements in identification and control of amounts of specific chemical substances discharged into environment, “Specific Category 1 specified chemical substances”.
12.	PRTR Law, Category 2: Law related to promotion of improvements in identification and control of amounts of specific chemical substances discharged into environment, “Category 2 specified chemical substances”.
13.	Prohibition of manufacture under Safety and Hygiene Law: Labor Safety and Hygiene Law, “harmful substances of which manufacture is prohibited”.
14.	Permission of manufacture under Safety and Hygiene Law: Labor Safety and Hygiene Law, “harmful substances of which manufacture is to be permitted”.
15.	Chemicals Examination Law, Category 1: Law related to examination of chemical substances and regulation on manufacture, “Category 1 specific chemical substances” (prohibition in principle of manufacturing and importing).
16.	Chemicals Examination Law, Category 2 Law related to examination of chemical substances and regulation on manufacture, “Category 2 specific chemical substances” (reporting on scheduled manufacturing and importing quantities).
17.	JARC=1: International Agency for Research on Cancer, Group 1, (cancerogenic substances)
18.	JARC=2A: International Agency for Research on Cancer, Group 2A, (substances probably having carcinogenecity)
19.	JARC=2B: International Agency for Research on Cancer, Group 2B, (substances having possibility of cancerating)
20.	German Daily Necessaries Rule
21.	European 76/769/EEC directive: Council Directive of 27 July 1976 on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations
22.	European RoHS directive: Amended proposal for a Directive of the European Parliament and of the Council on the Restriction on the use certain Hazardous Substances in electrical and electronic equipment
23.	European ELV directive: Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of life vehicles
24.	JIG: JOINT INDUSTORY GUIDE
25.	EU REACH REGULATION：Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction
26.	COMMISSION DECISION of 28 May 2009 amending Council Directive 76/769/EEC as regards restrictions on the marketing and use of organostannic compounds for the purpose of adapting

27.	Commission Decision of 17 March 2009 requiring Member States to ensure that products containing the biocide dimethylfumarate are not placed or made available on the market (2009/251/EC)
28.	GADSL : Global Automotive Declarable Substance List
29.	Regulation（EC）No 1272/2008 on Classification, Labelling and Packaging of substances and mixtures（The former regulation : EU 67/548/EEC）

To: Suppliers Date:

Communication on Environmentally Hazardous Substances Contained in Products

We wish to thank you for your usual cooperation.

While the environmental problem increases its seriousness in recent years, demands on business entities are also increasing as to their social responsibilities and ethical performances. Operations of laws related to environmental regulation are also becoming severer.

Based on such circumstances, we intend to maintain the policy of going thorough on non-use of substances having risks of affecting the environment (environmentally hazardous substances). We would, therefore, kindly ask you to submit the environmentally hazardous substance inclusion report on all products or parts we purchase directly or through third parties from you, your subsidiaries and affiliated companies, to promise us that your products do not contain the prohibited substances. Would you, therefore, please put your signature on the appended “Agreement in Relation with Works on Environment”, and return it to us?

If the above document cannot be returned, or although it is returned, if any fact breaching, or having a possibility of breaching the description of what you have promised with us is found, this could lead to a case that we can no longer continue business transactions with you, to which please kindly understand.

With my best regards,

Very sincerely yours,

Alps Electric Co., Ltd.

Nobuhiko Komeya
Managing Director
Materials Control

Alps Electric Co., Ltd. Date:
Mr. Nobuhiko Komeya
Managing Director
Materials Control
(Mr. Kazuhito Ozawa)
General Manager of Materials Control Department)

Agreement in Relation with Works on Environment

Company name: _____
Supplier code: _____
Address: _____
Telephone No.: _____
Representative product: _____
Responsible person
Title/Department: _____
Name: _____
Person in charge
Title/Department: _____
Name: _____
Telephone No.: _____
Fax: _____
e-mail: _____

We guarantee that we observe your "Green Procurement Standards" (hereinafter referred to as the Standards), and that the prohibited substances defined in the Standards shall not be contained in the products or parts (including accessories, packaging, and all other items delivered together with the products, hereinafter referred to the parts) as delivered by our company (including our subsidiaries, and affiliated companies, which shall apply hereinafter) either directly or through third parties to your company, your subsidiaries and affiliated companies (hereinafter referred to as your company).

In addition, in order to deliver the parts in compliance with the Standards, we are pleased to agree as described below:

1) We will execute the environmental evaluation on companies based on the provisions in the Standards, and submit to you the "Environment Managing Company (Supplier) Self-assessment Sheet".
2) We will execute the parts evaluation based on the provisions in the standard, and submit to you the "Environmentally Hazardous Substance Inclusion Report", and the verification data requested by you (analytical data, component tables, and MSDS.
3) When the Standards are revised due to amendments in laws or change in social circumstances, we will confirm the contents of the revision immediately, and if there are any parts that do not comply with the revised standard, we will report to you to that effect.
4) We will follow the matters of requests made by you from time to time according to the definitions given in the Standards.

Signature: _____

アルプスグループ環境憲章

基本理念

アルプスは地球社会の一員として、社会の持続可能な発展のため、
卓越した技術に支えられた事業活動とし社員行動を通じて、
美しい自然を守り、貴重な資源を大切にします。

行動指針

私たちはいつも環境保全に心掛け

1. 環境を意識した製品開発に取組みます
2. 環境にやさしい生産・販売に取組みます
3. モノを大切にします
4. ムダを省きます
5. リサイクルに努めます

The Alps Group Environmental Charter

Basic Philosophy

Alps, as a member of the global community, is committed to protecting the beauty of nature and to safeguarding our precious resources through the use of technologically advanced business practices and the efforts of its employees, in order to promote sustainable development.

Action Program

Placing priority on environmental preservation, we at Alps will:

1. Develop products in light of environmental concerns
2. Engage in environmentally friendly production and sales
3. Conserve our natural resources
4. Reduce or eliminate waste
5. Increase recycling activities

ALPS
アルプス電気株式会社
ALPS ELECTRIC CO., LTD.

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