

**Stanley Product Chemical substance management
Standard (SPCS)
(Ver. 6)**

Date implemented: December 2, 2024

STANLEY ELECTRIC CO., LTD.
Stanley Group

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Introduction

Through this standard, the Stanley Group (hereinafter referred to as “Stanley”) clearly specifies management criteria for the chemical substances contained within the parts and materials we procure in order to prevent the intermixing of prohibited substances within Stanley products and processes.

1. Applicable Scope

This standard shall apply to all parts, materials, sub-materials, and packaging materials procured by Stanley, as well as to the suppliers that provide them.

In addition, these apply to suppliers whom Stanley outsources the assembly of parts, materials, and processes (forming, surface treatment, etc.).

[Examples of applicable parts and materials]

- Parts, units, materials, and accessories such as instruction manuals
- Sub-materials used in products (such as adhesive tapes, soldering materials, adhesive agents, ink, etc.), also including sub-materials that could potentially be adhering to or residually remaining within products.
- Including instruction manuals

2. Definitions of Terminology

1) Containment

Whether the containment is intentional or not, it means that substances are contained in, adhere to, or are mixed in with parts and/or materials that form Stanley products. In addition, those generated unintentionally during manufacturing processes are included as well.

2) Intentional containment

This refers to intentionally including a substance in a part or material in order to improve its performance or change its properties.

manufacturing processes or its inclusion within end products is obvious.

3) Impurities

Substances that are contained in natural materials and cannot be excluded during refining processes, or those that are generated in reaction processes and cannot be excluded through technological means.

4) Standard value (allowable concentration)

Contained amount of a substance included in parts or materials or the maximum allowable value for the containment concentration.

When a compound part contains multiple materials in its parts, the containment concentration is not the value obtained by taking the parts as a whole as the denominator, but the concentration obtained in terms of the homogeneous material that contains the target substance.

5) Homogeneous material

Materials that are uniformly composed as a whole and cannot be mechanically separated into other materials.

(Examples: Metal alloys, polymer alloys, compounds, paint, adhesive agents, ink, paste, resin polymers, glass powder, ceramic powder, etc.)

Since parts that are painted, printed, or coated can be separated mechanically into material parts and each of their painted, printed or coated parts, these are each homogeneous materials. “Mechanical separation” means to separate materials by mechanical behavior like removing screws, cutting, smashing, grinding, abrading, etc.

6) Mixture

A material in which two or more different substances are blended together without changing their natures and which can be separated out (by crystallization, evaporation, sublimation, filtration, etc.) without using other substances.

7) CMS (Chemical substance Management System)

Management of substances contained in products shall be conducted properly throughout each process from the procurement of raw materials through to their production and shipping. Stanley defines it according to the Guidelines for the Management of Chemical Substances in Products issued by the Joint Article Management Promotion-consortium (JAMP).

8) JAPIA Standard Material Datasheet

A datasheet standardized by the Japan Auto Parts Industries Association (JAPIA) to investigate the substances contained in products.

9) IMDS (International Material Data System)

Management system operated by major global automobile makers to collect and manage information regarding materials and chemical substances.

10) GADSL (Global Automotive Declarable Substance List)

Global Automotive Declarable Substance List Refer to <https://www.gadsl.org/>

11) chemSHERPA CI

A basic information communication sheet recommended by the Ministry of Economy, Trade and Industry and operated by JAMP (Joint Article Management Promotion-consortium) to transmit information on chemical substances contained in products (substances/mixtures).

12) chemSHERPA AI

A basic information communication sheet recommended by the Ministry of Economy, Trade and Industry and operated by JAMP to transmit information on chemical substances contained in molded product (articles).

3. Compliance Items

As a general rule, Stanley refrains from purchasing parts and materials that contain prohibited substances. However, this excludes the exemptions from Table 1 and the items for which reports are required from Tables 6 and 8.

In addition, Stanley has established management criteria for the chemical substances contained in products which suppliers must comply with.

If the customers to which Stanley delivers its products submit management criteria for the chemical substances contained in our products, then we must comply with these as well.

1) Compliance with the Stanley Product Chemical Substance Management Standard (SPCS)

- The chemical substances contained in the raw materials, parts, products, sub-materials (when these are affixed to products), and packaging materials (hereinafter referred to as “articles”) procured by Stanley, as well as the chemical substances used in the manufacturing stage, are managed by being classified as either “Prohibited (with exemptions)”, “Scheduled to be prohibited,” or “Declarable” as indicated in “Table 1. Definition of control levels”. Suppliers must comply with the requirements in this standard.
- Even for those substances not classified as “Prohibited”, in cases where there are laws and regulations in a foreign country or region to which products are to be delivered (such as in cases where products are delivered overseas, etc.), then Stanley must follow the laws and regulations in question (**Separate instructions to be given by each department at Stanley**).

<Table 1. Definition of control levels>

Control levels	Definition
Prohibited	Do not include more than the standard value in delivered products. If a deadline has been specified, then the substance cannot be included in the delivered goods in excess of the standard value on or after the deadline. If a prohibited substance (by-product) classified as Category I Specified Chemical Substances under Japan’s Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., is unintentionally contained, Stanley will discuss with our suppliers to determine the necessary actions to be taken.
Exemptions	The inclusion of the substance in delivered goods is not prohibited, but only for specific uses. Cases of intentional containment where the substance is included over and above the allowable concentration as an exception must be treated as a case of containment and reported. If an exemption end date has been stipulated, this must be escalated to Stanley before said end date, and a changeover date must be determined by consultations between both parties and the changeover must be completed by this date.
Scheduled to be prohibited	For substances approaching the period from which they will be prohibited, the changeover must be completed by the deadline. In addition, if an exemption end date has been stipulated, this must be escalated to Stanley before said end date, and a changeover date must be determined by consultations between both parties and the changeover must be completed by this date.
Declarable	When substances are intentionally contained within delivered goods, this must be reported to Stanley. Cases of non-intentional containment over and above the allowable concentration, such as with impurities or the like, must also be reported.

- 2) Instructions for compliance with this standard in drawings
- Stanley includes the statement, “The latest version of the Stanley Product Chemical Substance Management Standard shall be satisfied,” in all of our drawings and specifications provided to our suppliers and instructs said suppliers to comply with this standard.
In addition, if the management criteria for chemical substances in products from customers are more stringent, then Stanley will submit said management criteria from our customers and include the statement, “The latest version of our customer’s management criteria for chemical substances in products shall be satisfied.”
If drawings and specifications do not contain the statements listed above, then suppliers must comply with this standard.
- 3) Establishment of the Chemical Substance Management System (CMS)
- According to both domestic legal regulations and those of other countries as well, the chemical substances contained in products must be managed.
In order to comply with these requirements, each company has to carry out “appropriate and effective management” regarding the chemical substances contained in products through their supply chains.
- As such, suppliers must establish and improve CMS according to “Guidelines for the Management of Chemicals in Products Annex Check Sheet (latest version)” issued by JAMP.
- Progress reports on the CMS must be made once a year according to the “Guidelines for the Management of Chemicals in Products Annex Check Sheet (latest version)” and submitted together with a self-evaluation (to be stored for a period of three years) when requested by Stanley.
Suppliers that function as trading companies are instructed to perform self-evaluations (to be stored for a period of three years) once a year on the manufacturers of delivered articles according to the “Guidelines for the Management of Chemicals in Products Annex Check Sheet (latest version)” and submit these when requested by Stanley.
 - Based upon the evaluation results by Stanley and requests from our customers, on-site inspections and audits of manufacturing processes may be required.
- 4) Surveys of and reports on chemical substances contained in products
- Suppliers must survey the information on chemical substances in products with respect to the products, parts, materials, sub-materials, packaging materials, and so forth supplied to Stanley based on the Stanley Product Chemical Substance Management Standard and other documents and comply with requests to report this. The submission forms are based on those in “Table 2. Submission forms for information on chemical substances contained in products,” and will be designated when the survey is requested.
Although the tentative use of non-use certificates without data (IMDS, JAPIA Standard Data Sheet, chemSHERPA-AI/CI) is permitted, the final response shall include data.
Moreover, in some cases responses can be submitted via a different form (e.g., composition table).
 - The latest versions of each form and their input fields can be obtained and referenced from the URLs in Table 2.
 - Suppliers must report to Stanley immediately when it has been confirmed that prohibited substances are contained within goods delivered to Stanley or articles that are scheduled to be delivered.
 - In some cases, we may share information submitted to Stanley internally within the company and use it to manage chemical substances at our company and to comply with investigations from our customers. In addition, we may also disclose it to third parties as information on Stanley products for the sake of legal compliance.

<Table 2. Submission forms for information on chemical substances in products>

Submission form	Submission standards		Remarks
	Substance and mixture	Article	
(a) IMDS	○ (Automobile equipment)	○ (Automobile equipment)	https://www.mdsystem.com/imdsnt/startpage/index.jsp Send IMDS data to Stanley ID (7255) and email the person in charge of requests about the data submission.
(b) JAPIA Standard Material Datasheet	◆ (Automobile equipment)	◆ (Automobile equipment)	https://www.japia.or.jp/work/kankyou/japiasheet/
(c) chemSHERPA AI	—	○ (Electronic equipment)	https://chemsherpa.net/tool
(d) chemSHERPA CI	○ (Electronic equipment)	—	https://chemsherpa.net/tool
Certificate of the Non-Use of Prohibited Substances	◆	◆	Form-1 *Although tentative use is permitted, the final response shall include data (e.g., (a), (b), (c), (d), composition table).
Analysis data	◆	◆	Notification of targeted articles and analysis methods will be sent separately.

○ : Generally required (to be answered by (a), (c), or (d))

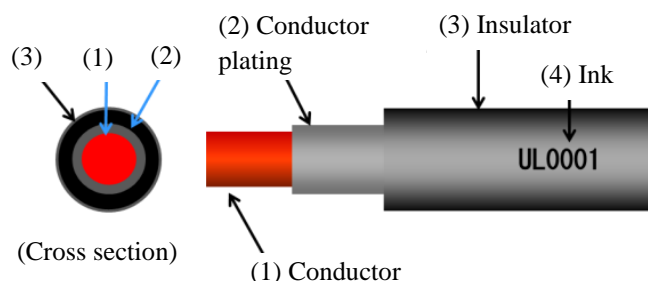
◆ : **Submit only if requested by Stanley**

- : Submission not required

5) Calculating the containment concentration

- The concentration of prohibited substances shall be calculated for each “homogeneous material”. The content concentration of each homogeneous material used in the product shall be less than the standard value. A specific example of a homogeneous material is shown in Fig. 1.
- The denominator in the concentration calculation is defined as the “Mass of the homogeneous material,” while the numerator is defined as the “Mass of the regulated substance contained in the homogeneous material.” But for metallic compounds, this is to be calculated by converting this to the weight of just the metallic components.

<Fig. 1. Specific examples of a homogeneous material>



[Example for the % of DEHP contained in an insulator]

$$\% \text{ of DEHP contained} = \frac{\text{Amount of DEHP contained}}{\text{Gross mass of (3) Insulator}}$$

6) Managing information on changes

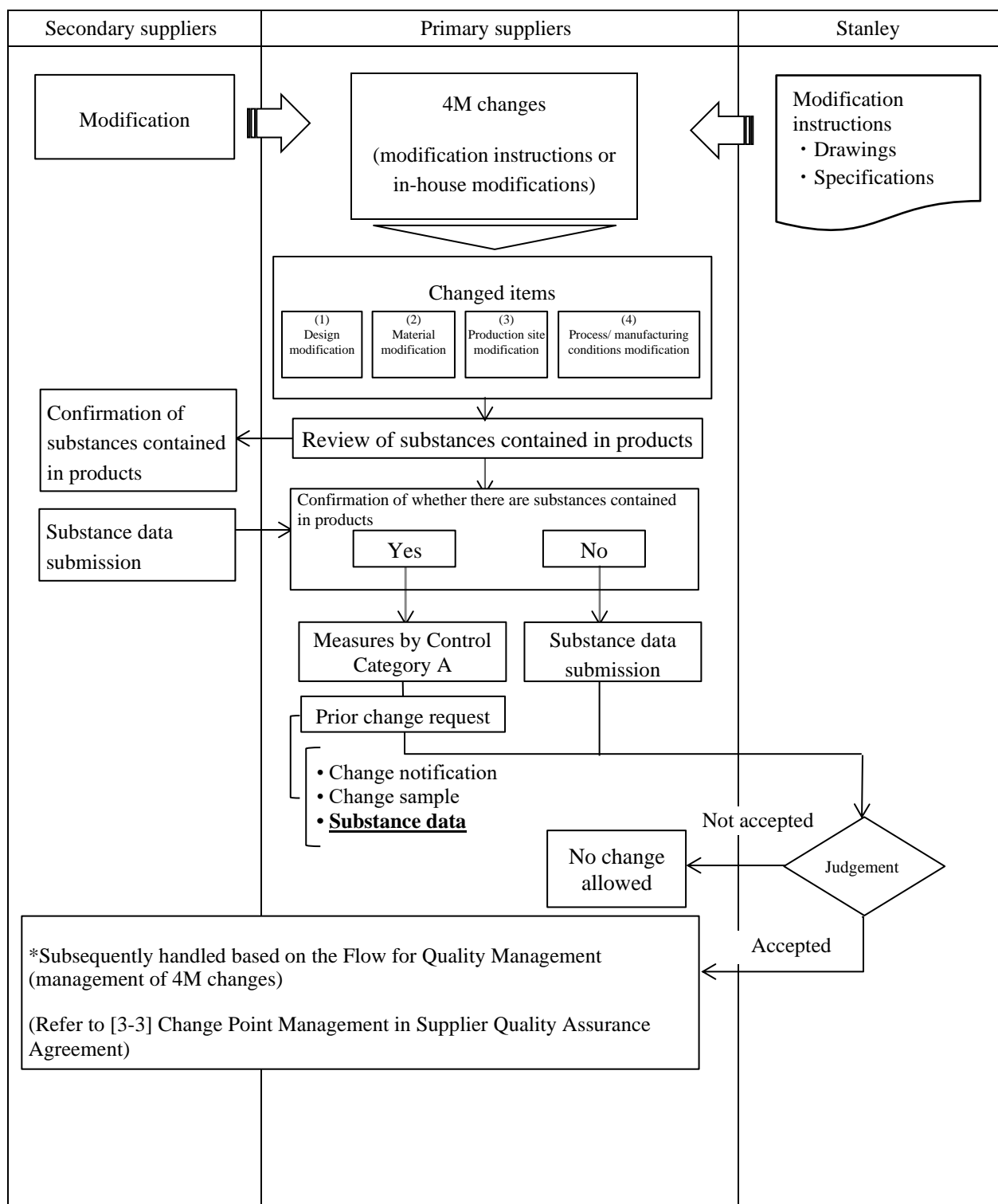
When it has come to light that there have been any of the following changes to the information on chemical substances contained in products (submission forms (a) - (d)), suppliers must immediately revise the applicable submission form and convey the information to the department in charge of this at Stanley.

- (1) When controlled substances (such as SVHC) are newly added via legal revisions or the like
- (2) When errors in the details of the information conveyed (amount of substances contained) comes to light
- (3) When there have been changes to the details of the information conveyed from upstream companies (your suppliers).
- (4) When 4M changes have occurred. In cases where, regardless of the control levels, the changes fall under the category of: (1) design modification, (2) material modification, (3) production site modification, or (4) process/manufacturing conditions modification, we ask that another survey or revisions be performed, and that the data on the substances be resubmitted. If there are any changes to the chemical substances contained in products, we ask that you handle these henceforth as Control Category A. Flow for surveying chemical substances in products (when there are 4M changes)).

7) Certificate of the Non-Use of Prohibited Substances

- Regardless of the control levels, Stanley may require the submission, “Form 1: Certificate of the Non-Use of Prohibited Substances” to obtain guarantees that no prohibited substances are used in a product.

<Fig. 2: Flow for surveying chemical substances in products (when there are 4M changes)>



8) Other Compliance Items

(1) Request for the submission of data

The data to be submitted in Table 3 must be submitted within the specified time limit.

Stanley will provide notice regarding the forms to be submitted for (1), (2), and (3) when it requests their submission.

(2) Handling of information

The information obtained will be shared internally within Stanley.

As a general rule, this information will not be disclosed externally, but when it must be disclosed this will be handled via consultations.

< Table 3. List of data to be submitted >

Initiatives	Data to be submitted	Time to submit				Remarks
		Legal revisions (when a controlled substance is added *2)	When there are 4M changes	Individual request	When initiating a new transaction	
Compliance with the management criteria for chemical substances in products	(1)“Guidelines for the Management of Chemicals in Products Annex Check Sheet (latest version)” issued by JAMP			○	○	<ul style="list-style-type: none"> • Applies to all suppliers • Obtain via the JAMP website https://chemsherpa.net/docs/guidelines
	(2)Data on the chemical substances in products	○	○ (*) 1	○		<ul style="list-style-type: none"> • Can be obtained from the URLs in Table 2.
	(a)IMDS					
	(b)JAPIA Standard Material Datasheet					
	(c)chemSHERPA AI (*2)					
	(d)chemSHERPA CI (*2)					
	(3)Certificate of the Non-Use of Prohibited Substances (Form-1)			○		
	(4)Analysis data			○		

*1 Cases where, regardless of the control levels, the 4M changes fall under the category of (1) design modification, (2) material modification, (3) production site modification, and (4) process/manufacturing conditions modification.

*2 If the chemSHERPA substance list is revised

4. Chemical Substances in Products

1) Laws and ordinances of major countries

The laws and ordinances of major countries are shown in Table 4. These laws and ordinances must be complied with when it comes to prohibited substances and the control scope must be clarified.

<Table 4. Laws and ordinances of major countries>

Region	Law/ordinance	Regulations/prohibited substances
Japan	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	Category I specified chemical substances from Japan's Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. https://www.meti.go.jp/policy/chemical_management/kasinhou/about/classes1specified_index.html
Europe	EU REACH Regulation	EU REACH Regulation (EC) No 1907/2006 https://echa.europa.eu/information-on-chemicals
	EU ELV Directive	EU ELV Directive 2011/37/EU https://environment.ec.europa.eu/topics/waste-and-recycling/end-life-vehicles_en
	EU RoHS Directive	EU RoHS Directive 2011/65/EU https://environment.ec.europa.eu/topics/waste-and-recycling/rohs-directive_en

2) Automobile products

(1) Control scope

The control scope for the chemical substances in automobile products (including automobile electric/electronic products) required by Stanley is shown in Table 5.

<Table 5. Control scope for automobile products>

Control scope	Regulations
GADSL	Manufacturers of automobiles, automotive parts, and chemicals from Japan, the US, and Europe must perform joint reviews and refer to the Global Automotive Declarable Substance List regarding the substances contained in the raw materials, parts, and so forth in automobiles. They must confirm the text of the relevant laws and regulations (latest versions). https://www.gadsl.org/

(2) Control levels

The control levels of “Prohibited,” “Scheduled to be prohibited,” and “Declarable” for the controlled criteria are shown in Table 6.

The declarable substances found in vehicle materials and parts are displayed as either “P” or “D” as described below.

<Table 6. Control levels>

Control levels	Targeted substances
Prohibited	Of the chemical substances stipulated in the GADSL, those chemical substances from Categories P and D/P that correspond to P and chemical substances for which a deadline has been designated that have already exceeded their end date
	Four chemical substances stipulated in Annex 2 as exemptions from specially controlled substances (lead, mercury, hexavalent chromium, and cadmium), and chemical substances that have already exceeded their end date
	Chemical substances in Annex 1 that fall under the category of specially controlled substances, and chemical substances for which a deadline has been designated that have already exceeded their end date
Scheduled to be prohibited	Of the chemical substances stipulated in the GADSL, those chemical substances from Categories P and D/P that correspond to P and chemical substances for which a deadline has been designated that are approaching their end date henceforth *In the case of those for which a deadline has been designated, changeover must be completed one year before their end date
	Chemical substances stipulated in Annex 1 as specially controlled substances for which a deadline has been designated that are approaching their end date henceforth
	Four chemical substances stipulated in Annex 2 as exemptions from specially controlled substances (lead, mercury, hexavalent chromium, and cadmium), and chemical substances that are approaching their end date henceforth
Declarable	Of the chemical substances stipulated in the GADSL, those chemical substances from Categories D and D/P that correspond to D
	Of the substances stipulated as Specially Controlled Substances in Annex 1, those substances from Categories D and D/P that correspond to D

[Explanation of categories]

P (Prohibited) : Substances that are prohibited and must not be included in products pursuant to laws/regulations.

D (Declarable) : Substances that must be reported if they are included in a product.

D/P : Substances that may be classified as either P or D depending on the purpose for which they are used or the requests of the supplier.

(3) Exemptions from Specially Controlled Substances (Automobile Products) Shown in Annex 2.

3) Electric/electronic products

(1) Control scope

The control scope for the chemical substances in electric/electronic products (excluding automobile products) required by Stanley is shown in Table 7.

<Table 7. Control scope for electric/electronic products>

Control scope	Regulations
Controlled substances pursuant to chemSHERPA	Category I specified chemical substances from Japan's Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.
	(U.S.) Toxic Substances Control Act (TSCA) (Article 6)
	(EU) ELV Directive
	(EU) RoHS Directive Annex II
	(EU) POPs Regulation Annex I
	(EU) REACH Regulation - Candidate List of SVHC for Authorization (Candidate List of Substances of Very High Concern for Authorization) and Annex XIV (Authorized Substances)
	(EU) REACH Regulation - Annex XVII (Restricted Substances)
	(EU) Medical Device Regulation (MDR) - Annex I 10.4 Substances
	(China) Administrative Measures on Restricted Use of Hazardous Substances in Electrical and Electronic Products
	Global Automotive Declarable Substance List (GADSL)
	IEC 62474 DB Declarable substance groups and declarable substances

(2) Control levels

The control levels of "Prohibited," "Scheduled to be prohibited," and "Declarable" for chemical substances are shown in Table 8.

<Table 8. Control levels>

Control levels	Targeted substances
Prohibited	Ten chemical substances stipulated in RoHS (lead, mercury, hexavalent chromium, cadmium, polybrominated biphenyls, polybrominated diphenyl ether, bis(2-ethylhexyl) phthalate, dibutyl phthalate, butyl benzyl phthalate, diisobutyl phthalate), and chemical substances that have already exceeded their end date via exemptions
	Chemical substances that fall under the category of Prohibited in Annex 3 as specially controlled substances
Scheduled to be prohibited	Chemical substances exempted from the ten chemical substances stipulated in the RoHS for which a deadline has been designated that are approaching their end date henceforth * In the case of those for which a deadline has been designated, changeover must be completed one year before their end date
	Chemical substances that fall under the category of scheduled to be prohibited in Annex 3 as specially controlled substances
Declarable	Chemical substances falling under the category of Declarable in Annex 3 as specially controlled substances

(3) Exemptions from Annex III of the RoHS Directive

Shown in Annex 4.

For details, check the text of the relevant laws and ordinances listed below (latest versions).
https://environment.ec.europa.eu/topics/waste-and-recycling/rohs-directive_en

(4) Exemptions from Annex IV of the RoHS Directive

Shown in Annex 5.

For details, check the text of the relevant laws and ordinances listed below (latest versions).
https://environment.ec.europa.eu/topics/waste-and-recycling/rohs-directive_en

4) Packaging materials

(1) Control scope

The control scope for the chemical substances in packaging materials required by Stanley is shown in Table 9.

<Table 9. Control scope for packaging materials>

Control scope	Regulations
Special heavy metals	<ul style="list-style-type: none">• EU Packaging and Packaging Waste Directive 94/62/EC• US regulations on heavy metals in packaging materials (TIP)
Phthalate esters	<ul style="list-style-type: none">• Directive 2015/863/EU on the authorization of the European Commission revising EU RoHS Directive 2011/65/EU• EU REACH Regulation (EC) No 1907/2006 ANNEX XVII (restricted substances)
Mineral oil	French domestic regulation on mineral oil

(2) Control levels

The control level of “Prohibited” chemical substances is shown in Table 10.

<Table 10. Control levels>

Control levels	Targeted substances
Prohibited	Chemical substances falling under the category of Prohibited in Annex 6 as specially controlled substances

Revision History

Ver.	No. Date revised	Major revisions
(Ver. 1)	September 2, 2019	<ul style="list-style-type: none"> The requirements pertaining to controlling chemical substances in products were removed from the Green Procurement Guidelines and enacted in the form of the Stanley Product Chemical Substance Management Standard.
(Ver. 2)	September 22, 2020	<ul style="list-style-type: none"> “AIS” and “MSDSplus” were deleted from “2. Definitions of Terminology” “AIS” and “MSDSplus” were deleted from Table 2 and the descriptions of IMDS and JAMA in the table were changed “AIS” and “MSDSplus” were deleted from Table 3 Contents of exemptions and details for deadline designation in Table 6 were changed Details for deadline designation in Table 8 were changed The name and contents of Annex 2 were changed The contents of Annexes 1, 2, 3, 4, 5 and 6 were changed
Ver. 3	September 28, 2021	<ul style="list-style-type: none"> Changed “JAMA/JAPIA Standard Material Datasheet” to “JAPIA Standard Material Datasheet” in 8) of “Definition of Terminology” and Table 2/Table 3 Modified wording in 6) of “3. Compliance Items” and Fig. 2 Added content for “Declarable” in Table 6 Added “EU Medical Device Regulation” under “Rules” in Table 7
Ver. 4	December 1, 2022	<p>Table of Contents, 3. Compliance Items 4) Table 2, 7), 8) Table 3</p> <p>Changed “Certificate of the Non-Containment” to “Certificate of the Non-Use”</p> <p>3. Compliance Items 3), 8) Table 3</p> <p>Changed “Check Sheet specified by Stanley” to “Check Sheet issued by JAMP”</p> <p>3. Compliance Items 4), 4) Table 2</p> <p>Added the wording “Certificate of the Non-Use”</p> <p>4. Chemical Substances in Products 2), 3)</p> <p>Added content</p>
Ver. 5	December 25, 2023	<ul style="list-style-type: none"> 4) of “2. Terminology”, 1) and 5) of “3. Compliance items” “Threshold Value” → “Standard Value” 1) of “3. Compliance items” Added content 1) of “4. Chemical substances in products” URL correction 4) of “4. Chemical substances in products” Added mineral oil
Ver. 6	December 2, 2024	<ul style="list-style-type: none"> 3. Compliance Items 1) Compliance with the Stanley Product Chemical Substance Management Standard (SPCS) Table 2 of “(4) Surveys of and reports on chemical substances contained in products” Table 3 of “(1) Request for the submission of data” under “(8) Other Compliance Items” Modified wording 4. Chemical Substances in Products Table 7 of “(1) Control scope” under “(3) Electric/electronic products” Modified wording

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Ver. 6 December 2, 2024

● Details of revisions

Main text

- 3. Compliance Items

1) Compliance with the Stanley Product Chemical Substance Management Standard (SPCS) (p3)

Modified wording in Table 2 of “4) Surveys of and reports on chemical substances contained in products” (p5)

Modified wording in Table 3 of “(1) Request for the submission of data” under “8) Other Compliance Items” (p8)

Modified wording in Table 7 of “(1) Control scope” under “3) Electric/electronic products” in “4. Chemical Substances in Products” (p11)

*Strengthened management

Annex 1. Specially Controlled Substances (Automobile Products)

Updated any substances with disparities from the GADSL (p14-32)

*Revised in-house requirements and strengthened management based on the February 2024 version of GADSL

Annex 2. Exemptions from Specially Controlled Substances (Automobile Products)

Revised content (p33-35)

*Strengthened management

Annex 3. Specially Controlled Substances (Electric / Electronic Products)

- Revised content of “1. Prohibited” - Added 4 substance groups (p36-48)

- Revised content of “3. Declarable” - Added 11 substance groups (p49-56)

*Strengthened management

Annex 4. Exemptions from Annex III of the EU RoHS Directive

Revised content (p57-63)

*Reflected revised regulations, strengthened management

Annex 5. Exemptions from Annex IV of the EU RoHS Directive

Revised content (p64-67)

*Reflected revised regulations, strengthened management

Annex 6. Specially Controlled Substances (Packaging Materials)

Revised content (p68-69)

*Strengthened management

Annex 1. Specially Controlled Substances (Automobile Products)

Substances for which there are differences with the August version of the FY2024 GADSL are indicated below. (The details of GADSL shall be complied with for substances not shown here.)

GADSL No	Substance	CAS RN	GADSL control level	Stanley control level	Stanley's criteria		Major related laws, regulations, etc. (Reference)
			Category	Category	Standard value	Main uses	
18	Arsenic and its compounds, all members	12006-15-4 3687-31-8 7784-40-9 10102-48-4 7645-25-2 10031-13-7 7784-37-4 53404-12-9 58-36-6	D/P	D/P	Intentional use prohibited • Use prohibited when greater than 0.01% by weight • Threshold for metals: 0.05% by weight	Fouling prevention for ship hulls and submerged objects, rot prevention for wood materials All uses (excluding semiconductors/LEDs, lead batteries, copper in PCBs, titanium gold plating)	EU-R 1907/2006 Annex XVII
		7778-39-4 53404-12-9 1327-53-3	D/P	D/P	Intentional use prohibited	All materials manufactured in the EU using this substance without REACH authorization	EU-R 1907/2006 Annex XIV
19	Asbestos fibers, all members	77536-66-4 12172-73-5 77536-67-5 12001-29-5 12001-28-4 77536-68-6	P	P	Use prohibited when greater than 0% by weight (unintentional use also prohibited)	All uses	EU-R 1907/2006 Annex XVII
20	Asbestos minerals, all members	1332-21-4 13768-00-8 14567-73-8 17068-78-9 12172-67-7 132207-32-0	D/P	P	Use prohibited when greater than 0% by weight (unintentional use also prohibited)	All uses	EU-R 1907/2006 Annex XVII
46	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	D/P	D/P	Use prohibited when greater than 0% by weight	All uses	EU-R 1907/2006 Annex XIV EU POPs (projected)
61	Cadmium and its compounds, all members	12656-57-4 58339-34-7 12626-36-7	P	P	(1) Use prohibited when greater than 0.01% by weight (2) Use prohibited when greater than 0.002% by weight	(1) All uses of cadmium except the following (2) Button cells and batteries for driving, starting, ignition, and lighting	ELV 2006/66/EC
		CAS RN list *1	D/P	D/P			
62	Chlorinated hydrocarbons, selected	71-55-6	P	P	Use prohibited when greater than 0% by weight (unintentional use also prohibited)	All uses	EU-R 1005/2009
63	Chlorinated or brominated Dibenzo-p-dioxins or Dibenzofurans, all members	CAS RN list *2	P	P	Use prohibited when greater than 0% by weight (unintentional use also prohibited)	All uses	POPs Convention

GADSL N o	Substance	CAS RN	GADSL control level	Stanley control level	Stanley's criteria		Major related laws, regulations, etc. (Reference)
			Category	Category	Standard value	Main uses	
64	Chlorinated paraffins, short & medium chain length (SCCP, MCCP), all members: Note that the use of specific CAS numbers for these substances differs throughout the world. Example CAS numbers are provided below; however, other CAS numbers may be used that are not specific to chain length. Therefore, please consult your MSDS and supplier to determine product-specific chain length.	108171-26-2 85535-84-8 71011-12-6	P	P	Intentional use prohibited (unintentional usage in mixtures is prohibited when greater than or equal to 1% by weight and in molded parts when greater than or equal to 0.15% by weight)	All uses	EU 2015/2030 EU 519/2012 POPs Convention Japan Chemical Substance Control Law
		CAS RN list * 3	P	P	Usage in mixtures is prohibited when the concentration of short-chain chlorinated paraffins in medium-chain and other classes of chlorinated paraffins is greater than or equal to 1% by weight and in molded parts when greater than or equal to 0.15% by weight)	All uses including short-chain chlorinated paraffins (C10-13) *Short-chain chlorinated paraffins (C10-13), which are by-products of medium-chain and other classifications of chlorinated paraffins, may be present in trace amounts.	
		84082-38-2 85422-92-0 85681-73-8 85536-22-7 68920-70-7 97659-46-6 84776-06-7 97553-43-0 61788-76-9 63449-39-8	D/P	D/P			
		85535-85-9	D	D/P			
74	Cyclododecane, hexabromo- (HBCD)	25637-99-4 3194-55-6 134237-50-6 134237-51-7 134237-52-8	P	P	• Intentional use prohibited • Unintentional use prohibited when greater than 0.0075% by weight	All uses	EU 2019/1021 POPs Convention Japan Chemical Substance Control Law EU POPs (projected)
		4736-49-6 65701-47-5 138257-17-7 138257-18-8 138257-19-9 169102-57-2 678970-15-5 678970-16-6 678970-17-7	D/P	D/P			
92	Diorganotin compounds	Dibutyltin compounds, CAS RN list * 4	D/P	D/P	0.1% (use prohibited at tin-equivalent weight concentrations in molded products or parts)	All uses	EU-R 1907/2006 Annex XVII
		Diocetyl tin compounds, CAS RN list * 5	D/P	D/P		Parts that come in regular contact with skin	
102	Dodecachloropentacyclo 1, 3, 4-Metheno-1H-cyclobuta(cd)pentalene, Mirex	2385-85-5	P	P	Use prohibited when greater than 0% by weight (unintentional use also prohibited)	All uses	POPs Convention Japan Chemical Substance Control Law
103	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.1*6,9*.0*2,13*.0*5,10*]octadeca-7,15-diene, all members(Dechlorane Plus)	13560-89-9 135821-74-8 135821-03-3	P	D/P	Intentional use prohibited (unintentional use also prohibited when greater than 0.0001% by weight (1 ppm))	All uses	POPs Convention EU POPs (projected)
120	Hexachlorobenzene	118-74-1	D/P	P	Intentional use prohibited(Unintentional use prohibited when greater than 0.001% by weight)	All uses	Japan Chemical Substance Control Law
121	Hexachloro-1,3-butadiene (HCBD)	87-68-3	P	P	Use prohibited when greater than 0% by weight (unintentional use also prohibited)	All uses	EU 2019/1021

GADSL N o	Substance	CAS RN	GADSL control level	Stanley control level	Stanley's criteria		Major related laws, regulations, etc. (Reference)
			Category	Category	Standard value	Main uses	
122	Hexachlorocyclohexane, gamma isomer, Lindane	58-89-9	D	P	Use prohibited when greater than 0% by weight (unintentional use also prohibited)	All uses	POPs Convention Japan Chemical Substance Control Law
127	Hydrobromofluorocarbons (HBFC's), all members	CAS RN list * 6	P	P	Intentional use prohibited	All uses	EU 2024/590
128	Hydrochlorofluorocarbons (HCFC's), all members	127564-92-5 134190-52-6 127404-11-9 127564-83-4 116890-51-8	P	P	Intentional use prohibited	All uses	EU 2024/590
		CAS RN list * 7	D/P	P			
129	Hydrofluorocarbons (HFC's), saturated, all members	CAS RN list * 8	D/P	D/P	Intentional use prohibited	All uses	EU-R 842/2006
135	Lead and its compounds, all members	598-63-0 1319-46-6 7446-14-2 15739-80-7	D/P	D/P	Use prohibited when greater than 0% by weight (unintentional use also prohibited)	Lead sulfate and lead carbonate in coatings	EU-R 1907/2006 Annex XVII
		12069-00-0	P	P	Use prohibited when greater than 0.1% by weight	All uses of lead	ELV
		CAS RN list * 9	D/P	D/P			
137	Mercury and its compounds, all members	CAS RN list * 10	D/P	D/P	Intentional use prohibited	All uses of mercury except the following	ELV EU-R 1907/2006 Annex XVII
					Use prohibited when greater than 0.1% by weight	Mercury at or below restricted levels allowed by GADSL	
					Use prohibited when greater than 0.1% by weight	Headlight discharge lamps	
					Use prohibited when greater than 0% by weight	Switches and relays	Japanese Domestic Law
					Use prohibited when greater than 0% by weight	Fluorescent lights	
					Use prohibited when greater than 0% by weight	High-pressure mercury lamps for general lighting	
					Use prohibited when greater than 0.0005% by weight	Batteries	(EU) 2023/1542
		5902-76-1	P	P	Use prohibited when greater than 0% by weight	All uses	Japan Chemical Substance Control Law
147	Monomethyldibromodiphenylmethane	99688-47-8	P	P	Intentional use prohibited	All uses	EU-R 1907/2006 Annex XVII
148	Monomethyldichlorodiphenylmethane	81161-70-8	P	P	Intentional use prohibited	All uses	EU-R 1907/2006 Annex XVII
149	Monomethyltetrachlorodiphenylmethane	76253-60-6	P	P	Intentional use prohibited	All uses	EU-R 1907/2006 Annex XVII
170	Pentachlorobenzene	608-93-5	P	P	Use prohibited when greater than 0% by weight (unintentional use also prohibited)	All uses	POPs Convention

GADSL N o	Substance	CAS RN	GADSL control level	Stanley control level	Stanley's criteria		Major related laws, regulations, etc. (Reference)
			Category	Category	Standard value	Main uses	
171	Pentachlorophenol (PCP) and its salts and esters, all members	5902-76-1 87-86-5 7778-73-6 131-52-2 2917-32-0	P	P	Use prohibited when greater than 0% by weight (Unintentional use prohibited when greater than 0.0005% by weight)	All uses	Japan Chemical Substance Control Law
179	PFOA and its salts	CAS RN list * 11	P	P	Use prohibited when greater than 25 ppb (0.0000025% by weight)	All uses	EU 2019/1021, EU 2020/784 Japan Chemical Substance Control Law
					Intentional use prohibited (Unintentional use is also prohibited when greater than 1000 ppb in one or a combination thereof.)	All uses	EU 2019/1021, EU 2020/784 Japan Chemical Substance Control Law
180	PFOA Related Compounds	CAS RN list * 12	P	P	Intentional use prohibited (Unintentional use is also prohibited when greater than 1000 ppb in one or a combination thereof.)	All uses	EU 2019/1021, EU 2020/784
181	Other PFOA Related Compounds	CAS RN list * 13	P	P	Intentional use prohibited (Unintentional use is also prohibited when greater than 1000 ppb in one or a combination thereof.)	All uses	EU 2019/1021, EU 2020/784
183	PFCAs (C9-C14) and their salts	CAS RN list * 14	P	P	Use prohibited when greater than 25 ppb in one or a combination thereof.	All uses	EU 2021/1297
184	PFCAs (C9-C14) related substances	CAS RN list * 15	P	P	Use prohibited when greater than 260ppb in one or a combination thereof.	All uses	EU 2021/1297
185	PFOS, Perfluorooctane sulfonates C8F17SO2X (X = OH, Metal salt, halide, amide, and other derivatives including polymers), all members	1763-23-1 45298-90-6 307-35-7 306975-62-2 2991-51-7 2795-39-3 29081-56-9 29457-72-5 56773-42-3	P	P	Use prohibited when greater than 0% by weight (unintentional use also prohibited)	All uses	EU 2019/1021 POPs Convention Japan Chemical Substance Control Law
187	PFHxS and its salts	355-46-4 68259-08-5 3871-99-6	P	P	Use prohibited when greater than 25ppb by weight (0.0000025wt%)	All uses	POPs Convention
188	PFHxS related substances	CAS RN list * 16	P	P	Use prohibited when greater than 1000ppb (0.0001wt%) in one or a combination thereof.	All uses	POPs Convention
194	Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)- (UV 320)	3846-71-7	P	P	Intentional use prohibited (unintentional use also prohibited)	All uses	Japan Chemical Substance Control Law
206	Phenol, 2,4,6-tris(1,1-dimethylethyl)-	732-26-3	D/P	D/P	Intentional use prohibited (unintentional use also prohibited)	All uses	Japan Chemical Substance Control Law
218	Phthalates, selected	85-68-7 117-81-7 84-74-2 84-69-5	D/P	P	Use prohibited when greater than 0.1% by weight (total for one of four substances or total for multiple substances)	Use prohibited (P) in both mass-produced products and spare parts. [Four wheel vehicle products] Use prohibited (P) in both mass-produced products and spare parts. However, this does not apply to older model products and spare parts for vehicles whose mass production ends before January 7, 2024.	EU-R 1907/2006 Annex XVII

GADSL N o	Substance	CAS RN	GADSL control level	Stanley control level	Stanley's criteria		Major related laws, regulations, etc. (Reference)
			Category	Category	Standard value	Main uses	
221	Polybrominated biphenyls (PBB), all members	36355-01-8	P	P	Use prohibited when greater than 0% by weight (unintentional use also prohibited)	All uses	POPs Convention Japan Chemical Substance Control Law
		CAS RN list * 17	P	P	• Intentional use prohibited • Unintentional use prohibited when greater than 0.1% by weight	All uses	EU-R 1907/2006 Annex XVII
222	Polybrominated diphenyl ethers (PBDE), all members	101-55-3 2050-47-7 49690-94-0 32536-52-0 117964-21-3 63936-56-1	P	P	• Intentional use prohibited • Unintentional use prohibited when greater than 0.1% by weight	All uses	china ELV
		5436-43-1 60348-60-9 68631-49-2 207122-15-4 446255-22-7 207122-16-5 109945-70-2 1201677-32-8 145538-74-5 116995-33-6	P	P	(1)•Intentional use prohibited •Unintentional use prohibited when greater than 0.05% by weight (total of all substances) (2)•Intentional use prohibited •Unintentional use prohibited when greater than 0.001% by weight	(1)All uses (total when in mixtures/molded products) (2)All uses (alone when in homogeneous material)	EU-R 1907/2006 Annex XVII POPs Convention
		1163-19-5	D/P	P			
		32534-81-9 36483-60-0 68928-80-3 40088-47-9	P	P	Use prohibited when greater than 0% by weight (unintentional use also prohibited)	All uses	Japan Chemical Substance Control Law
224	Polychlorinated biphenyls (PCB), all members	CAS RN list * 18	P	P	Use prohibited when greater than 0.0002% by weight (2 ppm)	All uses (However, it can be used only when BAT application for PCB, which is a by-product of the parts of equipment destined for Japan, is applied to the three ministries and approved.)	EU-R 1907/2006 Annex XVII POPs Convention Japan Chemical Substance Control Law
225	Polychlorinated naphthalenes, all members	70776-03-3 1321-65-9 1321-64-8	P	P	Use prohibited when greater than 0% by weight (unintentional use also prohibited)	All uses	Japan Chemical Substance Control Law
227	Polycyclic aromatic hydrocarbons (PAH; PCAH), selected	56-55-3 205-99-2 50-32-8 192-97-2 205-82-3 207-08-9 218-01-9 53-70-3	D/P	D/P	Use prohibited • Benzo[a]pyrene alone: When greater than 1 ppm • Total PAH: When greater than 10 ppm	Extender oils for tire manufacturing	EU-R 1907/2006 Annex XVII
					Use prohibited when greater than 0.0001% by weight	Rubbers, plastics, or coatings used in repeated and direct contact with skin, either for long or short periods, and non-clothing fiber products used contact with skin, etc.	
256	Sulfur hexafluoride	2551-62-4	D/P	P	Intentional use prohibited	All uses	EU 2024/573
266	Tetrafluoro-methane	75-73-0	D/P	P	Intentional use prohibited	All uses	EU-R 842/2006
278	Triorganotin compounds, all members	CAS RN list * 19	P	P	Intentional use prohibited	All uses	EU-R 1907/2006 Annex XVII
		56-35-9	P	P	Use prohibited when greater than 0% by weight (unintentional use also prohibited)	All uses	Japan Chemical Substance Control Law
—	Bis(2-methoxyethyl) ether	111-96-6	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	1,2-Dichloroethane	107-06-2	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII

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			Category	Category	Standard value	Main uses	
—	Aniline-formaldehyde polymer	25214-70-4	—	D	Report if greater than 0%	All uses	REACH-SVHC
—	N,N'-Ditolyl-p-phenylenediamine	27417-40-9	—	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
—	1,4-Benzenediamine, N-(dimethylphenyl)-N'-(methylphenyl)- (9CI)	70290-05-0	—	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
—	1,4-Benzenediamine, N,N'-bis(dimethylphenyl)- (9CI)	28726-30-9	—	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
—	4,4'-Methylenebis[2-chloroaniline]	101-14-4	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Benzenethiol, 2,3,4,5,6-pentachloro-	133-49-3	—	D	Report if greater than 0%	All uses	TSCA
—	Asbestos, Crocidolite	132207-33-1	—	D	Report if greater than 0%	All uses	Stanley Company Policy
—	1-Butanamine, N,N-dibutyl	102-82-9	—	D	Report if greater than 0%	All uses	Stanley Company Policy
—	Phenylmercury octanoate	13864-38-5	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Formic acid	64-18-6	—	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
—	Benzyl-alcohol	100-51-6	—	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
—	Ethanol	64-17-5	—	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
—	Furfuryl-alcohol	98-00-0	—	D	Report if greater than 0%	All uses	US California Prop 65
—	Aldrin	309-00-2	—	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
—	Cyclododecane	294-62-2	—	D	Report if greater than 0%	All uses	REACH-SVHC
—	Cyclohexane	110-82-7	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	4,4'-Thiodianiline	139-65-1	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII

GADSL N o	Substance	CAS RN	GADSL control level	Stanley control level	Stanley's criteria		Major related laws, regulations, etc. (Reference)
			Category	Category	Standard value	Main uses	
–	4-Chloraniline	106-47-8	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	4-Chloro-o-toluidine	95-69-2	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	4-Methoxy-m-phenylenediamine	615-05-4	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	5-Nitro-o-toluidine	99-55-8	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	[1,1'-Biphenyl]-2,4,4'-triamine	2835-69-0	–	D	Report if greater than 0%	All uses	German TRGS 614
–	Tetrasodium 5-benzamido-3-(5-(4-fluoro-6-(1-sulphonato-2-naphthylamino)-1,3,5-triazin-2-ylamino)-2-sulphonatophenylazo)-4-hydroxynaphthalene-2,7-disulphonate	85665-97-0	–	D	Report if greater than 0%	All uses	German TRGS 614
–	N-(4-(1,1,3,3-tetramethylbutyl))phenyl-1-naphthylamine	4572-51-4	–	D	Report if greater than 0%	All uses	German TRGS 614
–	2-aminonaphthalene-1-sulphonic acid	81-16-3	–	D	Report if greater than 0%	All uses	German TRGS 614
–	3,3'-dimethoxybiphenyl-4,4'-ylenediammonium dichloride	20325-40-0	–	D	Report if greater than 0%	All uses	German TRGS 614
–	Acetamide, N-(2-((2-bromo-4,6-dinitrophenyl)azo)-5-(diethylamino)phenyl)-	52697-38-8	–	D	Report if greater than 0%	All uses	German TRGS 614
–	2,4,5-Trimethylaniline	137-17-7	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	Diammonium sulfate	7783-20-2	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	2,4,5-trimethylaniline hydrochloride	21436-97-5	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	N,N'-dimethylbenzidine	2810-74-4	–	D	Report if greater than 0%	All uses	Canadain Toxic Substances Regulation
–	Benzyl chloride (alpha-chlorotoluene ; chloromethylbenzene)	100-44-7	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	Titanium dioxide	13463-67-7	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	1,3-Bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	6440-58-0	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	1,3-Benzodioxole, 5-((2-(2-butoxyethoxy)ethoxy)methyl)-6-propyl-	51-03-6	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	2-Butanone, peroxide	1338-23-4	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	3(2H)-Isothiazolone, 2-methyl-, hydrochloride	26172-54-3	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	4,4-Dimethyloxazolidine	51200-87-4	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	7a-Ethylidihydro-1H,3H,5H-oxazolo[3,4-c]oxazole	7747-35-5	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	Carbon-dioxide	124-38-9	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR

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			Category	Category	Standard value	Main uses	
–	Disilver oxide	20667-12-3	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	Nitrogen	7727-37-9	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	Octanoic-acid	124-07-2	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	Methanamine, N-methyl-, polymer with 2-(chloromethyl)oxirane	25988-97-0	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	Pyrethrins and Pyrethroids	8003-34-7	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products...	68909-20-6	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	S-[(6-Chloro-2-oxooxazolo[4,5-b]pyridin-3(2H)-yl)methyl] O,O-dimethy...	35575-96-3	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	Kieselgur	61790-53-2	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	Sulphuryl-difluoride	2699-79-8	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	Silica, amorphous	112926-00-8	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	2,3,5,6-Tetrafluorobenzyl trans-2-(2,2-dichlorovinyl)-3,3-dimethyle...	118712-89-3	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	1,1 Dichloroethylene	75-35-4	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	1,1,2,2 Tetrachloroethane	79-34-5	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	Pentachloroethane	76-01-7	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	Trichloromethane (Chloroform)	67-66-3	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	Tetrachloroethylene	127-18-4	–	D	Report if greater than 0%	All uses	K-REACH
–	1,4-Dichlorobenzene	106-46-7	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	Chloromethane	74-87-3	–	D	Report if greater than 0%	All uses	REACH PACT
–	Chlorine	7782-50-5	–	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
–	O,p'-DDT(2,2,2,4,4,5-hexachloro-1,1-diphenyl-2,2,2-trichloroethane)	789-02-6	–	D	Report if greater than 0%	All uses	Stanley Company Policy
–	1,2,4 Trichlorobenzene	120-82-1	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	1,3,5-Trichlorobenzene	108-70-3	–	D	Report if greater than 0%	All uses	REACH-SVHC
–	1,2,3-Trichlorobenzene	87-61-6	–	D	Report if greater than 0%	All uses	REACH-SVHC
–	Chlordanes	57-74-9	–	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
–	Chlordecone	143-50-0	–	D	Report if greater than 0%	All uses	POPs Convention

GADSL N o	Substance	CAS RN	GADSL control level	Stanley control level	Stanley's criteria		Major related laws, regulations, etc. (Reference)
			Category	Category	Standard value	Main uses	
—	Chloromethyl methyl ether (CMME)	107-30-2	—	D	Report if greater than 0%	All uses	Canada Toxic Substances Regulation
—	Dibutyltin S,S'-bis (isooctyl mercaptoacetate)	26636-01-1	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-methyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate	57583-34-3	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Tin, dichloro[29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, (OC-6-12)-	18253-54-8	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Ugilec 121(p,p'-dichlorodiphenyl ethane); Benzene, 1,1 -ethylidenebis(4-chloro-	3547-04-4	—	D	Report if greater than 0%	All uses	POPs Convention
—	Dicofol	115-32-2	—	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
—	Dieldrin	60-57-1	—	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
—	Dinitrotoluene	25321-14-6	—	D	Report if greater than 0%	All uses	EU-R 1272/2008 CLP
—	Endosulfan	115-29-7	—	D	Report if greater than 0%	All uses	POPs Convention
—	Endrin	72-20-8	—	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
—	2-(2-butoxyethoxy)ethanol (DEGBE)	112-34-5	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	1-Methyl-3-nitro-1-nitrosoguanidine	70-25-7	—	D	Report if greater than 0%	All uses	EU-R 1272/2008 CLP
—	Heptachlor(1,4,5,6,7,8,8a-heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindene)	76-44-8	—	D	Report if greater than 0%	All uses	POPs Convention
—	Cyclohexane, 1,2,3,4,5,6-hexachloro-(1.alpha.,2.alpha.,3.beta.,4.alpha.,5.beta.,6.beta.)-	319-84-6	—	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
—	Cyclohexane, 1,2,3,4,5,6-hexachloro-(1.alpha.,2.beta.,3.alpha.,4.beta.,5.alpha.,6.beta.)-	319-85-7	—	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
—	hexachlorocyclohexane (delta-HCH)	319-86-8	—	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
—	technical 1,2,3,4,5,6-hexachlorocyclohexane (HCH mixed isomers)	608-73-1	—	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
—	Hexamethylphosphoric-triamide	680-31-9	—	D	Report if greater than 0%	All uses	EU-R 1272/2008 CLP
—	1-Chloro-1,2-difluoroethylene	359-04-6	—	D	Report if greater than 0%	All uses	EU-R 2009/1005 Montreal Protocol
—	1-Chloro-1-fluoroethylene	2317-91-1	—	D	Report if greater than 0%	All uses	EU-R 2009/1005 Montreal Protocol
—	1-Chloro-2-fluoroethylene	460-16-2	—	D	Report if greater than 0%	All uses	EU-R 2009/1005 Montreal Protocol
—	2-Chloro-1,1-difluoroethylene	359-10-4	—	D	Report if greater than 0%	All uses	EU-R 2009/1005 Montreal Protocol
—	1,1,2,2-Tetrachloro-1-fluoroethane	134237-32-4	—	D	Report if greater than 0%	All uses	EU-R 2009/1005 Montreal Protocol

GADSL N o	Substance	CAS RN	GADSL control level	Stanley control level	Stanley's criteria		Major related laws, regulations, etc. (Reference)
			Category	Category	Standard value	Main uses	
—	Methanaminium, N-[4-[[4-(dimethylamino)phenyl]phenylmethylen e]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride	569-64-2	—	D	Report if greater than 0%	All uses	K-REACH
—	Methylenediphenyl diisocyanate (MDI)	26447-40-5	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	2,4'-Methylenediphenyl diisocyanate (MDI)	5873-54-1	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	4,4'-Methylenediphenyl diisocyanate (MDI)	101-68-8	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	2,2'-Methylenediphenyl diisocyanate (MDI)	2536-05-2	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Nickel uranium oxide (NiU3O10)	15780-33-3	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Nickel uranyl tetraacetate, of uranium depleted in uranium-235	71767-12-9	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	[2,3'-Bis[[[2-hydroxyphenyl]methylene]amino]but-2-enedinitrilo(2-)-N2,N3,O2,O3]nickel; C.I. Solvent Brown 53	64696-98-6	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	(butylamine)[[2,2'-thiobis[4-(1,1,3,3-tetramethylbutyl)phenolato]](2-)-O,O',S]nickel	14516-71-3	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Nickel, 3-[(4-chlorophenyl)azo]-4-hydroxy-2(1H)-quinolinone complex	61725-51-7	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Poly(oxy-1,2-ethanediyl), alpha-(1-oxo-2-propenyl)-omega-(nonylphenoxy)-	50974-47-5	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Nonylphenylpolyoxyethylene sulfosuccinate	54612-36-1	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Poly(oxy-1,2-ethanediyl), alpha-(nonylphenyl)-omega-hydroxy-, branched, phosphates	68412-53-3	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Poly(oxy-1,2-ethanediyl), alpha-sulfo-omega-(nonylphenoxy)-, branched, ammonium salt	68649-55-8	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Poly(oxy-1,2-ethanediyl), alpha-(nonylphenyl)-omega-(sulfooxy)-, sodium salt	9014-90-8	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Poly(oxy-1,2-ethanediyl), alpha-sulfo-omega-(nonylphenoxy)-, ammonium salt	9051-57-4	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Poly(oxy-1,2-ethanediyl), alpha-(nonylphenyl)-omega-hydroxy-, phosphate	51811-79-1	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Poly(oxy-1,2-ethanediyl), alpha-(2-nonylphenyl)-omega-hydroxy-	51938-25-1	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Pentachloroanisole	1825-21-4	—	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
—	N,N'-ditolyl-p-phenylenediamine; N,N'-bis(methylphenyl)-1,4-Benzenediamine	27417-40-9	—	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law

GADSL N o	Substance	CAS RN	GADSL control level	Stanley control level	Stanley's criteria		Major related laws, regulations, etc. (Reference)
			Category	Category	Standard value	Main uses	
–	N,N'-dixylyl-p-phenylenediamine; 1,4-Benzenediamine, N,N'-bis(dimethylphenyl)- (9CI)	28726-30-9	–	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
–	N-tolyl-N'-xylyl-p-phenylenediamine; 1,4-Benzenediamine, N-(dimethylphenyl)-N'-(methylphenyl)- (9CI)	70290-05-0	–	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
–	Ammonium manganese(3+) diphosphate	10101-66-3	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	Ammonium dihydrogenorthophosphate	7722-76-1	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	Polyphosphoric acids, ammonium salts	68333-79-9	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	[1,1'-Biphenyl]-ar,ar'-diol, tetrabromo-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]	68758-75-8	–	D	Report if greater than 0%	All uses	EU-R 552/2009
–	2,2',3,3',5,5',6,6'-Octabromo-4-phenoxy-1,1'-biphenyl	83929-69-5	–	D	Report if greater than 0%	All uses	EU-R 552/2009
–	4,4',6,6'-Tetrabromo[1,1'-biphenyl]-2,2'-diol	14957-65-4	–	D	Report if greater than 0%	All uses	EU-R 552/2009
–	hexachlorobiphenyl(2,2',4,4',6,6'-PCB)	33979-03-2	–	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
–	Polychlorinated naphthalene; Cyclohexanecarboxylic acid, 4-propyl-, trans- (9CI)	38289-27-9	–	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
–	polychlorinatedtriphenyl(aroclor5442)	12642-23-8	–	D	Report if greater than 0%	All uses	POPs Convention
–	Tar acids, coal, crude	65996-85-2	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	Coal tar	122384-78-5	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	Creosote oil	61789-28-4	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	Distillates (coal tar), upper; heavy anthracene oil	65996-91-0	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	Distillates (coal tar), naphthalene oils; naphthalene oil	84650-04-4	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	Creosote oil, acenaphthene fraction; wash oil	90640-84-9	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	indeno(1,2,3-cd)pyrene	193-39-5	–	D	Report if greater than 0%	All uses	China ELV
–	Acenaphthylene	208-96-8	–	D	Report if greater than 0%	All uses	China GB
–	Acenaphthene	83-32-9	–	D	Report if greater than 0%	All uses	China GB
–	Fluorene	86-73-7	–	D	Report if greater than 0%	All uses	China GB
–	Quinoline	91-22-5	–	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
–	Carbon-disulphide	75-15-0	–	D	Report if greater than 0%	All uses	EU-R 1272/2008 CLP
–	t-Dodecanethiol	25103-58-6	–	D	Report if greater than 0%	All uses	REACH PACT

GADSL N o	Substance	CAS RN	GADSL control level	Stanley control level	Stanley's criteria		Major related laws, regulations, etc. (Reference)
			Category	Category	Standard value	Main uses	
—	tetrabromophthalic anhydride	632-79-1	—	D	Report if greater than 0%	All uses	REACH PACT
—	Toxaphene	8001-35-2	—	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
—	Tributylamine	102-82-9	—	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
—	Trichlorobenzene all isomers	12002-48-1	—	D	Report if greater than 0%	All uses	POPs Convention
—	1,1,1-Trichloro-2,2-bis(4-chlorophenyl)ethane; 4,4'-DDT	50-29-3	—	D	Report if greater than 0%	All uses	Japan Chemical Substance Control Law
—	Acetic acid, 2,2',2''-[(methylstannylidene)tris(thio)]tris-, triisooctyl ester	54849-38-6	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Oxirane, 2-methyl-, polymer with oxirane, bis(2-oxiranylmethyl) ether	9081-99-6	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XIV
—	4,4'-[(3,3'-dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[2,4-dihydro-5-methyl-2-phenyl-3H-pyrazol-3-one]	3520-72-7	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	2,2'-[(3,3'-dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[N-(2-methoxyphenyl)-3-oxobutyramide]	4531-49-1	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	2,2'-[(3,3'-dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[N-(2-methylphenyl)-3-oxobutyramide]	5468-75-7	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	2,2'-[(3,3'-dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[N-(4-chloro-2,5-dimethoxyphenyl)-3-oxobutyramide]	5567-15-7	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Nitrofen	1836-75-5	—	D	Report if greater than 0%	All uses	K-REACH
—	Dialifos	10311-84-9	—	D	Report if greater than 0%	All uses	K-REACH
—	Dimethoate	60-51-5	—	D	Report if greater than 0%	All uses	K-REACH
—	Disulfoton	298-04-4	—	D	Report if greater than 0%	All uses	K-REACH
—	Leptophos	21609-90-5	—	D	Report if greater than 0%	All uses	K-REACH
—	Monocrotophos	6923-22-4	—	D	Report if greater than 0%	All uses	K-REACH
—	Methamidophos	10265-92-6	—	D	Report if greater than 0%	All uses	K-REACH
—	Bis(2-chloroethyl)ether	111-44-4	—	D	Report if greater than 0%	All uses	K-REACH
—	Strychnine	57-24-9	—	D	Report if greater than 0%	All uses	K-REACH
—	Antu	86-88-4	—	D	Report if greater than 0%	All uses	K-REACH
—	Aldicarb	116-06-3	—	D	Report if greater than 0%	All uses	K-REACH
—	Isobenzan	297-78-9	—	D	Report if greater than 0%	All uses	K-REACH
—	Chlorobenzilate	510-15-6	—	D	Report if greater than 0%	All uses	K-REACH
—	Chloropicrin	76-06-2	—	D	Report if greater than 0%	All uses	K-REACH

GADSL N o	Substance	CAS RN	GADSL control level	Stanley control level	Stanley's criteria		Major related laws, regulations, etc. (Reference)
			Category	Category	Standard value	Main uses	
—	Chlordimeform	6164-98-3	—	D	Report if greater than 0%	All uses	K-REACH
—	Chlordimeform hydrochloride	19750-95-9	—	D	Report if greater than 0%	All uses	K-REACH
—	Captafol	2425-06-1	—	D	Report if greater than 0%	All uses	K-REACH
—	Trifluralin	1582-09-8	—	D	Report if greater than 0%	All uses	K-REACH
—	Parathion-methyl	298-00-0	—	D	Report if greater than 0%	All uses	K-REACH
—	Parathion	56-38-2	—	D	Report if greater than 0%	All uses	K-REACH
—	Phosphamidon	13171-21-6	—	D	Report if greater than 0%	All uses	K-REACH
—	Fluoroacetamide	640-19-7	—	D	Report if greater than 0%	All uses	K-REACH
—	Thalliumsulfate	7446-18-6	—	D	Report if greater than 0%	All uses	K-REACH
—	1,2-Dibromoethane	106-93-4	—	D	Report if greater than 0%	All uses	K-REACH
—	1,2-Dibromo-3- chloropropane	96-12-8	—	D	Report if greater than 0%	All uses	K-REACH
—	2,4,5-T	93-76-5	—	D	Report if greater than 0%	All uses	K-REACH
—	alpha,alpha,alpha-Trichlorotoluene	98-07-7	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Thalliumacetate	563-68-8	—	D	Report if greater than 0%	All uses	K-REACH
—	Thalliumnitrate	10102-45-1	—	D	Report if greater than 0%	All uses	K-REACH
—	Paraquat dichloride	1910-42-5	—	D	Report if greater than 0%	All uses	K-REACH
—	Dithallium tris(sulfate)	16222-66-5	—	D	Report if greater than 0%	All uses	K-REACH
—	Chlorpyrifos	2921-88-2	—	D	Report if greater than 0%	All uses	POPs Convention
—	Bromine	7726-95-6	—	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
—	Calcium-hypochlorite	7778-54-3	—	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
—	Bendiocarb	22781-23-3	—	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
—	Chlorine-dioxide	10049-04-4	—	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
—	Decanoic-acid	334-48-5	—	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
—	Geraniol	106-24-1	—	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
—	Hydrogen-cyanide	74-90-8	—	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
—	Hydrogen-peroxide	7722-84-1	—	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR

GADSL N o	Substance	CAS RN	GADSL control level	Stanley control level	Stanley's criteria		Major related laws, regulations, etc. (Reference)
			Category	Category	Standard value	Main uses	
—	Ozone	10028-15-6	—	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
—	Cyanamide	420-04-2	—	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
—	2-Nonylphenol	136-83-4	—	D	Report if greater than 0%	All uses	K-REACH
—	Chromium-oxide	11118-57-3	—	D	Report if greater than 0%	All uses	K-REACH
—	Wood creosote	8021-39-4	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Sulphur dioxide	7446-09-5	—	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
—	Peracetic acid	79-21-0	—	D	Report if greater than 0%	All uses	EU-R 528/2012 BPR
—	Dichloro(ethyl)arsine	598-14-1	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Dichloro(phenyl)arsine	696-28-6	—	D	Report if greater than 0%	All uses	EU-R 1907/2006 Annex XVII
—	Methoxychlor	72-43-5	—	D	Report if greater than 0%	All uses	EU-R 2021/1297 Annex XVII
—	6,11-Dioxa-5,12-distannahexadecane, 8,9-dibromo-5,5,12,12-tetrabutyl-7,10- dioxo-, (8R,9S)-rel-	31732-71-5	—	D	Report if greater than 0%	All uses	K-REACH

* 1	12014-29-8	51222-60-7	14402-75-6	7440-43-9	543-90-8	15743-19-8	12006-15-4	2420-98-6	7789-42-6	13464-92-1
	513-78-0	10108-64-2	12185-64-7	100402-53-7	7790-78-5	14312-00-6	542-83-6	14923-81-0	7790-83-2	13832-25-2
	14486-19-2	7790-79-6	17010-21-8	14067-62-0	21041-95-2	7790-81-0	7790-80-9	90604-90-3	1345-09-1	29870-72-2
	13972-68-4	12187-14-3	10022-68-1	10325-94-7	1306-19-0	101356-99-4	102110-30-5	12139-22-9	12014-28-7	16986-83-7
	1306-24-7	101357-00-0	101357-01-1	101357-02-2	101357-03-3	101357-04-4	12214-12-9	71243-75-9	12213-70-6	11112-63-3
	2223-93-0	141-00-4	10124-36-4	31119-53-6	7790-84-3	1306-23-6	13477-23-1	12292-07-8	1306-25-8	12014-14-1
	7790-85-4	16056-72-7	90604-89-0	11129-14-9	12442-27-2	8048-07-5	12139-23-0	4464-23-7	15337-60-7	14239-68-0
	93820-02-1	13701-66-1	13755-33-4	37131-86-5	19262-93-2	15600-62-1	20648-91-3	93686-40-9	14520-70-8	13847-17-1
	13477-17-3	13814-62-5	13814-59-0	13477-19-5	102184-95-2	14017-36-8	15851-44-2	15852-14-9	10196-67-5	

* 2	67562-39-4	35822-46-9	55673-89-7	70648-26-9	39227-28-6	57117-44-9	57653-85-7	72918-21-9	19408-74-3	57117-41-6
	40321-76-4	60851-34-5	57117-31-4	51207-31-9	1746-01-6	33857-26-0	34465-46-8	39001-02-0	3268-87-9	

* 3	108171-26-2	85535-84-8	18993-26-5	601523-20-0	601523-25-5	221174-07-8	276673-33-7	219697-10-6	219697-11-7	36312-81-9
	71011-12-6									

* 4	3026-81-1	22535-42-8	13173-04-1	33466-31-8	32011-18-0	17523-06-7	1002-53-5	10584-98-2	17036-31-6	25168-21-2
	25168-22-3	28660-67-5	4253-22-9	59963-28-9	93925-42-9	54581-65-6	53202-61-2	7324-74-5	5587-52-0	51287-83-3
	2781-09-1	29881-72-9	26761-46-6	1067-33-0	5847-54-1	3349-36-8	683-18-1	19704-60-0	77-58-7	1185-81-5
	10192-92-4	1067-55-6	4731-77-5	13323-62-1	13323-63-2	14214-24-5	5847-55-2	75113-37-0	85702-74-5	85391-79-3
	95873-60-2	78-04-6	78-20-6	78-06-8	818-08-6	25168-24-5	15546-12-0	85508-00-5	61947-30-6	15546-11-9
	15719-34-3	15546-16-4	2781-10-4	15666-29-2	163206-28-8	68239-46-3	22673-19-4	32011-19-1	67924-24-7	

* 5	26401-97-8	22205-30-7	68109-88-6	10039-33-5	54068-28-9	22205-26-1	15571-58-1	33568-99-9	3542-36-7	3648-18-8
	16091-18-2	870-08-6	68299-15-0	93925-43-0	91648-39-4					

* 6	75-82-1	1868-53-7	359-19-3	1511-62-2	762-49-2	352-91-0	460-32-2	358-97-4	460-25-3	354-04-1
	431-21-0	353-93-5	306-80-9	7304-53-2	677-34-9	353-97-9	420-88-2	598-67-4	359-07-9	666-48-8
	148875-98-3	421-90-9	460-86-6	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	148875-95-0	666-25-1	19041-01-1	29151-25-5	679-84-5	70192-84-6	70192-71-1	460-67-3
	75372-14-4	453-00-9	1786-38-5	51584-26-0	62135-10-8	62135-11-9	430-87-5	420-89-3	420-98-4	2195-05-3
	461-49-4	111483-20-6	420-47-3	2252-78-0	421-06-7	359-08-0	1871-72-3			

* 7	812-04-4	354-21-2	354-23-4	1649-08-7	431-06-1	102738-79-4	111512-56-2	127564-82-3	127564-90-3	127564-91-4
	128903-21-9	1330-45-6	134190-49-1	134190-51-5	134237-35-7	134237-36-8	134237-37-9	134237-38-0	134237-39-1	134237-40-4
	134237-41-5	134237-42-6	134237-43-7	134237-44-8	134237-45-9	13474-88-9	136013-79-1	1842-05-3	25167-88-8	25915-78-0
	29470-94-8	29470-95-9	338-75-0	41834-16-6	420-44-0	422-44-6	422-48-0	422-56-0	431-86-7	460-35-5
	460-69-5	460-92-4	507-55-1	61623-04-9	679-85-6	7125-83-9	7125-99-7	7799-56-6	818-99-5	430-57-9
	430-58-0	354-25-6	75-68-3	25497-29-4	75-45-6	593-70-4	63938-10-3	75-43-4	34077-87-7	2366-36-1
	811-95-0	359-28-4	1717-00-6	354-15-4	338-64-7	306-83-2	2837-89-0	55949-44-5	338-65-8	27154-33-2
	134190-53-7	110587-14-9	134190-54-8	28987-04-4	108662-83-5	134190-50-4	26588-23-8	75-88-7	116867-32-4	134190-48-0
	421-04-5	431-07-2	430-53-5	471-43-2	354-11-0	354-14-3				

* 8	2252-84-8	431-63-0	811-97-2	359-35-3	430-66-0	75-37-6	624-72-6	25497-28-3	75-10-5	420-46-2
	354-33-6	353-36-6	593-53-3	1814-88-6	460-73-1	406-58-6	138495-42-8	431-89-0	690-39-1	27070-61-7
	27987-06-0	75-46-7								

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	71608-58-7	71608-60-1	71608-63-4	72779-05-6	118400-71-8	144468-31-5	68990-40-9	113089-67-1	118102-37-7	118102-38-8
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* 13	68155-04-4	88248-34-4	90146-97-7	90718-04-0	93776-02-4	93776-08-0	93776-14-8	94158-61-9	94159-85-0	94159-86-1
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* 14	15811-52-6	16486-96-7	18024-09-4	2058-94-8	21049-39-8	307-55-1	307-71-1	3108-42-7	335-76-2	3658-63-7
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* 15	90622-71-2	865-86-1	2043-54-1	307-60-8	85631-54-5	94159-79-2	94200-50-7	63295-28-3	74256-14-7	93776-17-1
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* 16	111393-39-6	1270179-82-2	1270179-93-5	127133-66-8	129813-71-4	141607-32-1	1427176-17-7	1427176-20-2	147029-28-5	148240-80-6
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* 17	73141-48-7	77910-04-4	88700-05-4	81397-99-1	97038-97-6	66115-57-9	59080-40-9	67888-96-4	59080-39-6	80274-92-6
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	27753-52-2	27858-07-7	56307-79-0	61288-13-9						

* 18	16606-02-3	2437-79-8	52663-72-6	35065-27-1	32598-13-3	32774-16-6	12674-11-2	11104-28-2	11141-16-5	53469-21-9
	12672-29-6	11097-69-1	11096-82-5	28655-71-2	53742-07-7	25429-29-2	1336-36-3	31472-83-0		

* 19	3644-37-9	7094-94-2	26239-64-5	752-58-9	4027-18-3	25711-26-6	13356-08-6	14275-57-1	4782-29-0	6454-35-9
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	681-99-2	24124-25-2	2155-70-6	13302-06-2	1067-52-3	53466-85-6	36631-23-9	85409-17-2	4027-14-9	73927-93-2
	73940-88-2	6517-25-5	69226-47-7	41083-11-8	1907-13-7	994-31-0	994-32-1	2943-86-4	1529-30-2	1118-14-5
	1118-03-2	1066-45-1	56-24-6	811-73-4	63869-87-4	4638-25-9	4342-30-7	47672-31-1	639-58-7	1803-12-9
	892-20-6	76-87-9	894-09-7	3267-78-5	2767-61-5	2279-76-7	7342-45-2	73927-92-1	57808-37-4	4154-35-2

Annex 2. Exemptions from Specially Controlled Substances (Automobile Products)

- These exemptions shall be based on the standards stipulated by us based on the exemptions in the ELV Directive Annex.
- Entries with no time limit stated, there is no expiration date at the moment

N o	Applications exempted from the restriction	Scope and expiry date of the exemption
■Lead and lead compounds		
Lead as an alloying element		
1a	Steel for machining purposes and batch hotdip galvanised steel components containing upto 0,35 % lead by weight	
1b	Continuously galvanised steel sheetcontaining up to 0,35 % lead by weight	Vehicles and spare parts put on the market before 1 January 2016
2(a)	Aluminium for machining purposes with a leadcontent up to 2 % by weight	As spare parts for vehicles put on the market before 1 July 2005
2(b)	Aluminium with a lead content up to 1,5 % byweight	As spare parts for vehicles put on the market before 1 July 2008
2(c)(i)	Aluminium alloys for machining purposes with a lead content up to 0,4 % by weight	Spare parts for vehicles launched by Jan. 1, 2028
2(c)(ii)	Aluminium alloys not included in entry 2(c)(i) with a lead content up to 0,4 % by weight(1a)	To be revised in 2025
3	Copper alloy containing up to 4 % lead byweight	To be revised in 2025
4(a)	Bearing shells and bushes	As spare parts for vehicles put on the market before 1 July 2008
4(b)	Bearing shells and bushes used in engines, transmissions, and air conditioner compressors	As spare parts for vehicles put on the market before 1 July 2011
Lead and lead compounds in components		
5(a)	Lead in batteries in high-pressure systems used for propulsion applications only on M1 and N1 vehicles Systems with voltages greater than 75 VDC as defined in Directive 2006/95/EC	Vehicles and spare parts put on the market before 1 January 2019
5(b)(i)	(1) 12 V batteries (2) Lead in 24 V batteries for special-purpose vehicles as defined in Article 3 of the EU 2018/858, regulation on the approval and market surveillance of motor vehicles	To be revised in 2025
5(b)(ii)	Lead in batteries not included in 5(a) or 5(b)(i)	Vehicles launched before Jan. 1, 2024 and their spare parts
6	Vibration damper	Vehicles and spare parts put on the market before 1 January 2016
7(a)	Elastomer vulcanizers and stabilizers used in brake hoses, fuel hoses, ventilation hoses, and elastomers and metal used in chassis structures and engine mounts	As spare parts for vehicles put on the market before 1 July 2005
7(b)	Vulcanising agents and stabilisers forelastomers in brake hoses, fuel hoses, airventilation hoses, elastomer/metal parts inthe chassis applications, and enginemountings containing up to 0,5 % lead byweight	As spare parts for vehicles put on the market before 1 July 2006
7(c)	Adhesives for elastomers used in powertrain applications, including less than 0.5% lead by weight	As spare parts for vehicles put on the market before 1 July 2009

N o	Applications exempted from the restriction	Scope and expiry date of the exemption
8(a)	Lead in solder used to attach electrical and electronic components to electronic circuit boards, and lead used in surface treatments for terminals, pins, and electronic boards for parts other than electrolytic aluminum capacitors	Vehicles and spare parts put on the market before 1 January 2016
8(b)	Lead in solder used in electrical equipment other than solder used on electronic circuit boards or glass	Vehicles and spare parts put on the market before 1 January 2011
8(c)	Lead in surface treatments for the terminals of electrolytic aluminum capacitors	Vehicles and spare parts put on the market before 1 January 2013
8(d)	Lead in solder used on the glass of mass air flow sensors	Vehicles and spare parts put on the market before 1 January 2015
8(e)	Lead in refractory solder (85% or higher alloy lead content)	To be revised in 2025
8(f)(a)	Lead in compliant pin connector systems	Vehicles and spare parts put on the market before 1 January 2017
8(f)(b)	Lead in compliant pin connector systems other than the mating area of vehicle harness connectors	Vehicles launched before Jan. 1, 2024 and their spare parts
8(g)(i)	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages	Vehicles launched before Jan. 1, 2022 and their spare parts
8(g)(ii)	Lead in solders to complete a viable electrical connection between the semiconductor die and the carrier within integrated circuit flip chip packages where one of the below criteria applies: a) A semiconductor technology node of 90 nm or larger b) A single die of 300 mm ² or larger in any semiconductor technology node c) Stacked die packages with dies of 300 mm ² or larger, or silicon interposers of 300 mm ² or larger	Vehicles launched after Oct. 1, 2022 and their spare parts
8(h)	Lead in solder for used for connecting heat spreaders to heat sinks in power semiconductor assemblies with a projected area for the chip size of at least 1 cm ² or more and a silicon chip with a nominal current density of 1A/mm ² or more	Vehicles and spare parts put on the market before 1 January 2016
8(i)	Lead in solder used for electrical applications on glass other than solder used on laminated glass	Vehicles and spare parts put on the market before 1 January 2016
8(j)	Lead in solder used on laminated glass	Vehicles and spare parts put on the market before 1 January 2020
8(k)	Soldering of heating applications with 0,5A or more of heat current per related solder joint to single panes of laminated glazings not exceeding wall thickness of 2,1 mm. This exemption does not cover soldering to contacts embedded in the intermediate polymer	Vehicles launched before Jan. 1, 2024 and their spare parts
9	Valve seats	Spare parts for engine models developed before 1 July 2003

N o	Applications exempted from the restriction	Scope and expiry date of the exemption
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 used in capacitors with rated voltages at or below 125 VAC or 250 VDC	Vehicles and spare parts put on the market before 1 January 2016
10(d)	Lead in dielectric ceramic materials used in capacitors that correct temperature-related errors for sensors in ultrasonic sonar applications	Vehicles and spare parts put on the market before 1 January 2017
11	Combustion/ignition devices	Vehicles and spare parts put on the market before 1 January 2006
12	Lead in thermoelectric element materials for automobile control applications that reduce CO ₂ emissions by recovering exhaust heat	Vehicles and spare parts put on the market before 1 January 2019

■ Hexavalent chromium and hexavalent chromium compounds		
13(a)	Anti-corrosion coatings	As spare parts for vehicles put on the market before 1 July 2007
13(b)	Anti-corrosion coatings used on nuts and bolts for chassis assembly	As spare parts for vehicles put on the market before 1 July 2008
14	Hexavalent chromium for corrosion protection in the carbon steel cooling systems of absorption refrigerators and comprising 0.75% of the cooling solution by weight (1) Those designed for complete or partial operation with an electric heater, with an average power input of less than 75W under certain operating conditions (2) Those designed for complete or partial operation with an electric heater, with an average power input of 75 W or more under certain operating conditions (3) Those operate completely with non-electric heaters	(1) Vehicles launched before Jan. 1, 2020 and their spare parts (2) Vehicles launched before Jan. 1, 2026 and their spare parts
■ Mercury and mercury compounds		
15(a)	Headlight discharge lamps	Vehicles and spare parts put on the market before 1 July 2012
15(b)	Fluorescent tubes used in instrument panel displays	Vehicles and spare parts put on the market before 1 July 2012
■ Cadmium and cadmium compounds		
16	Electric vehicle batteries	As spare parts for vehicles put on the market before 31 December 2008

Annex 3. Specially Controlled Substances (Electric / Electronic Products)

1. Prohibited

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
1	Cadmium/cadmium compounds	• Annex XVII of REACH Regulation • RoHS Directive	All except as noted below	0.01% (100 ppm) by weight or less	Pigment, anti-corrosion surface treatment, optical glass, stabilizer, plating, fluorescent, electrode, solder, electric contact, contact point, zinc plating
		• EU Battery Directive	Batteries and storage batteries	0.002% (20 ppm) by weight or less	Batteries and storage batteries
		Representative examples of relevant substance (1)			
		Substance name			CAS RN
		Cadmium			7440-43-9
		Cadmium oxide			1306-19-0
		Cadmium sulfide			1306-23-6
		Cadmium chloride			10108-64-2
		Cadmium sulfate			10124-36-4
		Cadmium fluoride			7790-79-6
		Other cadmium compounds			—
2	Chromium VI compounds	• RoHS Directive	All except as noted below	0.1% (1,000 ppm) by weight or less	Pigment, paint, ink, catalyst, plating, anticorrosion surface treatment, dye
		• Annex XVII of REACH Regulation	Leather-molded products or leather parts that contact the skin	0.0003 % (3ppm) by weight or less of total dry weight or less of leather	Tanning agent for leather products
		Representative examples of relevant substance (1)			
		Substance name			CAS RN
		Chromium (VI) oxide			1333-82-0
		Barium chromate			10294-40-3
		Calcium chromate			13765-19-0
		Lead (II) chromate			7758-97-6
		Lead chromate molybdate sulphate red			12656-85-8
		Lead sulfochromate yellow			1344-37-2
		Sodium chromate			7775-11-3
		Sodium dichromate			10588-01-9
		Strontium chromate			7789-06-2
		Potassium dichromate			7778-50-9
		Potassium chromate			7789-00-6
		Zinc chromate			13530-65-9
		Pentazinc chromate octahydroxide			49663-84-5
		Potassium hydroxyoctaoxodizincatedichromate			11103-86-9
		Ammonium dichromate			7789-09-5
		Hexavalent chromium			18540-29-9
		Other chromium VI compounds			—

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use	
3	Lead/lead compounds	• RoHS Directive	All except as noted below	0.1%(1,000 ppm)by weight or less	Rubber hardener,pigment, paint,lubricant,plastic stabilizer,freemachining alloy,freecutting steels,optical materials,X-ray shielding in CRT glass,solder materials, curing agent,vulcanizing agent,ferroelectrics,plating,metal alloy	
		• Annex XVII of REACH Regulation	Articles or accessible parts thereof which may be placed in the mouth by children	0.05% (500 ppm) by weight or less of lead in articles or accessible parts thereof		
		EU Battery Directive	Portable batteries	0.01%(100ppm) by weight or less	Portable batteries	
		Substance name				CAS RN
		Lead				7439-92-1
		Lead (II) sulfate				7446-14-2
		Lead (II) carbonate				598-63-0
		Lead (II) chromate				7758-97-6
		Lead chromate molybdate sulphate red				12656-85-8
		Lead hydrocarbonate				1319-46-6
		Lead acetate				301-04-2
		Lead (II) acetate, trihydrate				6080-56-4
		Lead phosphate				7446-27-7
		Lead selenide				12069-00-0
		Lead (IV) oxide				1309-60-0
		Lead (II,IV) oxide				1314-41-6
		Lead (II) sulfide				1314-87-0
		Lead (II) oxide				1317-36-8
		Lead (II) carbonate basic				1319-46-6
		Lead hydroxidcarbonate				1344-36-1
		Lead (II) phosphate				7446-27-7
		Lead sulfochromate yellow				1344-37-2
		Lead (II) titanate				12060-00-3
		Lead sulfate, sulphuric acid, lead salt				15739-80-7
		Lead sulphate, tribasic				12202-17-4
		Lead stearate				1072-35-1
		Lead oxide				1335-25-7
		Lead fluoride (II)				7783-46-2
		Other lead compounds				—
		No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value
4	Mercury/mercury compounds	• Annex XVII of REACH Regulation •RoHS Directive	All except as noted below	•Intentional addition prohibited (see Note 2) •When inclusion is unintentional: 0.1% (1,000 ppm) by weight or less	Fluorescent bulb,contact point material, pigment,anti-corrosion,switches,antibacterial treatment	
		• EU Battery Directive	Batteries and storage batteries	0.0005% (5 ppm) by weight or less	Batteries, storage batteries	
			Coin batteries	2% by weight or less	Coin batteries	
		Representative examples of relevant substance (1)				
		Substance name				CAS RN
		Mercury				7439-97-6
		Mercuric chloride				33631-63-9
		Mercury (II) chloride				7487-94-7
		Mercuric sulfate				7783-35-9
		Mercuric nitrate				10045-94-0
		Mercuric (II) oxide				21908-53-2
		Mercuric sulfide				1344-48-5
		Other mercurv compounds				—

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use	
5	Polybrominated biphenyls (PBBs)	• RoHS Directive	All	• No intentional addition (see Note 2) • When inclusion is unintentional: 0.1% (1,000 ppm) by weight or less	Flame retardant	
		Representative examples of relevant substance (1)				
		Substance name				CAS RN
		Polybrominated Biphenyls				59536-65-1
		Dibromobiphenyl				92-86-4
		2-Bromobiphenyl				2052-07-5
		3-Bromobiphenyl				2113-57-7
		4-Bromobiphenyl				92-66-0
		Tribromobiphenyl				59080-34-1
		Tetrabromobiphenyl				40088-45-7
		Pentabromobiphenyl				56307-79-0
		Hexabromobiphenyl				59080-40-9
		Hexabromo-1,1-biphenyl				36355-01-8
		Firemaster FF-1				67774-32-7
No.	Substance/Category	Substance name			CAS RN	
5	Polybrominated biphenyls (PBBs)	Heptabromobiphenyl			35194-78-6	
		Octabromobiphenyl			61288-13-9	
		Nonabromobiphenyl			27753-52-2	
		Decabromobiphenyl			13654-09-6	
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use	
6	Polybrominated diphenyl ethers (PBDEs)	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	Electric and electronic products (including accessories)	• Intentional addition prohibited (see Note 2) • 0.1%(1,000 ppm) by weight or less of homogeneous material	Flame retardant	
		• EU POPs Regulation	All except those listed above	• Intentional addition prohibited (see Note 2) • 0.05%(500 ppm) by weight or less in total with PBDEs in molded parts		
		Representative examples of relevant substance (1)				
		Substance name				CAS RN
		Bromodiphenyl ether				101-55-3
		Dibromodiphenyl ether				2050-47-7
		Tribromodiphenyl ether				49690-94-0
		Tetrabromodiphenyl ether				40088-47-9
		Pentabromodidiphenyl ether				32534-81-9
		Hexabromodiphenyl ether				36483-60-0
		Heptabromodiphenyl ether				68928-80-3
		Octabromodiphenyl ether				32536-52-0
		Nonabromodiphenyl ether				63936-56-1
		Decabromodiphenyl ether				1163-19-5
		No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value
7	Polychlorinated biphenyls (PCBs) and specific substitutes	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. • Annex XVII of REACH Regulation	All	• Intentional addition prohibited (see Note 2)	Insulation oil,lubricant oil,electrical insulation medium,solvent,electrolytic solution,plasticizers,flame retardants,dielectric sealants	
		Representative examples of relevant substance (1)				
		Substance name				CAS RN
		Polychlorinated Biphenyls (all isomers and congeners)				1336-36-3
		Monomethyl-tetrachloro-diphenyl methane (Ugilec 141)				76253-60-6
		Monomethyl-dichloro-diphenyl methane (Ugilec 121, Ugilec 21)				81161-70-8
		Monomethyl-dibromo-diphenyl methane (DBBT)				99688-47-8

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
8	Polychlorinated terphenyls (PCTs)	• Annex XVII of REACH Regulation	All	• 0.005% (50 ppm) by weight or less	Insulation oil, lubricant oil, electrical insulation medium, solvent, electrolytic solution, plasticizers, flame retardants, coatings for electrical wire and cable, dielectric sealants
		Representative examples of relevant substance (1)			
		Substance name			CAS RN
		Polychlorinated Terphenyls (all isomers and congeners)			61788-33-8
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
9	Polychlorinated naphthalenes (more than 1 chlorine atoms)	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. • EU POPs Regulation	All	• Intentional addition prohibited (see Note 2)	Lubricant, paint, stabilizer (electric characteristic, flame-resistant, water-resistant) insulator, flame retardant
		Representative examples of relevant substance (1)			
		Substance name			CAS RN
		Polychlorinated naphthalenes			70776-03-3
10	Shortchain chlorinated paraffins (C10-13) (SCCPs)	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. • EU POPs Regulation	All	• Intentional addition prohibited (see Note 2) • 0.1% (1,000 ppm) by weight or less	Plasticizer for PVC, flame retardant
		Representative examples of relevant substance (1)			
		Substance name			CAS RN
		Alkanes, C10-13, chloro			85535-84-8
11	Tri-substituted organostannic compounds	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. • Annex XVII of REACH Regulation	All	• Intentional addition prohibited (see Note 2) • 0.1% (1,000 ppm) by weight of tin in a material	Stabilizer, antioxidant, antibacterial and antifungal agents, antifoulant, antiseptic, paint, pigment, antistaining
		Representative examples of relevant substance (1)			
		Substance name			CAS RN
		Triphenyltin-N, N-dimethyldithiocarbamate			1803-12-9
11	Tri-substituted organostannic compounds	Triphenyltinfluoride			379-52-2
		Triphenyltinacetate			900-95-8
		Triphenyltinchloride			639-58-7
		Triphenyltinhydroxide			76-87-9
		Triphenyltin fatty acid ((9-11)salt)			18380-71-7
					18380-72-8
					47672-31-1
					94850-90-5
		Triphenyltin chloroacetate			7094-94-2
		Tributyltin methacrylate			2155-70-6
		Bis(tributyltin) fumarate			6454-35-9
		Tributyltin fluoride			1983-10-4
		Bis(tributyltin) 2,3-dibromosuccinate			31732-71-5
		Tributyltin acetate			56-36-0
		Tributyltin laurate			3090-36-6
		Bis(tributyltin) phthalate			4782-29-0
		Copolymer of alkyl (c=8) acrylate, methyl methacrylate and tributyltin methacrylate			67772-01-4
		Tributyltin sulfamate			6517-25-5
		Bis(tributyltin) maleate			14275-57-1
		Tributyltin chloride			1461-22-9
					7342-38-3
		Tributyltin cyclopentane carbonate = mixture			85409-17-2
		Tributyltin-1,2,3,4,4a,4b,5,6,10,10a-decahydro-7-isopropyl-1,4-dimethyl-1-phenanthrenecarboxylate mix			26239-64-5
		Other tri-substituted organostannic compounds			—

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use	
12	Tributyl tin oxide (TBTO)	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	All	• Intentional addition prohibited (see Note 2) • As a tin element 0.1 % (1,000 ppm) by weight or less	Antiseptic, antifungal agent,paint, pigment, antistaining,refrigerant, foaming agent,extinguishant, solvent cleaner	
		Substance name			CAS RN	
		Tributyl tin oxide (TBTO)			56-35-9	
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use	
13	Dibutyltin (DBT) compounds	• Annex XVII of REACH Regulation	All	• As a tin element 0.1 % (1,000 ppm) by weight or less	Stabilizer for PVC,curing catalyst for silicone resin and urethane resin	
		Representative examples of relevant substance (1)				
		Substance name				CAS RN
		Dibutyltin oxide				818-08-6
		Dibutyltin diacetate				1067-33-0
		Dibutyltin dilaurate				77-58-7
		Dibutyltin maleate				78-04-6
Other dibutyltin compounds				—		
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use	
14	Diocetyl tin (DOT) compounds	• Annex XVII of REACH Regulation	(a) textile and leather articles intended to come into contact with the skin, (b) childcarearticles (c)wocomponent room temperature vulcanisation moulding kits (RTV-2 moulding kits)	• As a tin element 0.1 % (1,000 ppm) by weight or less	Stabilizer for PVC, curing catalyst for silicone resin and urethane resin	
		Representative examples of relevant substance (1)				
		Substance name				CAS RN
		Diocetyl Tin Oxide				870-08-6
		Diocetyl tin dilaurate				3648-18-8
		Other Diocetyl tin compounds				—
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use	
15	Ozone depleting substances	• Montreal Protocol	All	• Intentional addition prohibited (see Note 2)	Refrigerant,foaming agent,extinguishant,solvent cleaner	
		Representative examples of relevant substance (1)				
		Substance name				CAS RN
		Trichlorofluoromethane (CFC-11)				75-69-4
		Dichlorodifluoromethane (CFC-12)				75-71-8
		Chlorotrifluoromethane (CFC-13)				75-72-9
		Pentachlorofluoroethane (CFC-111)				354-56-3
		Tetrachlorodifluoroethane (CFC-112)				76-12-0
		1,1,2,2-Tetrachloro-1,2-difluoroethane (CFC-112)				28605-74-5
		1,1,1,2-Tetrachloro-2,2-difluoroethane (CFC-112a)				76-11-9
		Trichlorotrifluoroethane (CFC-113)				76-13-1
		1,1,2-Trichloro-1,2,2 trifluoroethane (CFC-113)				26523-64-8
		1,1,1-Trichloro-2,2,2 trifluoroethane (CFC-113a)				354-58-5
		Dichlorotetrafluoroethane (CFC-114)				76-14-2
		Monochloropentafluoroethane (CFC-115)				76-15-3
		Heptachlorofluoropropane (CFC-211)				422-78-6 135401-87-5
		1,1,1,2,3,3,3-Heptachloro-2-fluoropropane (CFC-211ba)				422-81-1
		Hexachlorodifluoropropane (CFC-212)				3182-26-1
		Pentachlorotrifluoropropane (CFC-213)				2354-06-5 134237-31-3
		Tetrachlorotetrafluoropropane (CFC-214)				29255-31-0
		1,2,2,3-Tetrachloro-1,1,3,3-tetrafluoropropane (CFC-214aa)				677-68-9
		1,1,1,3-Tetrachloro-2,2,3,3-tetrafluoropropane (CFC-214cb)				2268-46-4
		Trichloropentafluoropropane (CFC-215)				1599-41-3
		1,2,2-Trichloropentafluoropropane (CFC-215aa)				1599-41-3
		1,2,3-Trichloropentafluoropropane (CFC-215ba)				76-17-5
		1,1,2-Trichloropentafluoropropane (CFC-215bb)				—
		1,1,3-Trichloropentafluoropropane (CFC-215ca)				—
		1,1,1-Trichloropentafluoropropane (CFC-215cb)				4259-43-2
		Dichlorohexafluoropropane (CFC-216)				661-97-2
		Chloroheptafluoropropane (CFC-217)				422-86-6

No.	Substance/Category	Substance name	CAS RN
15	Ozone depleting substances	Bromochloromethane (Halon-1011)	74-97-5
		Dibromodifluoromethane (Halon-1202)	75-61-6
		Bromochlorodifluoromethane (Halon-1211)	353-59-3
		Bromotrifluoromethane (Halon-1301)	75-63-8
		Dibromotetrafluoroethane (Halon-2402)	124-73-2
		Tetrachloromethane (carbon tetrachloride)	56-23-5
		1,1,1-Trichloroethane (methylchloroform)	71-55-6
		Bromomethane (methyl bromide)	74-83-9
		Bromoethane (ethyl bromide)	74-96-4
		1-Bromopropane (n-propyl bromide)	106-94-5
		Trifluoriodomethane (trifluoromethyl iodide)	2314-97-8
		Chloromethane (methyl chloride)	74-87-3
		Dibromofluoromethane (HBFC-21 B2)	1868-53-7
		Bromodifluoromethane (HBFC-22 B1)	1511-62-2
		Bromofluoromethane (HBFC-31 B1)	373-52-4
		Tetrabromofluoroethane (HBFC-121 B4)	306-80-9
		Tribromodifluoroethane (HBFC-122 B3)	—
		Dibromotrifluoroethane (HBFC-123 B2)	354-04-1
		Bromotetrafluoroethane (HBFC-124 B1)	124-72-1
		Tribromofluoroethane (HBFC-131 B3)	—
		Dibromodifluoroethane (HBFC-132 B2)	75-82-1
		Bromotrifluoroethane (HBFC-133 B1)	421-06-7
		Dibromofluoroethane (HBFC-141 B2)	358-97-4
		Bromodifluoroethane (HBFC-142 B1)	420-47-3
		Bromofluoroethane (HBFC-151 B1)	762-49-2
		Hexabromofluoropropane (HBFC-221 B6)	—
		Pentabromodifluoropropane (HBFC-222 B5)	—
		Tetrabromotrifluoropropane (HBFC-223 B4)	—
		Tribromotetrafluoropropane (HBFC-224 B3)	—
		Dibromopentafluoropropane (HBFC-225 B2)	431-78-7
		Bromohexafluoropropane (HBFC-226 B1)	2252-78-0
		Pentabromofluoropropane (HBFC-231 B5)	—
		Tetrabromodifluoropropane (HBFC-232 B4)	—
		Tribromotrifluoropropane (HBFC-233 B3)	—
		Dibromotetrafluoropropane (HBFC-234 B2)	—
		Bromopentafluoropropane (HBFC-235 B1)	460-88-8
		Tetrabromofluoropropane (HBFC-241 B4)	—
		Tribromodifluoropropane (HBFC-242 B3)	70192-80-2
		Dibromotrifluoropropane (HBFC-243 B2)	431-21-0
		Bromotetrafluoropropane (HBFC-244 B1)	679-84-5
		Tribromofluoropropane (HBFC-251 B3)	75372-14-4
		Dibromodifluoropropane (HBFC-252 B2)	460-25-3
		Bromotrifluoropropane (HBFC-253 B1)	421-46-5
		Dibromofluoropropane (HBFC-261 B2)	51584-26-0
		Bromodifluoropropane (HBFC-262 B1)	—
		Bromofluoropropane (HBFC-271 B1)	1871-72-3
		Dichlorofluoromethane (HCFC-21)	75-43-4
		Chlorodifluoromethane (HCFC-22)	75-45-6
		Chlorofluoromethane (HCFC-31)	593-70-4
		Tetrachlorofluoroethane (HCFC-121)	134237-32-4
		1,1,2,2-Tetrachloro-1-fluoroethane (HCFC-121)	354-14-3
		1,1,1,2-Tetrachloro-2-fluoroethane (HCFC-121a)	354-11-0
		Trichlorodifluoroethane (HCFC-122)	41834-16-6
		1,2,2-Trichloro-1,1-difluoroethane (HCFC-122)	354-21-2
		1,1,2-Trichloro-1,2-difluoroethane (HCFC-122a)	354-15-4
		1,1,1-Trichloro-2,2-difluoroethane (HCFC-122b)	354-12-1
		Dichlorotrifluoroethane(HCFC-123)	34077-87-7
		1,1-Dichloro-2,2,2-trifluoroethane (HCFC-123)	306-83-2
		1,2-Dichloro-1,1,2-trifluoroethane (HCFC-123a)	354-23-4
			90454-18-5
		1,1-Dichloro-1,2,2-trifluoroethane (HCFC-123b)	812-04-4
		Chlorotetrafluoroethane (HCFC-124)	63938-10-3
		2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)	2837-89-0
		1-chloro-1,1,2,2-tetrafluoroethane (HCFC-124a)	354-25-6

No.	Substance/Category	Substance name	CAS RN
15	Ozone depleting substances	Trichlorofluoroethane (HCFC-131)	27154-33-2 134237-34-6
		1,1,2-Trichloro-2-fluoroethane (HCFC-131)	359-28-4
		1,1,2-Trichloro-1-fluoroethane (HCFC-131a)	811-95-0
		1,1,1-Trichloro-2-fluoroethane (HCFC-131b)	2366-36-1
		Dichlorodifluoroethane (HCFC-132)	25915-78-0
		1,2-Dichloro-1,2-difluoroethane (HCFC-132)	431-06-1
		1,1-Dichloro-2,2-difluoroethane (HCFC-132a)	471-43-2
		1,2-Dichloro-1,1-difluoroethane (HCFC-132b)	1649-08-7
		1,1-Dichloro-1,2-difluoroethane (HCFC-132c)	1842-05-3
		Chlorotrifluoroethane (HCFC-133)	1330-45-6 431-07-2
		1-Chloro-1,2,2-trifluoroethane (HCFC-133)	1330-45-6
		2-Chloro-1,1,1-trifluoroethane (HCFC-133a)	75-88-7
		1-Chloro-1,1,2-trifluoroethane (HCFC-133b)	421-04-5
		Dichlorofluoroethane(HCFC-141)	25167-88-8
		1,2-Dichloro-1-fluoroethane (HCFC-141)	430-57-9
		1,1-Dichloro-2-fluoroethane (HCFC-141a)	430-53-5
		1,1-Dichloro-1-fluoroethane (HCFC-141b)	1717-00-6
		Chlorodifluoroethane (HCFC-142)	25497-29-4
		2-Chloro-1,1-Difluoroethane (HCFC-142)	338-65-8
		1-Chloro-1,1-difluoroethane (HCFC-142b)	75-68-3
		1-Chloro-1,2-difluoroethane (HCFC-142a)	338-64-7
		Chlorofluoroethane (HCFC-151)	110587-14-9
		1-Chloro-2-fluoroethane (HCFC-151)	762-50-5
		1-Chloro-1-fluoroethane (HCFC-151a)	1615-75-4
		Hexachlorofluoropropane (HCFC-221)	134237-35-7 29470-94-8
		1,1,1,2,2,3-Hexachloro-3-fluoropropane (HCFC-221ab)	422-26-4
		Pentachlorodifluoropropane (HCFC-222)	134237-36-8
		1,1,1,3,3-pentachloro-2,2-difluoropropane (HCFC-222ca))	422-49-1
		1,2,2,3,3-pentachloro-1,1-difluoropropane (HCFC-222aa)	422-30-0
		Tetrachlorotrifluoropropane (HCFC-223)	134237-37-9
		1,1,3,3-Tetrachloro-1,2,2-trifluoropropane (HCFC-223ca)	422-52-6
		1,1,1,3-Tetrachloro-2,2,3-trifluoropropane (HCFC-223cb)	422-50-4
		Trichlorotetrafluoropropane (HCFC-224)	134237-38-0
		1,3,3-Trichloro-1,1,2,2-tetrafluoropropane (HCFC-224ca)	422-54-8
		1,1,3-Trichloro-1,2,2,3-tetrafluoropropane (HCFC-224cb)	422-53-7
		1,1,1-Trichloro-2,2,3,3-tetrafluoropropane (HCFC-224cc)	422-51-7
		Dichloropentafluoropropane (HCFC-225)	127564-92-5
		2,2-Dichloro-1,1,1,3,3-pentafluoropropane(HCFC-225aa)	128903-21-9
		2,3-Dichloro-1,1,1,2,3-pentafluoropropane (HCFC-225ba)	422-48-0
		1,2-Dichloro-1,1,2,3,3-pentafluoropropane (HCFC-225bb)	422-44-6
		3,3-Dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)	422-56-0
		1,3-Dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)	507-55-1
		1,1-Dichloro-1,2,2,3,3-pentafluoropropane(HCFC-225cc)	13474-88-9
		1,2-Dichloro-1,1,3,3,3-pentafluoropropane (HCFC-225da)	431-86-7
		1,3-Dichloro-1,1,2,3,3-pentafluoropropane (HCFC-225ea)	136013-79-1
		1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb)	111512-56-2
		Chlorohexafluoropropane (HCFC-226)	134308-72-8
		2-Chloro-1,1,1,3,3,3-hexafluoro-propane (HCFC-226da)	431-87-8
		Pentachlorofluoropropane (HCFC-231)	134190-48-0
		1,1,1,2,3-pentachloro-2-fluoro-propane (HCFC-231bb)	421-94-3
		Tetrachlorodifluoropropane (HCFC-232)	134237-39-1
		1,1,1,3-Tetrachloro-3,3-difluoropropane (HCFC-232fc)	460-89-9
		Trichlorotrifluoropropane (HCFC-233)	134237-40-4
		1,1,1-Trichloro-3,3,3-trifluoropropane (HCFC-233fb)	7125-83-9
		Dichlorotetrafluoropropane (HCFC-234)	127564-83-4
		1,2-Dichloro-1,2,3,3-tetrafluoropropane (HCFC-234db)	425-94-5
		Chloropentafluoropropane (HCFC-235)	134237-41-5
		1-Chloro-1,1,3,3,3-pentafluoropropane (HCFC-235fa)	460-92-4
		Tetrachlorofluoropropane (HCFC-241)	134190-49-1
		1,1,2,3-Tetrachloro-1-fluoropropane (HCFC-241db)	666-27-3
		Trichlorodifluoropropane (HCFC-242)	134237-42-6
		1,3,3,Trichloro-1,1-difluoropropane (HCFC-242fa)	460-63-9

No.	Substance/Category	Substance name			CAS RN
15	Ozone depleting substances	Dichlorotrifluoropropane (HCFC-243)			134237-43-7
		1,1-Dichloro-1,2,2-trifluoropropane (HCFC-243cc)			7125-99-7
		2,3-Dichloro-1,1,1-trifluoropropane (HCFC-243db)			338-75-0
		3,3-Dichloro-1,1,1-trifluoropropane (HCFC-243fa)			460-69-5
		Chlorotetrafluoropropane (HCFC-244)			134190-50-4
		3-Chloro-1,1,2,2-tetrafluoropropane (HCFC-244ca)			679-85-6
		1-Chloro-1,1,2,2-tetrafluoropropane (HCFC-244cc)			421-75-0
		Trichlorofluoropropane (HCFC-251)			134190-51-5
		1,1,3-Trichloro-1-fluoropropane (HCFC-251fb)			818-99-5
		1,1,2-Trichloro-1-fluoropropane (HCFC-251dc)			421-41-0
		Dichlorodifluoropropane (HCFC-252)			134190-52-6
		1,3-Dichloro-1,1-difluoropropane (HCFC-252fb)			819-00-1
		Chlorotrifluoropropane (HCFC-253)			134237-44-8
		3-Chloro-1,1,1-trifluoropropane (HCFC-253fb)			460-35-5
		Dichlorofluoropropane (HCFC-261)			134237-45-9
		1,1-Dichloro-1-fluoropropane (HCFC-261fc)			7799-56-6
		1,2-Dichloro-2-fluoro-propane (HCFC-261ba)			420-97-3
		Chlorodifluoropropane (HCFC-262)			134190-53-7
		1-Chloro-2,2-difluoropropane (HCFC-262ca)			420-99-5
		2-Chloro-1,3-difluoropropane (HCFC-262da)			102738-79-4
		1-Chloro-1,1-difluoropropane (HCFC-262fc)			421-02-3
		Chlorofluoropropane (HCFC-271)			134190-54-8
		2-Chloro-2-fluoropropane (HCFC-271ba)			420-44-0
		1-Chloro-1-fluoropropane (HCFC-271fb)			430-55-7
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
16	Asbestos	• Annex XVII of REACH Regulation	All	• Intentional addition prohibited (see Note 2) • 0.1% (1,000 ppm) by weight or less	Insulator,filler,pigment, paint,talc
		Representative examples of relevant substance (1)			
		Substance name			CAS RN
		Asbestos			1332-21-4
		Actinolite			77536-66-4
		Amosite (Grunerite)			12172-73-5
		Anthophyllite			77536-67-5
		Chrysotile			12001-29-5
		Crocidolite			12001-28-4
		Tremolite			77536-68-6

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
17	Azocolourants and azodyes which form certain aromatic amines(3)	• Annex XVII of REACH Regulation	Textiles and leather	• 0.003%(30 ppm)(3) by weight or less of the finished textile/leather product	Pigment,dyes,colorants
		Representative examples of relevant substance(1)			
		Substance name			CAS RN
		Biphenyl-4-ylamine			92-67-1
		Benzidine			92-87-5
		4-chloro-o-toluidine			95-69-2
		2-naphthylamine			91-59-8
		o-aminoazotoluene			97-56-3
		5-nitro-o-toluidine			99-55-8
		4-chloroaniline			106-47-8
		4-methoxy-m-phenylenediamine			615-05-4
		4,4'-methylenedianiline			101-77-9
		3,3'-dichlorobenzidine			91-94-1
		3,3'-dimethoxybenzidine			119-90-4
		3,3'-dimethylbenzidine			119-93-7
		4,4'-methylenedi-o-toluidine			838-88-0
		6-methoxy-m-toluidine			120-71-8
		4,4'-methylene-bis(2-chloroaniline)			101-14-4
		4,4'-oxydianiline			101-80-4
		4,4'-thiodianiline			139-65-1
		o-toluidine			95-53-4
		4-methyl-m-phenylenediamine			95-80-7
		2,4,5-trimethylaniline			137-17-7
		o-anisidine			90-04-0
		4-amino azobenzene			60-09-3
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
18	Perfluorooctane sulfonate (PFOS)	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. • EU POPs Regulation	All except the following exempted uses	• Intentional addition prohibited (see Note 2) • 0.1%(1,000 ppm) by weight or less • 1 µg/m2(Woven fabrics and other coated materials) by weight or less	Photoresist, anti-reflection coating agent, film, paper,photos coatings, plating mist inhibitor, lubricating oil used
		Representative examples of relevant substance(1)			
		Substance name			CAS RN
		Perfluorooctane Sulfonates (PFOS)			1763-23-1
		perfluorooctane 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)-glycine, N-ethyl-N-[(heptadecafluorooctyl)sulfonyl]-, potassium salt			306975-62-2
		perfluorooctane sulfonate potassium perfluorooctane-1-sulfonate			2991-51-7
		perfluorooctane sulfonate ammonium salt			2795-39-3
		perfluorooctane sulfonate lithium salt			29081-56-9
		perfluorooctane sulfonate lithium salt			29457-72-5
		tetraethylammoniumheptadecafluorooctansulfonate			56773-42-3
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
19	Dimethyl fumarate (DMF)	• Annex XVII of REACH Regulation	All	• 0.00001%(0.1 ppm)by weight or less	Biocide, mold treatment of electronic leather seats, including recliners, massage chairs
		Substance name			
		Dimethyl fumarate (DMF)			CAS RN 624-49-7
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
20	Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. • EU POPs Regulation	All	• Intentional addition prohibited (see Note 2) • 0.1% (1,000 ppm) by weight or less	Adhesives, paints, printing inks, plastics, inked ribbons, putty, caulking or sealing fillers
		Substance name			
		Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)			CAS RN 3846-71-7

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use					
21	Hexabromocyclododecane (HBCDD(4)) and all major diastereoisomers	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	All	• Intentional addition prohibited (see Note 2) • 0.01% (100 ppm) by weight or less	Flame retardant mainly used for expanded polystyrene and some types of fiber					
						Representative examples of relevant substance (1)				
						Substance name				CAS RN
						Hexabromocyclododecane (HBCD)				25637-99-4 3194-55-6
						α-hexabromocyclododecane				134237-50-6
						β-hexabromocyclododecane				134237-51-7
						γ-hexabromocyclododecane				134237-52-8
						rel-(1R,2S,5R,6S,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane				4736-49-6
						rel-(1R,2S,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane				65701-47-5
						(1R,2R,5R,6S,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane				138257-17-7
						(1R,2R,5R,6S,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane				138257-18-8
						(1R,2S,5S,6R,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane				138257-19-9
						(1R,2S,5S,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane				169102-57-2
						(1R,2R,5S,6R,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane				678970-15-5
						(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane				678970-16-6
		(1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane				678970-17-7				
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use					
22	Polycyclic-aromatic hydrocarbons (PAH)	• Annex XVII of REACH Regulation	Rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity	• 0.0001% (1ppm) by weight or less	Rubber, plasticizer, colored pigment for plastic					
			Rubber or plastic components in toys, including activity toys, and childcare articles, that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity	• 0.00005% (0.5ppm) by weight or less						
		Representative examples of relevant substance (1)								
		Substance name				CAS RN				
		Benzo[a]pyrene (BaP)				50-32-8				
		Benzo[e]pyrene (BeP)				192-97-2				
		Benzo[a]anthracene (BaA)				56-55-3				
		Chrysen (CHR)				218-01-9				
		Benzo[b]fluoranthene (BbFA)				205-99-2				
		Benzo[j]fluoranthene (BjFA)				205-82-3				
		Benzo[k]fluoranthene (BkFA)				207-08-9				
		Dibenzo[a,h]anthracene (DBAhA)				53-70-3				
		No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use			
		23	Selected four Phthalates • Bis (2-ethylhexyl) phthalate (DEHP) • Dibutyl phthalate (DBP) • Benzyl butyl (BBP) • Diisobutyl phthalate (DIBP)	RoHS Directive 2011/65/EU To modify the European Commission delegation Directive (EU) 2015/863	All	• 0.1% (1,000 ppm) by weight or less Total for one of four substances or total for multiple substances	Plasticizer, dye, pigment, paint, ink, adhesive, lubricant			
Representative examples of relevant substance (1)										
Substance name				CAS RN						
Bis (2-ethylhexyl) phthalate (DEHP)				117-81-7						
Dibutyl phthalate (DBP)				84-74-2						
Benzyl butyl phthalate (BBP)				85-68-7						
Diisobutyl phthalate (DIBP)				84-69-5						

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
24	Perfluorooctanoic acid (PFOA)	• Annex XVII of REACH Regulation • Annex I of Stockholm convention on POPs	All	PFOA and its salts • Intentional addition prohibited (see Note 2) • 25ppb by weight or less for PFOA and its salts	Fluorine coating, water repellent, fire extinguishing material, photographic coatings applied to paper, resin modifiers
				PFOA-related substances • Intentional addition prohibited (see Note 2) • 1,000ppb by weight or less in total for one or multiple substances	
Typical examples of applicable chemical substances (1)					
Substance name					CAS RN
Perfluorooctanoic acid (PFOA)					335-67-1
Ammonium pentadecafluorooctanoate (APFO)					3825-26-1
Sodium perfluorooctanoate					335-95-5
Potassium perfluorooctanoate					2395-00-8
Silver perfluorooctanoate					335-93-3
Chromium(3+) perfluorooctanoate					68141-02-6
Ethanaminium, N,N,N-triethyl-, pentadecafluorooctanoate (1:1) and its salts					98241-25-9
Hexanoic acid, 2,3,3,4,4,5,5,6,6,6-decafluoro-2-(1,1,2,2,2- pentafluoroethyl)-, ammonium salt (1:1)					13058-06-5
Pentadecafluorooctyl fluoride					335-66-0
Methyl perfluorooctanoate					376-27-2
Ethyl perfluorooctanoate					3108-24-5
Triethoxy(1H,1H,2H,2H-heptadecafluorodecyl)silane					101947-16-4
1,3-Propanediol, 2,2-bis(gamma.-omega.-perfluoro-C4-10-alkyl) thiomethyl derivs., phosphates, ammonium salts					148240-85-1
1,3-Propanediol, 2,2-bis(gamma.-omega.-perfluoro-C6-12-alkyl) thiomethyl derivs., phosphates, ammonium salts					148240-87-3
2-Propenoic acid, C16-18-alkyl esters, polymers					160336-09-4
2-(Heptadecafluorooctyl)ethyl=methacrylate					1996-88-9
1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluoro-10-iododecane					2043-53--0
Cyclotetrasiloxane, 2-(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecyl)-2,4,6,8-tetramethyl-, Si-[3-(oxiranylmethoxy)propyl] derivs.					206886-57-9
1H,1H,2H-Heptadecafluoro-1-decene					21652-58-4
3,4-Bis((2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)amino)benzenesulphonyl chloride					24216-05-5
2H,2H-Perfluorodecanoic acid					27854-31-5
1H,1H,2H,2H-Heptadecafluorodecyl acrylate					27905-45-9
1H,1H,2H,2H-Perfluorodecylmethyldichlorosilane					3102-79-2
Phosphine, tris[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]					325459-92-5
Bis[tris[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl]phosphine]palladium(II) dichloride					326475-46-1
Pentadecafluorooctanoic anhydride					33496-48-9
N-(2-carboxyethyl)-N,N-bis(2-hydroxyethyl)-3-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)amino]-1-propanaminium					39186-68--0
Perfluorooctylphosphoric acid; C8-PFPA					40143-78--0
Bis(perfluorooctyl)phosphinic acid; C8/C8-PFPIA					40143-79-1
N-[3-bis(2-hydroxyethyl)amino]propyl]-2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanamide					41358-63-8
Heptadecafluoro-n-octyl iodide					507-63-1
2-Propenoic acid, 2-methyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- pentadecafluorooctyl ester, polymer with 2-propenoic acid					53515-73-4
N-[3-(Perfluorooctanoylamido) propyl]-N,N,N-trimethylammonium chloride					53517-98-9
3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl dihydrogen phosphate					57678-03-2
Bis(perfluorooctyl)phosphinic acid; C6/C8-PFPIA					610800-34-5
Poly(difluoromethylene), α -fluoro- ω -[2- [[2-(trimethylammonio) ethyl]thio]ethyl]-, methyl sulfate					65530-57-6
Poly(difluoromethylene), .alpha.fluoro-.omega.-2-(phosphonooxy) ethyl-					65530-61-2

No.	Substance/Category	Substance name	CAS RN			
24	Perfluorooctanoic acid (PFOA)	Poly(difluoromethylene), .alpha.,.alpha.-phosphinicobis(oxy-2,1-ethanediyl)bis.omega.-fluoro-	65530-62-3			
		1H,1H,2H,2H-Heptadecafluoro-1-decanol	678-39-7			
		Phosphoric acid bis[2-(heptadecafluorooctyl)ethyl]	678-41-1			
		Fatty acids, C7-13, perfluoro	68333-92-6			
		Fatty acids, C7-13, perfluoro, compds. with ethylamine	69278-80-4			
		2-Decenoic acid,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,- hexadecafluoro-	70887-84-2			
		Pentanoic acid, 4,4-bis[(γ-ω-perfluoro-C8-20-alkyl)thio]derivs., compds. with diethanolamine	71608-61-2			
		Fatty acids, C6-18, perfluoro, ammonium salts	72623-77-9			
		Carboxylic acids, C7-13, perfluoro, ammonium salts	72968-38-8			
		Perfluorooctylethyldimethylchlorosilane	74612-30-9			
		Trichloro(1H,1H,2H,2H-heptadecafluorodecyl)silane	78560-44-8			
		Poly(difluoromethylene), alpha-fluoro-omega-(2-sulfoethyl)-	80010-37-3			
		Trimethoxy(1H,1H,2H,2H-heptadecafluorodecyl)silane	83048-65-1			
		Heptadecafluoro-1-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctyl)oxy]nonene	84029-60-7			
		N-(3-aminopropyl)-2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanamide	85938-56-3			
		1-Propanesulfonic acid,3-[ethyl (2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)amino]-	89685-61--0			
		Octanoic acid, pentadecafluoro-, mixed esters with 2,2'-[1,4-butanediylbis(oxyethylene)]bis[oxirane] and 2,2'-[1,6-hexanediylbis(oxyethylene)]bis[oxirane]	90480-57-2			
		Amides, C7-19, α-ω-perfluoro-N,N-bis(hydroxyethyl)	90622-99-4			
		Fatty acids, C7-19, perfluoro	91032-01-8			
		Poly(oxy-1,2-ethanediyl),a-[2-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)amino]ethyl]-w-hydroxy-	93480--00-3			
		Diammonium 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl phosphate	93857-44-4			
		Diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoro-2-hydroxyundecyl phosphate	94200-45--0			
		Carbamic acid, [2-(sulfothio)ethyl]-, C-(γ-ω-perfluoro-C6-9-alkyl) esters, monosodium salts	95370-51-7			
No.	Substance/Category	Main laws and ordinances	Applications	Standard Value	Examples of Use	
25	2-(2H-Benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	• Annex I of Stockholm convention on POPs	All	• Intentional addition prohibited (see Note 2)	Benzotriazole ultraviolet absorber	
						• 0.1% (1,000 ppm) by weight or less
		Typical examples of applicable chemical substances (1)				
		Substance name				CAS RN
		2-(2H-Benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)				25973-55-1
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use	
26	Perfluorohexanesulfonic acid (PFHxS), its salts, and PFHxS-related substances	• Candidate added to POPs Convention Annex I	All	• Intentional addition prohibited (see Note 2)	Carpet, leather, textiles, paper, plating,electronic components	
						• EU POPs Regulation
Substance name					CAS RN	
Perfluorohexanesulfonic acid (PFHxS)					355-46-4	
Sodium perfluorohexanesulfonate					82382-12-5	
Potassium perfluorohexanesulfonate					3871-99-6	
Lithium perfluorohexanesulfonate					55120-77-9	
Ammonium perfluorohexanesulfonate					68259-08-5	

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
27	Hexachlorobenzene	<ul style="list-style-type: none"> • Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. • EU POPs Regulation 	All	<ul style="list-style-type: none"> • Intentional addition prohibited (see Note 2) • When inclusion is unintentional: 0.001% (10 ppm) by weight or less 	Raw materials for insecticide, etc.
Substance name					CAS RN
Hexachlorobenzene					118-74-1
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
28	Pentachlorophenol and its salts and esters	<ul style="list-style-type: none"> • Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. 	All	<ul style="list-style-type: none"> • Intentional addition prohibited (see Note 2) • When inclusion is unintentional: 0.0005% (5 ppm) by weight or less 	Agrichemicals
Substance name					CAS RN
Pentachlorophenol and its salts and esters					87-86-5
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
29	C9-C14 Perfluorocarboxylic acids (PFCAs), their salts, and related substances	<ul style="list-style-type: none"> • Annex XVII of REACH Regulation 	All	<ul style="list-style-type: none"> • 0.0000025% (25 ppb) by weight or less of the sum of C9-C14 PFCAs or any of their salts present in mixtures or molded articles • 0.000026% (260 ppb) by weight or less of the sum of C9-C14 PFCAs related substances present in mixtures or molded articles 	Fire extinguishing agents, water repellents, surfactants, corrosion inhibitors, etchants, anti-reflective films, photoresists, plating solutions, activators, coatings, solders, lubricants, adhesives, paints, inks, paper surface treatment agents, resin modifiers
Substance name					CAS RN
Perfluorononanoic acid (PFNA: C9 PFCA)					375-95-1
Sodium perfluorononanoate					21049-39-8
Ammonium perfluorononanoate					4149-60-4
Perfluorodecanoic acid (PFDA: C10 PFCA)					335-76-2
Sodium perfluorodecanoate					3830-45-3
Ammonium perfluorodecanoate					3108-42-7
Perfluoroundecanoic acid (PFUnDA: C11 PFCA)					2058-94-8
Perfluorododecanoic acid (PFDoDA: C12 PFCA)					307-55-1
Perfluorotridecanoic acid (PFTrDA: C13 PFCA)					72629-94-8
Perfluorotetradecanoic acid (PFTDA: C14 PFCA)					376-06-7
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
30	Dechlorane Plus	<ul style="list-style-type: none"> • Annex I of Stockholm convention on POPs 	All	Intentional addition prohibited (see Note 2)	Adhesives, sealants flame retardants
Substance name					CAS RN
1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo 6,9.02,13.05,10]octadeca-7,15-diene					13560-89-9
(1S,2S,5S,6S,9R,10R,13R,14R)-1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene					135821-74-8
(1S,2S,5R,6R,9S,10S,13R,14R)-1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene					135821-03-3

2. Scheduled to be prohibited

3. Declarable (declaration required when standard values are exceeded)

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
1	Cobalt dichloride (CoCl ₂)	• Annex XVII of REACH Regulation	All	• Intentional addition • 0.1% (1,000 ppm) by weight	Catalysts, paints, pigments, ink desiccants, platings, medical applications, pharmaceutical applications (patch test patches)
Substance name					CAS RN
Cobalt dichloride (CoCl ₂)					7646-79-9
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
2	Fluorinated greenhouse gases (HFC, PFC, SF ₆)	IEC62474	Refer to the followings as products, equipments and gases to be prohibited	• Intentional addition	Refrigerants, blowing agents, extinguishing agents, cleaning agents, insulating media, caustic gas
Representative examples of relevant substance (1)					
Substance name					CAS RN
Hydrofluorocarbons (HFCs)					
Trifluoromethane (fluoroform) (HFC-23)					75-46-7
Difluoromethane (HFC-32)					75-10-5
Methyl fluoride (methyl fluoride) (HFC-41)					593-53-3
Pentafluoroethane (HFC-125)					354-33-6
1,1,2,2-Tetrafluoroethane (HFC-134)					359-35-3
1,1,1,2-Tetrafluoroethane (HFC-134a)					811-97-2
1,1,2-Trifluoroethane (HFC-143)					430-66-0
1,1,1-Trifluoroethane (HFC-143a)					420-46-2
1,2-Difluoroethane (HFC-152)					-
1,1-Difluoroethane (HFC-152a)					75-37-6
Fluoroethane (ethyl fluoride) (HFC-161)					-
1,1,1,2,3,3,3-Heptafluoropropane (HFC-227ea)					431-89-0
1,1,1,2,2,3-Hexafluoro-propane (HFC-236cb)					677-56-5
1,1,1,2,3,3-Hexafluoropropane (HFC-236ea)					431-63-0
1,1,1,3,3,3-Hexafluoropropane (HFC-236fa)					690-39-1
1,1,2,2,3-Pentafluoropropane (HFC-245ca)					679-86-7
1,1,1,3,3-Pentafluoropropane (HFC-245fa)					460-73-1
1,1,1,3,3-Pentafluorobutane (HFC-365mfc)					406-58-6
1,1,1,2,2,3,4,5,5,5-Decafluoropentane (HFC-43-10mee)					138495-42-8
Perfluorocarbons (PFCs)					
Tetrafluoromethane(perfluoromethane, carbon tetrafluoride) (PFC-14)					75-73-0
Hexafluoroethane (perfluoroethane) (PFC-116)					76-16-4
Octafluoropropane (perfluoropropane) (PFC-218)					76-19-7
Decafluorobutane (perfluorobutane) (PFC-31-10)					355-25-9
Dodecafluoropentane (perfluoropentane) (PFC-41-12)					678-26-2
Tetradecafluorohexane (perfluorohexane)(PFC-51-14)					355-42-0
Octafluorocyclobutane (perfluorocyclobutane)(PFC-c318)					115-25-3
Other perfluorinated compounds					
Sulfur hexafluoride (SF ₆)					2551-62-4
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
3	Formaldehyde	• Annex XVII of REACH Regulation	• Clothing and related accessories • Fiber products • Footwear	• 0.0075% by weight	Adhesives, paints
Substance name					CAS RN
Formaldehyde					50-00-0

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use	
4	Nickel and nickel compounds (6)	• Annex XVII of REACH Regulation	All,where prolonged skin contact is expected	Intentional addition	Stainless steel,plating;example application for prolonged skin contact is an ear bud (headphone),mobile phone	
		Substance name			CAS RN	
		Nickel			7440-02-0	
		Nickel (II) sulfate hexahydrate			10101-97-0	
		Nickel oxide			11099-02-8	
		Nickel hydroxide (II)			12054-48-7	
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use	
5	Selected Phthalates Group 2(7) (DIDP, DINP, DNOP)	• Annex XVII of REACH Regulation	Children's toy or child care article that can be placed in a child's mouth	• 0.1% (1,000 ppm) by weight of plasticized material as the sum of phthalate esters	Plasticizer, dye, pigment, paint, ink, adhesive, lubricant	
		Representative examples of relevant substance (1)				
		Substance name				CAS RN
		Diisodecyl phthalate (DIDP)				76761-40-0 68515-49-1
		Diisononyl phthalate (DINP)				28553-12-0 68515-48-0
		Di-n-octyl phthalate (DNOP)				117-84-0
		Note: The reporting requirement refers to the sum of just those substances listed above				
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use	
6	Tris (2-chloroethyl) phosphate (TCEP)	• Annex XVII of REACH Regulation	All	• 0.1% (1,000 ppm) by weight	Flame retardant	
		Substance name				CAS RN
		Tris (2-chloroethyl) phosphate (TCEP)				115-96-8
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use	
7	Other SVHC	• REACH Regulation - SVHC	All	• 0.1% (1,000 ppm) by weight		
		Substance name				CAS RN
		Must confirm the text of the laws and regulations (latest versions) https://echa.europa.eu/candidate-list-table				
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use	
8	Perfluorohexanoic acid (PFHxA) and its salts and PFHxA related substances	•Candidates to be added to Annex I of Stockholm convention on POPs	All	• Intentional addition	Carpet, leather, fiber, paper, plating, electronic component	
		Substance name				CAS RN
		Perfluorohexanoic acid (PFHxA)				307-24-4
		Sodium salt of perfluorohexanoic acid				2923-26-4
		Ammonium salt of perfluorohexanoic acid				21615-47-4
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use	
9	Tris (2,3-dibromopropyl) phosphate (TRIS)	• Annex XVII of REACH Regulation	All	• Intentional addition		
		Substance name				CAS RN
		Tris(2,3-dibromopropyl)phosphate(TRIS)				126-72-7
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use	
10	Tris (1-aziridinyl) phosphine oxide (TEPA)	• Annex XVII of REACH Regulation	すべて	• Intentional addition		
		Substance name				CAS RN
		Tris (1-aziridinyl) phosphine oxide (TEPA)				545-55-1
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use	
11	Aldrin	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	All	• Intentional addition	Insecticide	
		Substance name				CAS RN
		Aldrin				309-00-2

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
12	Dieldrin	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	All	• Intentional addition	Insecticide
		Substance name			CAS RN
		Dieldrin			60-57-1
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
13	Endrin	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	All	• Intentional addition	Insecticide
		Substance name			CAS RN
		Endrin			72-20-8
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
14	DDT	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	All	• Intentional addition	Insecticide
		Substance name			CAS RN
		DDT			50-29-3
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
15	Chlordanes	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	All	• Intentional addition	Termite insecticide, etc.
		Substance name			CAS RN
		Chlordanes			12789-03-6
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
16	N,N'-Ditolyl-p-phenylenediamine, N-tolyl-N'-xylyl-p-phenylenediamine, or N,N'-dixylyl-p-phenylenediamine	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	All	• Intentional addition	Rubber antioxidants and styrene-butadiene rubber
		Substance name			CAS RN
		N,N'-Ditolyl-p-phenylenediamine, N-tolyl-N'-xylyl-p-phenylenediamine, or N,N'-dixylyl-p-phenylenediamine			27417-40-9
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
17	Toxaphene	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	All	• Intentional addition	(Agricultural and livestock) insecticide and miticide
		Substance name			CAS RN
		Toxaphene			8001-35-2
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
18	Mirex	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	All	• Intentional addition	Flame retardants for resins, rubber, paints, paper, textiles, electrical products, etc.; insecticide and anticide
		Substance name			CAS RN
		Mirex			2385-85-5
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
19	Kelthane (Dicofol)	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	All	• Intentional addition	Tick repellent
		Substance name			CAS RN
		Kelthane (Dicofol)			115-32-2
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
20	Hexachloro-1,3-butadiene	• Act on the Evaluation of Chemical	All	• Intentional addition	Solvent
		Substance name			CAS RN
		Hexachloro-1,3-butadiene			87-68-3
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
21	Pentachlorobenzene	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	All	• Intentional addition	Raw materials for insecticide, etc.
		Substance name			CAS RN
		Pentachlorobenzene			608-93-5

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
22	alpha-hexachlorocyclohexane	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	All	• Intentional addition	By-product of CAS RN58-89-9
		Substance name			CAS RN
		alpha-hexachlorocyclohexane			319-84-6
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
23	beta-Hexachlorocyclohexane	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	All	• Intentional addition	By-product of CAS RN58-89-9
		Substance name			CAS RN
		beta-Hexachlorocyclohexane			319-85-7
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
24	gamma-Hexachlorocyclohexane	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	All	• Intentional addition	Agrichemicals and insecticide
		Substance name			CAS RN
		gamma-Hexachlorocyclohexane			58-89-9
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
25	Chlordecone	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	All	• Intentional addition	Agrichemicals and insecticide
		Substance name			CAS RN
		Chlordecone			143-50-0
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
26	Endosulfan	• Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	All	• Intentional addition	
		Substance name			CAS RN
		Endosulfan			115-29-7 959-98-8 33213-65-9
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
27	4,4'-isopropylidenediphenol (bisphenolA; BPA)	• Annex XVII of REACH Regulation	All	• Intentional addition • 0.02% (200 ppm) by weight	
		Substance name			CAS RN
		4,4'-isopropylidenediphenol (bisphenolA; BPA)			80-05-7

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
28	CMR substances under Annex XVII of REACH Regulation (excluding substances already designated prohibited chemical substances)	• Annex XVII of REACH Regulation	• Clothing and related accessories • Fiber products • Footwear	• Intentional addition	Straps, bags, pouches, etc.
		Typical examples of appropriate chemical substances (1)			
		Substance name			CAS RN
		Benzene			71-43-2
		alpha,alpha,alpha-tetrachlorotoluene; p-chlorobenzotrithloride			5216-25-1
		alpha,alpha,alpha-trichlorotoluene, benzotrithloride			98-07-7
		alpha-chlorotoluene; benzyl chloride			100-44-7
		1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich			71888-89-6
		Bis(2-methoxyethyl) phthalate			117-82-8
		Diisopentyl phthalate			605-50-5
		Dipentyl phthalate (DPP)			131-18-0
		N-methylpyrrolidone; 1-Methyl-2-pyrrolidinone (NMP)			872-50-4
		N,N-Dimethylethanamide (DMAC)			127-19-5
		N,N-Dimethylmethanamide; Dimethylformamide			68-12-2
		1,4,5,8-tetraaminoanthraquinone, Disperse blue 1			2475-45-8
		Substance name			CAS RN
		Benzamine, 4,4'-((4-iminocyclohexa-2,5-dienylidene)methylene)dianiline hydrochloride; Basic Red 9			569-61-9
		4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride; Basic Violet 3			548-62-9
		5-Chloro-2-methylaniline hydrochloride			3165-93-3
		2-Naphthylammonium acetate			553-00-4
		4-Methoxy-m-phenylenediamine sulfate; 2,4-Diaminoanisole sulfate			39156-41-7
		2,4,5-Trimethylaniline hydrochloride			21436-97-5
		Quinoline			91-22-5
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
29	Polyvinyl chloride (PVC) and PVC mixture	• Annex XVII of REACH Regulation	All	• 0.1% (1,000 ppm) by weight	• Packaging materials and accessories
		Substance name			CAS RN
		Polyvinyl chloride (PVC)			9002-86-2
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
30	Arsenic and arsenic compounds	• Annex XVII of REACH Regulation	All	• Intentional addition • 0.0001% (1 ppm) by weight	Wood, clothing, accessories, fiers and glass
		Typical examples of appropriate chemical substances (1)			
		Substance name			CAS RN
		Arsenic			7440-38-2
		Copper chromated arsenate (CCA)			37337-13-6
		Arsenic trioxide			1327-53-3
		Triethyl arsenate			15606-95-8
		Acid lead arsenate (II)			3687-31-8
		Calcium arsenate			7778-44-1
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
31	Radioactive material	• EU-D 96/29/Euratom • Act on Prevention of Radiation Hazards due to Radioisotopes, etc.	All	• Intentional addition	Optical characteristics (thorium), measuring devices, gauges and sensors
		Typical examples of appropriate chemical substances (1)			
		Substance name			CAS RN
		Uranium 238			7440-61-1
		Radon			10043-92-2
		Americium 241			14596-10-2
		Thorium 232			7440-29-1
		Cesium 137			10045-97-3
		Strontium 90			10098-97-2

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
32	Phenol, isopropylated, phosphate (3:1)	• Toxic Substances Control Act (TSCA)	All	• Intentional addition	
		Substance name			CAS RN
		Phenol, isopropylated, phosphate			68937-41-7
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
33	2,4,6-Tri-tert-butylphenol	Toxic Substances Control Act (TSCA)	All excluding molded parts	Intentional addition	Lubricant or fuel additives such as antioxidants
		Substance name			CAS RN
		2,4,6-Tri-tert-butylphenol			732-26-3
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
34	Pentachlorothiophenol (PCTP)	Toxic Substances Control Act (TSCA)	All	Intentional addition	Rubber peptizers
		Substance name			CAS RN
		Pentachlorothiophenol (PCTP)			133-49-3
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
35	Medium-chain chlorinated paraffins (MCCPs)	Additional candidate for the POPs Convention	All	Intentional addition	Flame-retardant resin raw materials
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
36	Peptachlor	• Annex I of Stockholm convention on POPs	All	Intentional addition	
		Substance name			CAS RN
		Peptachlor			76-44-8
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
37	Tris(1,3-chloro-2-propyl) = phosphate (TDCPP)	U.S. State Regulations	All	Intentional addition	Flame retardant
		Substance name			CAS RN
		Tris(1,3-chloro-2-propyl) = phosphate (TDCPP)			13674-87-8
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
38	1,1,2-trichloroethane	• Annex XVII of REACH Regulation	All	Intentional addition	
		Substance name			CAS RN
		1,1,2-trichloroethane			79-00-5
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
39	Red phosphorus	Stanley Company Policy	All	Intentional addition	
		Substance name			CAS RN
		Red phosphorus			7723-14-0

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
40	1,1'-(Ethane-1,2-diyl)bis[2,3,4,5,6-pentabromobenzene](DBDPE)	Canada Regulations	All	Intentional addition	
		Substance name			CAS RN
		1,1'-(Ethane-1,2-diyl)bis[2,3,4,5,6-pentabromobenzene](DBDPE)			1163-19-5
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
41	Beryllium and its compounds	Stanley Company Policy	All	Intentional addition	
		Substance name			CAS RN
		Beryllium and its compounds			79-94-7
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
42	Hydrochlorofluorocarbons	EU-F Gas Regulations	All	Intentional addition	
		Substance name			CAS RN
		1-Chloro-1,1-difluoroethane (HCFC-142b)			75-68-3
		Chlorodifluoromethane (HCFC-22)			75-45-6
		1-Chloro-1,1,1,2-tetrafluoroethane (HCFC-124)			2837-89-0
		2-Chloro-1,1,1-trifluoroethane (HCFC133a)			75-88-7
		Chlorofluoromethane			593-70-4
		2,2-Dichloro-1,1,1-trifluoroethane (HCFC123)			306-83-2
		1,1-Dichloro-1-fluoroethane (HCFC141b)			1717-00-6
		Dichlorofluoromethane (HCFC-21)			75-43-4
		1,3-Dichloro-1,1,2,2,3-pentafluoropropane (HCFC225cb)			507-55-1
		3,3-Dichloro-1,1,1,2,2-pentafluoropropane (HCFC225ca)			422-56-0
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
43	Tris(1-chloro-2-propyl) =	U.S. State Regulations	All	Intentional addition	
		Substance name			CAS RN
		Tris(1-chloro-2-propyl) = phosphate (TCPP)			13674-84-5
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
44	Perfluoroalkyl Compounds and	Maine PFAS Regulations	All	<ul style="list-style-type: none"> Intentional addition 0% by weight 	
		Substance name			
		See the link below https://comptox.epa.gov/dashboard/chemical-lists/pfasmaster			

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
45	Halogen flame retardants	EU-ErP Directive	All	<ul style="list-style-type: none"> Intentional addition 0% by weight 	
		Note: Substance non-pursuant to chemSHERPA			

Notes:

(1) Representative examples of corresponding chemical substances:

This does not necessarily cover all enumerated chemical substances with a CAS NO corresponding to the classes of chemicals.

(2) Intentionally added: Intentionally added means that the corresponding substance or compound including the corresponding substance is intentionally added during manufacturing process, etc., irrespective of quantity. Ordinary impurities do not fall under this category.

The substance, for which "Intentionally added" is written in its threshold field, must not be intentionally added.

(3) The European Community's ban applies to azocolourants and azodyes that by reductive cleavage of azo groups may release one of the 22 aromatic amines listed. The Standard Value given applies to these amines, not to the azocolourants and azodyes.

(4) HBCD is also referred to as HBCDD. HBCD and HBCDD are the same substance.

(5) A printed wiring board laminate refers to the layered board materials excluding surface finishing and components

(6) Nickel must be reported in certain regulated applications where it is likely to result in prolonged skin exposure (e.g., an outer enclosure for a portable electronic product designed to be carried). Use of nickel or nickel contained in components and parts designed to be located inside the outer enclosure of a product need not be reported.

(7) The Standard Value here is the sum of the phthalate concentrations of the phthalates (identified in the respective Annex B tables) in the selected phthalate group designated by the Substance/Category.

Annex 4. Exemptions from Annex III of the EU RoHS Directive

The following applications are excluded from the RoHS Directive as of **September 1, 2024**.

However, because RoHS Directive annexes are continuously being revised, it is necessary to confirm the latest information.

Refer to the European Commission website for the latest information.

https://environment.ec.europa.eu/topics/waste-and-recycling/rohs-directive/implementation-rohs-directive_en

N o	Applications exempted from the restriction	Exemption deadline				
		Categories 1 to 7 and 10	Medical monitoring and control equipment	Category 8 Medical equipment for in vitro diagnostic use	Category 9 Industrial monitoring and control equipment	Category 11 Other electrical and/or electronic equipment
1	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner):					
1(a)	For general lighting purposes < 30 W : 2.5mg	Feb. 24, 2023 Deadline passed				
1(b)	For general lighting purposes ≥ 30 W and < 50 W : 3.5mg	Feb. 24, 2023 Deadline passed				
1(c)	For general lighting purposes ≥ 50 W and < 150 W : 5mg	Feb. 24, 2023 Deadline passed				
1(d)	For general lighting purposes ≥ 150 W : 15mg	Feb. 24, 2023 Deadline passed				
1(e)	For general lighting purposes with circular or square structural shape and tube diameter ≤ 17 mm : 5mg	Feb. 24, 2023 Deadline passed				
1(f)- I	For lamps designed to emit mainly light in the ultraviolet spectrum: 5 mg	Feb. 24, 2027				
1(f)- II	For special purposes : 5mg	Feb. 24, 2025				
1(g)	For general lighting purposes < 30 W with a lifetime equal or above 20,000 h : 3.5 mg	Aug. 24, 2023 Deadline passed				
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) : 4mg	Feb. 24, 2023 Deadline passed				
2(a)(2)	Tri-band phosphor with normal lifetime and a tube diameter ≥ 9 mm and ≤ 17 mm (e.g. T5) : 3mg	Aug. 24, 2023 Deadline passed				
2(a)(3)	Tri-band phosphor with normal lifetime and a tube diameter > 17 mm and ≤ 28 mm (e.g. T8) : 3.5mg	Aug. 24, 2023 Deadline passed				
2(a)(4)	Tri-band phosphor with normal lifetime and a tube diameter > 28 mm (e.g. T12) : 3.5mg	Feb. 24, 2023 Deadline passed				
2(a)(5)	Tri-band phosphor with long lifetime (≥ 25,000 h) : 5mg	Feb. 24, 2023 Deadline passed				
2(b)	Mercury in other fluorescent lamps not exceeding (per lamp):					
2(b)(1)	Straight tube halophosphate lamps with tube diameters larger than 28 mm (e.g., T10 and T12): 10 mg	Apr.13,2012 Deadline passed				
2(b)(2)	Non-straight-tube halophosphate lamps (all tube diameters): 15 mg	Apr.13,2016 Deadline passed				
2(b)(3)	Non-linear tri-band phosphor lamps with tube diameter > 17 mm (e.g. T9) : 15 mg	Aug 24, 2023 Deadline passed				
	Non-linear tri-band phosphor lamps with tube diameter > 17 mm (e.g. T9) : 10mg	Feb. 24, 2025				
2(b)(4)-I	Lamps for other general lighting and special purposes (e.g. induction lamps) : 15mg	Update pending				
2(b)(4)- II	Lamps emitting mainly light in the ultraviolet spectrum: 15 mg	Feb. 24, 2027				
2(b)(4)-III	Emergency lamps: 15 mg	Feb. 24, 2027				
3	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes used in EEE placed on the market before 24 February 2022 not exceeding (per lamp):					
3(a)	Short length (≤ 500 mm) : 3.5mg	Feb. 24, 2025				
3(b)	Medium length (> 500 mm and ≤ 1,500 mm) : 5mg	Feb. 24, 2025				
3(c)	Long length (> 1,500 mm) : 13mg	Feb. 24, 2025				

N o	Applications exempted from the restriction	Exemption deadline				
		Categories 1 to 7 and 10	Medical monitoring and control equipment	Category 8 Medical equipment for in vitro diagnostic use	Category 9 Industrial monitoring and control equipment	Category 11 Other electrical and/or electronic equipment
4(a)	Mercury in other low pressure discharge lamps (per lamp) : 15mg	Feb. 24, 2023 Deadline passed	Feb. 24, 2023 Deadline passed	Feb. 24, 2023 Deadline passed	Feb. 24, 2023 Deadline passed	Feb. 24, 2023 Deadline passed
4(a)-I	Mercury in low pressure non-phosphor coated discharge lamps, where the application requires the main range of the lamp-spectral output to be in the ultraviolet spectrum: up to 15 mg mercury may be used per lamp	Feb. 24, 2027				
4(b)	Mercury in high-pressure sodium (steam) lamps for general lighting applications with a power of 105 W or less and an average color rendering index of more than 80: 16 mg per burner	Feb. 24, 2027				
4(b)- I	$P \leq 155W$: 30 mg	Feb. 22, 2023 Deadline passed				
4(b)- II	$155W < P \leq 405W$: 40 mg	Feb. 22, 2023 Deadline passed				
4(b)-III	$405W < P$: 40 mg	Feb. 22, 2023 Deadline passed				
4(c)	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding(per burner):					
4(c)- I	$P \leq 155 W$: 20mg	Feb. 24, 2027				
4(c)- II	$155 W < P \leq 405 W$: 25mg	Feb. 24, 2027				
4(c)-III	$405 W < P$: 25mg	Feb. 24, 2027				
4(d)	Mercury in High Pressure Mercury (vapour) lamps(HPMV)	Apr.13,2015 Deadline passed	Apr.13,2015 Deadline passed			
4(e)	Mercury in metal halide lamps (MH)	Feb. 24, 2027				
4(f)-I	Mercury in other discharge lamps for specialpurposes not specifically mentioned in this Annex	Update pending				
4(f)- II	Mercury in high pressure mercury vapour lamps used in projectors where an output ≥ 2000 lumen ANSI is required	Feb. 24, 2027				
4(f)-III	Mercury in high pressure sodium vapour lamps used for horticulture lighting	Feb. 24, 2027				
4(f)-IV	Mercury in lamps emitting light in the ultraviolet spectrum	Feb. 24, 2027				
4(g)	Mercury in handicraft luminescent electric discharge tubes for signage, ornamental or architectural purposes and professional lighting fixtures and light artworks. Mercury content is limited to: (a) Add 20 mg per electrode pair and 0.3 mg per 1 cm of tube length for outdoor or indoor applications at temperatures of 20°C or below. (However, the total shall be 80 mg or less.) (b) For all other indoor applications add 15 mg per electrode pair and 0.24 mg per 1 cm of tube length. (However, the total shall be 80 mg or less.)	Dec.31,2018 Deadline passed				
5(a)	Lead in glass of cathode ray tubes	July. 21, 2016 Deadline passed	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed	July. 21, 2024 Deadline passed
5(b)	Lead in glass of fluorescent tubes not exceeding 0,2 % by weight	Update pending	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed	July. 21, 2024 Deadline passed

N o	Applications exempted from the restriction	Exemption deadline				
		Categories 1 to 7 and 10	Medical monitoring and control equipment	Category 8 Medical equipment for in vitro diagnostic use	Category 9 Industrial monitoring and control equipment	Category 11 Other electrical and/or electronic equipment
6(a)	Lead as an alloying element in steel for machining purposes and in galvanised steel containing up to 0,35 % lead by weight	June.30,2019 Deadline passed	Update pending	Update pending	Update pending	Update pending
6(a)- I	Lead as an alloying element in steel for machining purposes containing up to 0,35 % lead by weight and in batch hot dip galvanised steel components containing up to 0,2 % lead by weight	Update pending				
6(b)	Lead as an alloying element in aluminium containing up to 0,4 % lead by weight	June.30,2019 Deadline passed	Update pending	Update pending	Update pending	Update pending
6(b)- I	Lead as an alloying element in aluminium containing up to 0,4 % lead by weight, provided it stems from lead-bearing aluminium scrap recycling	Update pending				
6(b)- II	Lead as an alloying element in aluminium for machining purposes with a lead content up to 0,4 % by weight	Update pending				
6(c)	Copper alloy containing up to 4 % lead by weight	Update pending	Update pending	Update pending	Update pending	Update pending
7(a)	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)	Update pending	Update pending	Update pending	Update pending	Update pending
7(b)	Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission, and network management for telecommunications	July. 21, 2016 Deadline passed	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed	July. 21, 2024 Deadline passed
7(c)- I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectric devices, or in a glass or ceramic matrix compound	Update pending	Update pending	Update pending	Update pending	Update pending
7(c)- II	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher	Update pending	Update pending	Update pending	Update pending	Update pending
7(c)-III	For spare parts for EEE placed on the market before January 1, 2013, lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC	Jan.1st,2013 Deadline passed				
7(c)-IV	Lead in PZT based dielectric ceramic materials for capacitors which are part of integrated circuits or discrete semiconductors	July. 21, 2021 Deadline passed	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed	July. 21, 2024 Deadline passed
8(a)	For spare parts for EEE placed on the market before January 1, 2012, cadmium and its compounds in one shot pellet type thermal cut-offs	January 1, 2012 Deadline passed				
8(b)	Cadmium and its compounds in electrical contacts	Feb. 29, 2020 Deadline passed	Update pending	Update pending	Update pending	Update pending
8(b)-I	Cadmium and its compounds in electrical contacts used in: - circuit breakers, - thermal sensing controls, - thermal motor protectors (excluding hermetic thermal motor protectors) - AC switches rated at: - 6 A and more at 250 V AC and more, or - 12 A and more at 125 V AC and more, - DC switches rated at 20 A and more at 18 V DC and more, and - switches for use at voltage supply frequency \geq 200 Hz.	Update pending				

N o	Applications exempted from the restriction	Exemption deadline				
		Categories 1 to 7 and 10	Medical monitoring and control equipment	Category 8 Medical equipment for in vitro diagnostic use	Category 9 Industrial monitoring and control equipment	Category 11 Other electrical and/or electronic equipment
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	Mar. 5, 2020 Deadline passed	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed	July. 21, 2024 Deadline passed
9(a)-I	Up to 0,75 % hexavalent chromium by weight, used as an anticorrosion agent in the cooling solution of carbon steel cooling systems of absorption refrigerators (including minibars) designed to operate fully or partly with electrical heater, having an average utilised power input < 75 W at constant running conditions	Mar. 5, 2021 Deadline passed				
9(a)-II	Up to 0,75 % hexavalent chromium by weight, used as an anticorrosion agent in the cooling solution of carbon steel cooling systems of absorption refrigerators: —designed to operate fully or partly with electrical heater, having an average utilised power input ≥ 75 W at constant running conditions, —designed to fully operate with non-electrical heater.	Update pending				
9(a)-III	Hexavalent chromium up to 0.7 wt% contained as an antiseptic in the working fluid in a carbon steel sealed circuit of a gas-absorbing heat pump	Dec.31,2026 Deadline passed				
9(b)	Lead in bearing shells and bushes for refrigerant-containing compressors for heating, ventilation, air conditioning and refrigeration (HVACR) applications	July. 5, 2018 Deadline passed	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed	July. 21, 2024 Deadline passed
9(b)-1	Lead contained in the bearing housing and bearing sleeve of hermetic scroll compressors containing refrigerant with a rated power of 9 kW or less and used for heating, ventilation, air conditioning and refrigeration (HVACR) applications	July. 21, 2019 Deadline passed				
10						
11(a)	For spare parts for EEE placed on the market before September 24, 2010, lead used in C-press compliant pin connector systems	Sep. 24, 2010 Deadline passed				
11(b)	For spare parts for EEE placed on the market before January 1, 2013, lead used in other than C-press compliant pin connector systems	Jan.1st,2013 Deadline passed				
12	For spare parts for EEE placed on the market before September 24, 2010, lead as a coating material for the thermal conduction module C-ring	Sep. 24, 2010 Deadline passed				
13(a)	Lead in white glasses used for optical applications	Update pending	Update pending	Update pending	Update pending	Update pending
13(b)	Cadmium and lead in filter glasses and glasses used for reflectance standards	July. 5, 2018 Deadline passed	Update pending	Update pending	Update pending	Update pending
13(b)- I	Cadmium and lead in filter glasses and glasses used for reflectance standards	Update pending				
13(b)- II	Cadmium in striking optical filter glass types; excluding applications falling under point 39 of this Annex	Update pending				
13(b)- III	Cadmium and lead in glazes used for reflectance standards	Update pending				
14	For spare parts for EEE placed on the market before January 1, 2011, 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	Jan.1st,2011 Deadline passed				

N o	Applications exempted from the restriction	Exemption deadline				
		Categories 1 to 7 and 10	Medical monitoring and control equipment	Category 8 Medical equipment for in vitro diagnostic use	Category 9 Industrial monitoring and control equipment	Category 11 Other electrical and/or electronic equipment
15	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages	Feb. 29, 2020 Deadline passed	Update pending	Update pending	Update pending	Update pending
15(a)	Lead in solders to complete a viable electrical connection between the semiconductor die and carrier within integrated circuit flip chip packages where at least one of the following criteria applies: - a semiconductor technology node of 90 nm or larger; - a single die of 300 mm2 or larger in any semiconductor technology node; - stacked die packages with die of 300 mm2 or larger, or silicon interposers of 300 mm2 or larger.	Update pending				
16	Lead in straight tube incandescent bulbs with silicate coated valves	Sep. 1st, 2013 Deadline passed				
17	Lead halide as radiant agent in high intensity discharge (HID) lamps used for professional reprography applications	July. 21, 2016 Deadline passed	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed	July. 21, 2024 Deadline passed
18(a)	Including phosphors such as SMS ((SR,Ba) 2 MgSi 2 O 7 :Pb), lead as an activator in fluorescent powder (less than 1% by weight) in discharge lamps used as special lamps for diazo printing, lithography, insect trapping, photochemistry and curing processes.	Jan.1st,2011 Deadline passed				
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 (BaSi2O5:Pb)	Update pending	Update pending	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed	Update pending
18(b)-I	Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps containing phosphors such as BSP (BaSi2O5:Pb) when used in medical phototherapy equipment	Update pending	July. 21, 2021 Deadline passed	July. 21, 2021 Deadline passed		
19	PbBiSn-Hg and PbInSn-Hg lead in a specific composition as the main amalgam, and PbSn-Hg lead as an auxiliary amalgam in highly compact energy-saving lamps (ESL)	June.1st,2011 Deadline passed				
20	Lead oxide in glass used to join the front and rear circuit boards of planar fluorescent lamps used in liquid crystal displays (LCDs)	June.1st,2011 Deadline passed				
21	Lead and cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	Feb. 29, 2020 Deadline passed	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed	July. 21, 2024 Deadline passed
21(a)	Cadmium when used in colour printed glass to provide filtering functions, used as a component in lighting applications installed in displays and control panels of EEE	July. 21, 2021 Deadline passed				
21(b)	Cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	July. 21, 2021 Deadline passed				
21(c)	Lead in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	July. 21, 2021 Deadline passed				
22						
23	For spare parts for EEE placed on the market before September 24, 2010, lead in finishes of fine pitch components other than connectors with a pitch of 0.65 mm and less	Sep.24,2010 Deadline passed				
24	Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors	Update pending	Update pending	Update pending	Update pending	July. 21, 2024 Deadline passed

N o	Applications exempted from the restriction	Exemption deadline				
		Categories 1 to 7 and 10	Medical monitoring and control equipment	Category 8 Medical equipment for in vitro diagnostic use	Category 9 Industrial monitoring and control equipment	Category 11 Other electrical and/or electronic equipment
25	Lead oxide in surface conduction electron emitter displays (SED) used in structural elements, notably in the seal frit and frit ring	July. 21, 2016 Deadline passed	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed	July. 21, 2024 Deadline passed
26	Lead oxide in the glass envelope of a blacklight blue lamp	June. 1st, 2011 Deadline passed				
27	Lead alloy as a solder for transducers used in high-power loudspeakers (operating for several hours at sound power levels of 125 dB SPL or more)	Sep.24,2010 Deadline passed				
28						
29	Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC	Update pending	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed	Update pending
30	Cadmium alloys as electrical/mechanical solder joints to electrical conductors located directly on the voice coil in transducers used in high-powered loudspeakers with sound pressure levels of 100 dB (A) and more	July. 21, 2016 Deadline passed	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed	July. 21, 2024 Deadline passed
31	Lead in soldering materials in mercury free flat fluorescent lamps (which, e.g. are used for liquid crystal displays, design or industrial lighting)	July. 21, 2016 Deadline passed	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed	July. 21, 2024 Deadline passed
32	Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes	Update pending	Update pending	July. 21, 2023 Deadline passed	Update pending	July. 21, 2024 Deadline passed
33	Lead in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers	July. 21, 2016 Deadline passed	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed	July. 21, 2024 Deadline passed
34	Lead in cermet-based trimmer potentiometer elements	Update pending	Update pending	Update pending	Update pending	Update pending
35						
37	Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body	July. 21, 2021 Deadline passed	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed	July. 21, 2024 Deadline passed
38	Cadmium and cadmium oxide in thick film pastes used on aluminium bonded beryllium oxide	July. 21, 2016 Deadline passed	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed	July. 21, 2024 Deadline passed
39(a)	Cadmium selenide in downshifting cadmium-based semiconductor nanocrystal quantum dots for use in display lighting applications (< 0,2 µg Cd per mm2 of display screen area)	Update pending	Update pending	Update pending	Update pending	Update pending
39(b)	Cadmium in downshifting semiconductor nanocrystal quantum dots directly deposited on LED semiconductor chips for use in display and projection applications (< 5 µg Cd per mm² of LED chip surface) with a maximum amount per device of 1 mg	Dec.31,2027	Dec.31,2027	Dec.31,2027	Dec.31,2027	Dec.31,2027
40	Cadmium in photoresist for analog optocouplers used in commercial audio equipment	Dec.31,2013 Deadline passed				
41	Lead in solders and termination finishes of electrical and electronic components and finishes of printed circuit boards used in ignition modules and other electrical and electronic engine control systems, which for technical reasons must be mounted directly on or in the crankcase or cylinder of hand-held combustion engines (classes SH:1, SH:2, SH:3 of Directive 97/68/EC of the European Parliament and of the Council	Mar. 31, 2022 Deadline passed	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed	Mar. 31, 2022 Deadline passed

N o	Applications exempted from the restriction	Exemption deadline				
		Categories 1 to 7 and 10	Medical monitoring and control equipment	Category 8 Medical equipment for in vitro diagnostic use	Category 9 Industrial monitoring and control equipment	Category 11 Other electrical and/or electronic equipment
42	Lead in bearings and bushes of diesel or gaseous fuel powered internal combustion engines applied in non-road professional use equipment: — with engine total displacement ≥ 15 litres; or — with engine total displacement < 15 litres and the engine is designed to operate in applications where the time between signal to start and full load is required to be less than 10 seconds; or regular maintenance is typically performed in a harsh and dirty outdoor environment, such as mining, construction, and agriculture applications.					Update pending
43	Bis(2-ethylhexyl) phthalate in rubber components in engine systems, designed for use in equipment that is not intended solely for consumer use and provided that no plasticised material comes into contact with human mucous membranes or into prolonged contact with human skin and the concentration value of bis(2-ethylhexyl) phthalate does not exceed: (a) 30 % by weight of the rubber for (i) gasket coatings; (ii) solid-rubber gaskets; or (iii) rubber components included in assemblies of at least three components using electrical, mechanical or hydraulic energy to do work, and attached to the engine. (b) 10 % by weight of the rubber for rubber-containing components not referred to in point (a). For the purposes of this entry, “prolonged contact with human skin” means continuous contact of more than 10 minutes duration or intermittent contact over a period of 30 minutes, per day.					July. 21, 2024 Deadline passed
44	Lead in solder of sensors, actuators, and engine control units of combustion engines within the scope of Regulation (EU) 2016/1628 of the European Parliament and of the Council , installed in equipment used at fixed positions while in operation which is designed for professionals, but also used by non-professional users.					Update pending
45	Lead diazide, lead styphnate, lead dipicramate, orange lead (lead tetroxide), lead dioxide in electric and electronic initiators of explosives for civil (professional) use and barium chromate in long time pyrotechnic delay charges of electric initiators of explosives for civil (professional) use					April. 20, 2026
46	0.1% cadmium by weight and 1.5% lead by weight in recovered rigid PVC material produced from polyvinyl chloride waste recovered from electrical and electronic windows and doors. From May 28, 2026, rigid PVC recovered from electrical and electronic windows and doors shall only be used for the production of new articles under the categories specified in entry 63, points 18 (a) to (d) of Annex XVII of the REACH Regulation. Suppliers of PVC articles containing recovered rigid PVC with a concentration of lead equal to or greater than 0.1% by weight of the PVC material shall mark articles or their containers and packaging with the statement: “Contains $\geq 0.1\%$ lead”. Suppliers of PVC articles containing recovered rigid PVC shall submit to national enforcement authorities upon request documentary evidence to substantiate the claims on the recovered origin of the PVC in those articles according to EN 15343:2007 or equivalent. Claims made on the recovered origin of the PVC in imported articles shall be accompanied by a certificate showing proof of traceability and recycled content and issued by an independent third party.					May. 28, 2028

Annex 5. Exemptions from Annex IV of the EU RoHS Directive

The following applications are excluded from the RoHS Directive as of **September 1, 2024**.

However, because RoHS Directive annexes are continuously being revised, it is necessary to confirm the latest information.

Refer to the European Commission website for the latest information.

https://environment.ec.europa.eu/topics/waste-and-recycling/rohs-directive/implementation-rohs-directive_en

N o	Applications exempted from the restriction	Medical monitoring and control equipment	Category 8 Medical equipment for in vitro diagnostic use	Category 9 Industrial monitoring and control equipment
Equipment utilising or detecting ionising radiation				
1	Lead, cadmium and mercury in detectors for ionising radiation.	Update pending	July. 21, 2023 Deadline passed	Update pending
2	Lead bearings in X-ray tubes	Update pending	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed
3	Lead in electromagnetic radiation amplification devices: micro-channel plate and capillary plate.	Update pending	Update pending	Update pending
4	Lead in glass frit of X-ray tubes and image intensifiers and lead in glass frit binder for assembly of gas lasers and for vacuum tubes that convert electromagnetic radiation into electrons.	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	Update pending
5	Lead in shielding for ionising radiation.	Update pending	July. 21, 2023 Deadline passed	Update pending
6	Lead in X-ray test objects.	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed
7	Lead stearate X-ray diffraction crystals.	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed
8	Radioactive cadmium isotope source for portable X-ray fluorescence spectrometers.	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed
Sensors, detectors and electrodes				
1a	Lead and cadmium in ion selective electrodes including glass of pH electrodes.	Update pending	Update pending	Update pending
1b	Lead anodes in electrochemical oxygen sensors.	Update pending	July. 21, 2023 Deadline passed	Update pending
1c	Lead, cadmium and mercury in infra-red light detectors.	Update pending	Update pending	Update pending
1d	Mercury in reference electrodes: low chloride mercury chloride, mercury sulphate and mercury oxide.	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed
Others				
9	Cadmium in helium-cadmium lasers.	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	Update pending
10	Lead and cadmium in atomic absorption spectroscopy lamps.	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	Update pending
11	Lead in alloys as a superconductor and thermal conductor in MRI.	Update pending	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed
12	Lead and cadmium in metallic bonds creating superconducting magnetic circuits in MRI, SQUID, NMR (Nuclear Magnetic Resonance) or FTMS (Fourier Transform Mass Spectrometer) detectors.	Update pending	June.30,2021 Deadline passed	Update pending
13	Lead in counterweights.	Update pending	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed
14	Lead in single crystal piezoelectric materials for ultrasonic transducers.	Update pending	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed
15	Lead in solders for bonding to ultrasonic transducers.	Update pending	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed
16	Mercury in very high accuracy capacitance and loss measurement bridges and in high frequency RF switches and relays in monitoring and control instruments not exceeding 20mg of mercury per switch or relay.	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed
17	Lead in solders in portable emergency defibrillators.	Update pending	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed

N o	Applications exempted from the restriction	Medical monitoring and control equipment	Category 8 Medical equipment for in vitro diagnostic use	Category 9 Industrial monitoring and control equipment
18	Lead in solders of high performance infrared imaging modules to detect in the range 8-14 µm.	Update pending	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed
19	Lead in Liquid crystal on silicon (LCoS) displays.	July. 21, 2021 Deadline passed	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed
20	Cadmium in X-ray measurement filters.	Update pending	July. 21, 2023 Deadline passed	July. 21, 2024 Deadline passed
21	Cadmium in phosphor coatings in image intensifiers for X-ray images	Dec.31,2019 Deadline passed	Dec.31,2019 Deadline passed	Dec.31,2019 Deadline passed
22	Lead acetate marker for use in stereotactic head frames for use with CT and MRI and in positioning systems for gamma beam and particle therapy equipment.	June.30,2021 Deadline passed	June.30,2021 Deadline passed	June.30,2021 Deadline passed
23	Lead as an alloying element for bearings and wear surfaces in medical equipment exposed to ionising radiation.	June.30,2021 Deadline passed	June.30,2021 Deadline passed	
24	Lead that enables a vacuum-tight connection between aluminum and iron in X-ray image intensifiers	Feb. 31, 2023 Deadline passed	Dec.31,2019 Deadline passed	Dec.31,2019 Deadline passed
25	Lead in the surface coatings of pin connector systems requiring nonmagnetic connectors which are used durably at temperature below - 20 °C under normal operating and storage conditions.	June.30,2021 Deadline passed	June.30,2021 Deadline passed	June.30,2021 Deadline passed
26	Lead in - solders on printed circuit boards, - termination coatings of electrical and electronic components and coatings of printed circuit boards, - solders for connecting wires and cables, - solders connecting transducers and sensors, that are used durably at a temperature below -20 °C under normal operating and storage conditions. Lead in solders of electrical connections to temperature measurement sensors in devices which are designed to be used periodically at temperatures below - 150 °C.	Update pending	June.30,2021 Deadline passed	Update pending
27	Lead in - solders, - termination coatings of electrical and electronic components and printed circuit boards, - connections of electrical wires, shields and enclosed connectors, which are used in (a) magnetic fields within the sphere of 1 m radius around the isocentre of the magnet in medical magnetic resonance imaging equipment, including patient monitors designed to be used within this sphere, or (b) magnetic fields within 1 m distance from the external surfaces of cyclotron magnets, magnets for beam transport and beam direction control applied for particle therapy.	Update pending	Update pending	
	(c) MRI non-integrated coils, for which the Declaration of Conformity is issued for the first time before September 23, 2022, or (d) MRI devices including integrated coils, which are used in magnetic fields within the sphere of 1 m radius around the isocentre of the magnet in medical magnetic resonance imaging equipment, for which the Declaration of Conformity is issued for the first time before June 30, 2024.	Jun.30,2027		
28	Lead contained in solder used to mount a digital-array detectors for cadmium telluride and zinc cadmium telluride on PCBs	Dec.31,2017 Deadline passed	Dec.31,2017 Deadline passed	Dec.31,2017 Deadline passed
29	Lead in alloys, as a superconductor or thermal conductor, used in cryo-cooler cold heads and/or in cryo-cooled cold probes and/or in cryo-cooled equipment potential bonding systems, in medical devices (category 8) and/or in industrial monitoring and control instruments.	Update pending	June.30,2021 Deadline passed	June.30,2021 Deadline passed
30	Hexavalent chromium in alkali dispensers used to create photocathodes in X-ray image intensifiers until 31 December 2019 and in spare parts for X-ray systems placed on the EU market before 1 January 2020.	Dec.31,2019 Deadline passed	Dec.31,2019 Deadline passed	Dec.31,2019 Deadline passed

N o	Applications exempted from the restriction	Medical monitoring and control equipment	Category 8 Medical equipment for in vitro diagnostic use	Category 9 Industrial monitoring and control equipment
31a	Lead, cadmium, hexavalent chromium, and polybrominated diphenyl ethers (PBDE) in spare parts recovered from and used for the repair or refurbishment of medical devices, including in vitro diagnostic medical devices, or electron microscopes and their accessories, provided that the reuse takes place in auditable closed-loop business-to-business return systems and that each reuse of parts is notified to the customer.	Update pending	Update pending	July. 21, 2024 Deadline passed
32	Lead contained in the solder of PCBs used in positron tomography (PET) detectors and data acquisition equipment integrated into nuclear magnetic resonance imaging (MRI) equipment	Dec.31,2019 Deadline passed	Dec.31,2019 Deadline passed	Dec.31,2019 Deadline passed
33	Lead in solders on populated printed circuit boards used in Directive 93/42/EEC class IIa and IIb mobile medical devices other than portable emergency defibrillators.	Dec.31,2020 Deadline passed		
34	Lead as an activator in the fluorescent powder of discharge lamps when used for extracorporeal photopheresis lamps containing BSP (BaSi ₂ O ₅ :Pb) phosphors.	July. 21, 2021 Deadline passed	July. 21, 2021 Deadline passed	
35	Mercury in cold cathode fluorescent lamps for back-lighting liquid crystal displays, not exceeding 5 mg per lamp, used in industrial monitoring and control instruments placed on the market before 22 July 2017.			July. 21, 2024 Deadline passed
36	Lead used in other than C-press compliant pin connector systems for industrial monitoring and control instruments.			Dec.31,2020 Deadline passed
37	Lead in platinized platinum electrodes used for conductivity measurements where at least one of the following conditions applies: (a) wide-range measurements with a conductivity range covering more than 1 order of magnitude (e.g. range between 0,1 mS/m and 5 mS/m) in laboratory applications for unknown concentrations; (b) measurements of solutions where an accuracy of +/- 1 % of the sample range and where high corrosion resistance of the electrode are required for any of the following: (i) solutions with an acidity < pH 1; (ii) solutions with an alkalinity > pH 13; (iii) corrosive solutions containing halogen gas; (c) measurements of conductivities above 100 mS/m that must be performed with portable instruments.	Dec.31,2025	Dec.31,2025	Dec.31,2025
38	Lead in solder in one interface of large area stacked die elements with more than 500 interconnects per interface which are used in X-ray detectors of computed tomography and X-ray systems.	Dec.31,2019 Deadline passed	Dec.31,2019 Deadline passed	Dec.31,2019 Deadline passed
39	Lead in micro-channel plates (MCPs) used in equipment where at least one of the following properties is present: (a) a compact size of the detector for electrons or ions, where the space for the detector is limited to a maximum of 3mm/MCP (detector thickness + space for installation of the MCP), a maximum of 6 mm in total, and an alternative design yielding more space for the detector is scientifically and technically impracticable; (b) a two-dimensional spatial resolution for detecting electrons or ions, where at least one of the following applies: (i) a response time shorter than 25 ns; (ii) a sample detection area larger than 149 mm ² ; (iii) a multiplication factor larger than $1,3 \times 10^3$. (c) a response time shorter than 5 ns for detecting electrons or ions; (d) a sample detection area larger than 314 mm ² for detecting electrons or ions; (e) a multiplication factor larger than $4,0 \times 10^7$.	Update pending	Update pending	Update pending
40	Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC for industrial monitoring and control instruments.			Dec.31,2020 Deadline passed
41	Lead as a thermal stabiliser in polyvinyl chloride (PVC) used as base material in amperometric, potentiometric and conductometric electrochemical sensors which are used in in-vitro diagnostic medical devices for the analysis of blood and other body fluids and body gases.		Mar. 31, 2022 Deadline passed	

N o	Applications exempted from the restriction	Medical monitoring and control equipment	Category 8 Medical equipment for in vitro diagnostic use	Category 9 Industrial monitoring and control equipment
41a	Lead as a thermal stabilizer in polyvinyl chloride (PVC) used as base material in amperometric, potentiometric and conductometric electrochemical sensors which are used in in-vitro diagnostic medical devices for the analysis of creatinine and blood urea nitrogen in whole blood		Dec. 31, 2023 Deadline passed	
42	Mercury in electric rotating connectors used in intravascularultrasound imaging systems capable of highoperating frequency (> 50 MHz) modes of operation.	June. 30, 2026		
43	Cadmium anodes in Hersch cells for oxygen sensors used in industrial monitoring and control instruments, where sensitivity below 10 ppm is required.			July. 15, 2023 Deadline passed
44	Cadmium in radiation tolerant video camera tubes designed for cameras with a centre resolution greater than 450 TV lines which are used in environments with ionising radiation exposure exceeding 100 Gy/hour and a total dose in excess of 100kGy.	Mar. 31, 2027		Mar. 31, 2027
45	Bis(2-Ethylhexyl) phthalate (DEHP) in ion-selective electrodes applied for point-of-care analysis of ionic substances present in human body fluids and/or dialysate	July. 21, 2028		
46	Bis(2-Ethylhexyl) phthalate (DEHP) in plastic parts of Magnetic Resonance Imaging (MRI) detector coils		Update pending	
47	Bis(2-ethylhexyl) phthalate (DEHP), Benzyl butyl phthalate (BBP), Dibutyl phthalate (DBP), and Diisobutyl phthalate (DIBP) in spare parts recovered from and used for the repair or refurbishment of medical devices, including in vitro diagnostic medical devices, provided that the reuse takes place in auditable closed-loop business-to-business return systems and that each reuse of parts is notified to the customer		July. 21, 2028	
48	Bismuth strontium calcium copper oxide (BSCCO) lead in superconducting cables and wires, and the lead in electrical connections to these wires	June. 30, 2027	June. 30, 2027	June. 30, 2027
49	Mercury in melt pressure transducers for capillary rheometers at temperatures over 300°C and pressures over 1,000 bar			Dec. 31, 2025

Annex 6. Specially Controlled Substances (Packaging Materials)

The following chemical substances are prohibited from inclusion in packaging materials. The concentration of these chemical substances should be below the standard value.

1. Prohibited substances

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
1	Specific Heavy Metals Cd/Cd Compounds; CrVI Compounds; Pb/Pb Compounds; Hg/Hg Compounds	• EU 94/62/EC Directive • US State Toxics in Packaging(TIP)	All	• Intentional addition prohibited • When inclusion is unintentional: 0.01% (100 ppm) by weight of the sum of Cd, Hg, Pb & Cr (VI) in the packaging material or less	Pigment, paint, Stabilizer for PVC
Representative examples of relevant substance					
Cadmium/Cadmium Compounds					CAS No.
Cadmium					7440-43-9
Cadmium oxide					1306-19-0
Cadmium sulfide					1306-23-6
Cadmium chloride					10108-64-2
Cadmium sulfate					10124-36-4
Other cadmium compounds					—
Chromium VI Compounds					CAS No.
Chromium (VI) oxide					1333-82-0
Barium chromate					10294-40-3
Calcium chromate					13765-19-0
Lead (II) chromate					7758-97-6
Lead chromate molybdate sulphate red					12656-85-8
Lead sulfochromate yellow					1344-37-2
Sodium chromate					7775-11-3
Sodium dichromate					10588-01-9
Strontium chromate					7789-06-2
Potassium dichromate					7778-50-9
Potassium chromate					7789-00-6
Potassium hydroxyoctaoxodizincatedichromate					11103-86-9
Pentazinc chromate octahydroxide					49663-84-5
Zinc chromate					13530-65-9
Other chromium VI compounds					—
Lead/Lead Compounds					CAS No.
Lead					7439-92-1
Lead (II) sulfate					7446-14-2
Lead (II) carbonate					598-63-0
Lead (II) chromate					7758-97-6
Lead chromate molybdate sulphate red					12656-85-8
Lead hydrocarbonate					1319-46-6
Lead acetate					301-04-2
Lead (II) acetate, trihydrate					6080-56-4
Lead phosphate					7446-27-7
Lead selenide					12069-00-0
Lead (IV) oxide					1309-60-0
Lead (II,IV) oxide					1314-41-6
Lead (II) sulfide					1314-87-0
Lead (II) oxide					1317-36-8
Lead (II) carbonate basic					1319-46-6
Lead hydroxidcarbonate					1344-36-1
Lead hydrogen arsenate					7784-40-9
Lead (II) phosphate					7446-27-7
Lead sulfochromate yellow					1344-37-2
Lead (II) titanate					12060-00-3
Lead sulfate, sulphuric acid, lead salt					15739-80-7
Lead sulphate, tribasic					12202-17-4
Lead stearate					1072-35-1
Lead azide					13424-46-9
Lead dipicrate					6477-64-1
Lead styphnate					1524544-0
Other lead compounds					—
Mercury /Mercury Compounds					CAS No.
Mercury					7439-97-6
Mercuric chloride					33631-63-9
Mercury (II) chloride					7487-94-7
Mercuric sulfate					7783-35-9
Mercuric nitrate					10045-94-0
Mercuric (II) oxide					21908-53-2
Mercuric sulfide					1344-48-5
Other mercury compounds					—

No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use	
2	Phthalate esters (four types) • Bis(2-ethylhexyl) phthalate (DEHP) • Dibutyl phthalate (DBP) • Butyl benzyl phthalate (BBP) • Diisobutyl phthalate (DIBP)	• Commission Delegated Directive (EU) 2015/863 amending RoHS Directive (EU) 2011/65	All	• Intentional addition prohibited • When inclusion is unintentional: 0.1% (1,000 ppm) by weight of the sum of one or more of the four substances or less	Plasticizers, Dyes, Pigments, Paint, Ink, Adhesives, Lubricants	
Substance name		CAS No.				
Bis(2-ethylhexyl) phthalate (DEHP)		117-81-7				
Dibutyl phthalate (DBP)		84-74-2				
Butyl benzyl phthalate (BBP)		85-68-7				
Diisobutyl phthalate (DIBP)		84-69-5				
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use	
3	Mineral oil aromatic hydrocarbons (MOAH) containing 1 to 7 aromatic rings	French domestic regulation on mineral oil	Packaging and printed materials	1% of ink by weight (10,000 ppm) or less	Paper materials such as user packaging or manuals and internal/external boxing	
		Standard values were changed for the following from Jan. 1, 2025. • Mineral oil aromatic hydrocarbons (MOAH) containing 1 to 2 aromatic rings: 0.1% of ink by weight (1,000 ppm) • Mineral oil aromatic hydrocarbons (MOAH) containing 3 to 7 aromatic rings: 0.0001% of ink by weight (1 ppm) *Because this substance is not applicable to chemSHERPA, the inclusion of the substance or whether it is below the standard value range shall be determined.				

2. Scheduled to be prohibited

2. Beneficial to be promoted					
No.	Substance/Category	Main laws and ordinances	Application(s)	Standard Value	Examples of Use
1	Mineral oil saturated hydrocarbons (MOSH) with 16 to 35 carbon atoms	French domestic regulation on mineral oil	Packaging and printed materials	0.1% of ink by weight (1,000 ppm) or less	Paper materials such as user packaging or manuals and internal/external boxing
		The start date for when the prohibitions will be applied to parts delivered to Stanley will be Jan. 1, 2025. *Because this substance is not applicable to chemSHERPA,the inclusion of the substance or whether it is below the standard value range shall be determined.			

<Form-1>

Date:

To Stanley Electric Co., Ltd.

Certificate of the Non-Use of Prohibited Substances

Company name: _____

Manager's name: _____



Our company (including our subsidiaries and affiliated companies) hereby certifies that the parts, materials, sub-materials, packaging materials, and so forth constituting all of the products we deliver to Stanley Electric Co., Ltd. and the Stanley Group (including affiliated companies, etc.) either directly or through a third party neither contain nor are coated with the prohibited substances specified by the Stanley Group that are listed below at or above the standard **value** (except where exempt or where required pursuant to drawings, etc.).

Notes

■ Stanley Product Chemical substance management Standard

- 1) Automobile products
 - GADSL
 - Specially Controlled Substances (Automobile Products) (Annex 1)
 - Exemptions from Specially Controlled Substances (Automobile Products) (Annex 2)
- 2) Electric / electronic products
 - Specially Controlled Substances (Electric / Electronic Products) (Annex 3)
 - Exemptions from Annex III of the EU RoHS Directive (Annex 4)
 - Exemptions from Annex IV of the EU RoHS Directive (Annex 5)
- 3) Packaging materials
 - Specially Controlled Substances (Packaging Materials) (Annex 6)