

## SA-S-204-01 PG list of prohibited and restricted substances

PREPARED BY Jens Molter	APPROVED BY Johanna Flood	APPROVAL DATE 2021-08-24	DOCUMENT KIND Regulation		
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## 1. Purpose and Basic Description

### List Version 1.17

The scope for Hitachi ABB Power Grids (PG) List of Prohibited and Restricted Substances is goods supplied to Power Grids, product development, production processes, products, packaging materials, service activities and construction sites. This document contains substances relevant to PG and is also linked with the General Terms and Conditions (GTC) for suppliers to our company.

Objective and purpose of this list is to support PG units and supplier to comply with chemicals legislation, to avoid chemical elements and compounds that may represent hazards to the environment or the health of workers, customers, consumers and other stakeholders, or could negatively influence end-of-life properties or might cause other concerns.

The current version of this list (August 2021) is a **non-exhaustive** list of substances subject to regulations of the reference list at the end of the document. If a substance is not included in this HAPG list of Prohibited and Restricted Substances but is included into one of the mentioned legislations, a PG unit or a supplier still has to comply to the applicable regulations. The global list may also not consider national legislation.

The document provides information about

- **Prohibited** substances, substances that must not be used,
- **Restricted** substances, substances whose use must be limited within Power Grids and
- **Declarable** substances, substances which have to be reported (declared) to customers in certain countries or regions of the world and/or have to be notified to authorities.

A chemical may be restricted in certain applications or regions but prohibited and / or declarable in others. **Prohibited** substances must not be used in concentrations that exceed the thresholds under the law.

**Restricted** substances can be prohibited for certain applications and if present in a product or in production. Thus scope, conditions and applicability of the Restriction must be evaluated before use. If not restricted but present in a product above 0.1% w/w or other limits according to legislation (see column "Comments"), active work shall be performed to eliminate the substances or to find less hazardous alternatives which could be introduced as soon as it is technically and economically possible.

**Declarable** substances from the EU Candidate List of Substances of Very High Concern (SVHC) are subject to reporting and notification obligations in Europe. SVHC as such, in mixtures or articles (products) with a content above 0.1% (w/w)\* must be communicated to customers and notified (declared) to the SCIP database.

The document is reviewed and updated twice per year, in January and July/ August mainly based on the update of REACH Candidate List in January and in the middle of the year.

\*Weight on weight - The concentration of chemical elements and compounds shall be calculated for constituent articles in a product. See [Updated ECHA Guidance](#)

## 2. How to read this list

**Substance name:** Name of chemical element or compound.

**CAS No.:** CAS Registry Numbers are unique numerical identifiers assigned by the Chemical Abstracts Service to every chemical described in the open scientific literature.

**Reason for inclusion:** The reason for a chemical element or compound to be on this list is its inherent properties that make it hazardous for humans or for the environment. Other Abbreviations are:

- CMR – Carcinogenic, Mutagenic, toxic for Reproduction
- PBT - Persistent, Bioaccumulating and Toxic
- vPvB - very Persistent and very Bioaccumulating
- STOT - Specific target organ toxicity

### PG classification

Classification in Prohibited (P), Restricted (R) and Declarable (D). Multiple classifications are possible. Example: A substance can be "Declarable" in Europe and at the same "Restricted" in North America

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	2/66

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**Legislation**

A non-exhaustive reference list to most relevant legislation, details at the end of this document in section "Reference".

**Example of applications**

Example of applications where a specific chemical element or compound is used.

**Comments**

Specific information e.g. about legislation thresholds and limits or EU-REACH "restriction sunset dates".

**Entry status**

An entry can be new (**n**) to the recent version of the list or is updated (**u**) due to e.g. regulatory status changes

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STATUS Approved	SECURITY LEVEL Internal	DOCUMENT ID. 8DAA5005282	REV. C	LANG. en	PAGE 3/66

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### 3. The List of Prohibited and restricted substances

Substance	CAS-No.	Reason for inclusion	PG-class	Legislation	Application example	Comments	Status
Phosphonium, triphenyl(phenylmethyl)-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1000597-52-3	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
Boric acid	10043-35-3	CMR	D	EC1907/2006/C	Used as wood preservative, flame retardant etc. Can be used in treated wood and flame-proof insulation.		u
Phenol, 4-(5-methylhexyl)-	100532-36-3	Endocrine disrupting properties	D	EC1907/2006/C			u
Lead dinitrate	10099-74-8	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Stabilizers for PVC, plastic goods		u
Cadmium chloride	10108-64-2	CMR	P;R	EC1907/2006/C EC1907/2006/XVII 2011/65/EU	Industrial and laboratory chemicals, which are used in surface treatment and the manufacture of other cadmium compounds	See note 3 in "Notes"	u
4,4'-methylenebis[2-chloroaniline]	101-14-4	CMR	P	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII CANNPRI	Hardener in resins and polymers	EU: sunset date 22/11/2017	u
Cadmium sulphate	10124-36-4	CMR	P;R	EC1907/2006/C EC1907/2006/XVII 2011/65/EU	Used for the electroplating of cadmium in electronic circuits. It is also a precursor to cadmium-based pigment such as cadmium sulfide. It is also used for electrolyte in a Weston standard cell as well as a pigment in fluorescent screens.	See note 3 in "Notes"	u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	4/66

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Cobalt(II) sulphate	10124-43-3	CMR	D;R	EC1907/2006/C CANNPRI CP65	Pigment. Surface treatment.		u
Cobalt(II) dinitrate	10141-05-6	CMR	D;R	EC1907/2006/C CANNPRI	Surface treatment of metals.		u
N,N,N',N'-tetramethyl-4,4'-methylenediphenylamine (Michler's base)	101-61-1	CMR	D;R	EC1907/2006/C CP65	Laboratory chemicals, paper goods, ink		u
4,4'-Methylenediphenyl diisocyanate (MDI)	101-68-8	CMR; skin sensitizer; respiratory sensitizer	R	EC1907/2006/XVII	Use as monomer in polymers like PU-foams, and adhesives	R: In Europe (Diisocyanates)	u
4,4'-diaminodiphenylmethane (MDA)	101-77-9	CMR	P	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII CANNPRI CP65	Hardener for plastics and adhesives	EU: sunset date 21/08/2014	
4,4'-oxydianiline and its salts	101-80-4	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CP65	Intermediate		u
Triethoxy(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)silane	101947-16-4	PBT	P	EU2019/1021/POP		P: In Europe	u
Phenol, 4-(3-methylhexyl)-	102570-52-5	Endocrine disrupting properties	D	EC1907/2006/C			u
Barium chromate	10294-40-3	CMR	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A2 2011/65/EU CANNPRI CANTSLS CP65	Used for surface treatment.	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes"	u
Cadmium nitrate	10325-94-7	CMR; STOT RE	P;R	EC1907/2006/C EC1907/2006/XVII 2011/65/EU	Used for the manufacture of glass, porcelain and ceramic products and in laboratory chemicals.	See note 3 in "Notes"	u
Ethanol, 2-(4-nonylphenoxy)-	104-35-8	Endocrine disrupting properties	P	EC1907/2006/C EC1907/2006/XIV	Cleaning agent	EU: Sunset date 4/1/2021 See note 2 in "Notes"	u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	5/66

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p-nonylphenol	104-40-5	CMR; Endocrine disrupting properties	D	EC1907/2006/C	adhesives and sealants, coating products and polymers	See note 1 in "Notes"	u
Sodium dichromate (anhydrous and dihydrate)	10588-01-9	CMR	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A2 2011/65/EU CANNPRI CANTSL CP65	Surface treatment of metal and electroplating products.	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes"	u
Phenol, p-sec-nonyl-, phosphite	106599-06-8	Endocrine disrupting properties	D	EC1907/2006/C	Rubber manufacturing, rubber products	TNPP derivates	u
1-bromopropane (n-propyl bromide)	106-94-5	CMR	P	EC1907/2006/C EC1907/2006/XIV CP65	Solvent	EU: sunset date 4/7/2020	
1,2-dichloroethane	107-06-2	CMR	P	EC1907/2006/C EC1907/2006/XIV CANNPRI CANTSL US40CFRCh CP65	Solvent	EU: sunset date 22/11/2017	
Ethylenediamine (EDA)	107-15-3	Respiratory sensitising properties - human health	D	EC1907/2006/C	Used in adhesives and sealants, coating products, fillers, putties, plasters, modelling clay, pH regulators and water treatment products		u
1-vinylimidazole	1072-63-5	CMR	D	EC1907/2006/C			u
1-Butanaminium, N,N,N-tributyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid	108427-54-9	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
Ethanaminium, N,N,N-triethyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1)	108427-55-0	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
2-methoxyethanol	109-86-4	CMR	D;R	EC1907/2006/C CANNPRI CANTSL	Solvent in paint		u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	6/66

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				US40CFRCh CP65			
Furan	110-00-9	CMR	D;R	EC1907/2006/C CP65	Solvent		u
2-methoxyethyl acetate	110-49-6	CMR	D;R	EC1907/2006/C CANNPRI CP65	Paints, lacquers		u
Isononylphenol	11066-49-2	CMR; Endocrine disrupting proper- ties	D	EC1907/2006/C	adhesives and sealants, coating prod- ucts and polymers	See note 1 in "Notes"	u
1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	CMR	D	EC1907/2006/C	Solvents and help-chemicals in the manufacture of industrial chemicals. As electrolyte in lithium batteries.		u
2-ethoxyethanol	110-80-5	CMR	D;R	EC1907/2006/C CANNPRI US40CFRCh CP65	Solvent in paint		u
Potassium hydroxyoctaoxodizincatedi- chromate	11103-86-9	CMR	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A2 2011/65/EU CANNPRI CANTSL CP65	Surface coating of metals	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes"	u
Boric acid	11113-50-1	CMR	D	EC1907/2006/C	Used as wood preservative, flame re- tardant etc. Can be used in treated wood and flame-proof insulation.		u
2-ethoxyethyl acetate	111-15-9	CMR	D;R	EC1907/2006/C CANNPRI CP65	Solvent in paint and varnish		u
Bromo(2H3)methane	1111-88-2	Substance that deplete the ozone layer					
Silicic acid, lead salt	11120-22-2	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Glass and ceramic products		u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	7/66

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Glutaral	111-30-8	Respiratory sensitising properties	D	EC1907/2006/C	Biocides, leather tanning, x-ray film processing, cosmetics.	n
Perboric acid, sodium salt	11138-47-9	CMR	D	EC1907/2006/C EC1907/2006/XIV		u
2-(2-methoxyethoxy)ethanol (DEGME)	111-77-3	CMR	R	EC1907/2006/XVII	use as solvent or in hydraulic fluids	Restriction to general public u
2-[4-(3,6-dimethylheptan-3-yl)phenoxy]ethanol	1119449-37-4	Endocrine disrupting properties	P	EC1907/2006/C EC1907/2006/XIV	Cleaning agent	EU: Sunset date 4/1/2021 See note 2 in "Notes" u
2-{2-[4-(3,6-dimethylheptan-3-yl)phenoxy]ethoxy}ethanol	1119449-38-5	Endocrine disrupting properties	P	EC1907/2006/C EC1907/2006/XIV	Cleaning agent	EU: Sunset date 4/1/2021 See note 2 in "Notes" u
Bis(2-methoxyethyl) ether	111-96-6	CMR	P	EC1907/2006/C EC1907/2006/XIV	Used primarily as a reaction solvent or process chemical. Solvent for battery electrolytes.	EU: sunset date 22/08/2017 u
1,3-propanesultone	1120-71-4	CMR	D;R	EC1907/2006/C CP65	Electrolyte fluid of lithium ion batteries	u
1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	CMR	D	EC1907/2006/C	Solvents and help-chemicals in the manufacture of industrial chemicals. Various petroleum products for motor vehicles	u
Phenol, 4-(4-methylhexyl)-	1139800-98-8	Endocrine disrupting properties	D	EC1907/2006/C		u
Endosulfan	115-29-7	PBT	P	EU2019/1021/POP		P: In Europe u
Dicofol	115-32-2	PBT	P	EU2019/1021/POP		P: In Europe u
Tris(2-chloroethyl)phosphate	115-96-8	CMR	P	EC1907/2006/C EC1907/2006/XIV CANTSL CP65	Additive flame retardant for plastics. Flame-retardant paints lacquers and adhesives.	EU: sunset date 21/08/2015 u
Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	1163-19-5	PBT; vPvB	P;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A1 2011/65/EU CANNPRI CANTSL USTSCA	Flame retardants, insulation materials, electrical equipment, textiles, plastics in automotive industry	R in all applications except: EU: P in all applications covered by RoHS. CH: P as flame retardant in EEE covered by RoHS Directive. u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	8/66

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						*Regulated in the US by US EPA under TSCA §751.405 from 08/03/2021	
Bis (2-ethylhexyl)phthalate (DEHP)	117-81-7	CMR; Endocrine disrupting proper- ties	P	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII 2011/65/EU CANNPRI US40CFRCh CP65	Used as plasticizer in PVC. Occurs also in colours, plastic, rubber, glue, filling medium and raw materials for paints.	EU: sunset date 21/05/2015	u
Bis(2-methoxyethyl) phthalate	117-82-8	CMR	P	EC1907/2006/C EC1907/2006/XIV	Used as plasticizer in paint and var- nish.	EU: sunset date 4/7/2020	
Reaction mass of 5-sec-butyl-2-(2,4-di- methylcyclohex-3-en-1-yl)-5-methyl-1,3- dioxane and 5-sec-butyl-2-(4,6-dime- thylcyclohex-3-en-1-yl)-5-methyl-1,3-di- oxane	117933-89-8	vPvB	P	EC1907/2006/C EC1907/2006/XIV			u
Hexachlorobenzene	118-74-1	PBT	P	EU2019/1021/POP CANNPRI CANTSL CP65		P: In Europe and Can- ada	u
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. With pyrrolidine (1:1)	1187817-57-7	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
2-benzyl-2-dimethylamino-4'-morpho- linobutyrophenone	119313-12-1	CMR	R	EC1907/2006/C	The substance is used in polymer pro- duction		u
Asbestos (incl. Brown, blue and white asbestos, Tremolite)	12001-28-4	CMR	P	EC1907/2006/XVII(N/Af or1332-21-4) CHSR814.81A1 CANNPRI CANTSL US40CFRCh CP65	Thermal insulation		
Asbestos (incl. Brown, blue and white asbestos, Tremolite)	12001-29-5	CMR	P	EC1907/2006/XVII(N/Af or1332-21-4)	Thermal insulation		



## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS Approved	SECURITY LEVEL Internal	DOCUMENT ID. 8DAA5005282	REV. C	LANG. en	PAGE 9/66
--------------------	----------------------------	-----------------------------	-----------	-------------	--------------

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				CHSR814.81A1 CANNPRI CANTSL US40CFRCh CP65		
Disodium octaborate	12008-41-2	CMR	D	EC1907/2006/C	Used in anti-freeze products, heat transfer fluids, lubricants and greases, and washing and cleaning products	u
Anthracene	120-12-7	PBT	D;R	EC1907/2006/C CANNPRI US40CFRCh	Available in pyrotechnics and in paints and waterproof coatings.	u
Lead oxide sulfate	12036-76-9	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Stabilizers for PVC, plastic goods	u
Lead titanium trioxide	12060-00-3	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Semiconductors, computers, electrical and optical products	u
Pentalead tetraoxide sulphate	12065-90-6	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Plastic products, lead acid batteries, stabilizers for PVC	u
6-methoxy-m-toluidine (p-cresidine)	120-71-8	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CP65	Used in the production of various azo dyes	u
2,4-dinitrotoluene	121-14-2	CMR	P	EC1907/2006/C EC1907/2006/XIV CANNPRI US40CFRCh CP65	Explosives	EU: sunset date 21/8/2015
Trilead dioxide phosphonate	12141-20-7	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Stabilizers	u
Asbestos (incl. Brown, blue and white asbestos, Tremolite)	12172-73-5	CMR	P	EC1907/2006/XVII(N/Af or1332-21-4) CHSR814.81A1 CANNPRI CANTSL	Thermal insulation	

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	10/66

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				US40CFRCh CP65		
Disodium tetraborate, anhydrous	12179-04-3	CMR	D	EC1907/2006/C	Used as wood preservative, flame retardant etc. Can be used in treated wood and flame-proof insulation.	u
Tetralead trioxide sulphate	12202-17-4	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Paints, varnishes, PVC stabilizers, plastic products, lead acid battery	u
Tetraboron disodium heptaoxide, hydrate	12267-73-1	CMR	D	EC1907/2006/C	Used as wood preservatives, flame retardants etc. Can be used in treated wood and flame-proof insulation.	u
Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	Respiratory sensitizing properties	D	EC1907/2006/C	Raw material for the manufacture of rubber and plastic, rubber and plastic products	u
1,4-dioxane	123-91-1	CMR	D	EC1907/2006/C CANNPRI CP65	Solvent.	n
1,2-dibromo-1,1,2,2-tetrafluoroethane (Halon-2402)	124-73-2	Substance that deplete the ozone layer	P	CHSR814.81A1 CHSR814.81A2 EC1005/2009 CANTSL US40CFRCh	Fire extinguisher	Europe: Some Application exempted u
Borate(2-), tetrahydroxybis[μ-(peroxy-κO1:κO2)]di-, sodium, hydrate (1:2:6)	125022-34-6	CMR	D	EC1907/2006/C EC1907/2006/XIV		u
Dioxobis(stearato)trilead	12578-12-0	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Stabilizers for PVC, plastic goods	u
Lead titanium zirconium oxide	12626-81-2	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Electronic products	u
Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	12656-85-8	CMR	P	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII CHSR814.81A2 2011/65/EU CANNPRI	Dyes and pigments, Corrosion protection	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes" u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS Approved	SECURITY LEVEL Internal	DOCUMENT ID. 8DAA5005282	REV. C	LANG. en	PAGE 11/66
--------------------	----------------------------	-----------------------------	-----------	-------------	---------------

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				CANTSL US40CFRCh CP65			
4-Nonylphenol, branched, ethoxylated	127087-87-0	Endocrine disrupting properties	P;R	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII	Cleaning agent	EU: Sunset date 4/1/2021 See note 2 in "Notes"	u
Tetrachloroethene (perchloroethylene)	127-18-4	CMR	R	CHSR814.81A1 CANNPRI EC1005/2009 CP65	Degreasing	restricted to certain application	u
N,N-dimethylacetamide	127-19-5	CMR	D;R	EC1907/2006/C CP65	May occur in surface treatment, sealants etc.		u
Pyrene	129-00-0	PBT; vPvB	D	EC1907/2006/C	Impurities in carbon black, which is used as coloring agent in plastics and softener in rubbers		u
Diarsenic pentaoxide	1303-28-2	CMR	P;R	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII CHSR814.81A2 CANNPRI	Used in wood preservatives, in the paint industry, metallurgy and in the manufacture of special glass.	EU: sunset date 21/05/2015	u
Diboron trioxide	1303-86-2	CMR	D	EC1907/2006/C	Raw material for the manufacture of glass, glassware, ceramics and metals. Paints, varnishes, inks, flame retardants, catalysts, detergent. The glassware and enameled glass products. Imported roared protected wood products.		u
Disodium tetraborate, anhydrous	1303-96-4	CMR	D	EC1907/2006/C	Used as wood preservative, flame retardant etc. Can be used in treated wood and flame-proof insulation.		u
Cadmium oxide	1306-19-0	CMR	P	EC1907/2006/C EC1907/2006/XVII 2011/65/EU	Used in electronics, for pigments, batteries, and electroplating.	See note 3 in "Notes"	u
Cadmium sulphide	1306-23-6	CMR	P	EC1907/2006/C EC1907/2006/XVII 2011/65/EU	Used as a pigment, in manufacturing of photoresistors and in thin-film form	See note 3 in "Notes"	u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE	
Approved	Internal	8DAA5005282	C	en	12/66	
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combined with other layers for use in certain types of solar cells.						
Ethanaminium, N-[4-[[4-(diethylamino)phenyl][4-(ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-ethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1310480-24-0	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams P: In Europe (PFOS)	u
Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1310480-27-3	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams P: In Europe (PFOS)	u
Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(phenylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1310480-28-4	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams P: In Europe (PFOS)	u
Dipentyl phthalate (DPP)	131-18-0	CMR	P	EC1907/2006/C EC1907/2006/XIV	Laboratory chemical EU: sunset date 4/7/2020	
Orange lead (lead tetroxide)	1314-41-6	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Pigments, stabilizers, lead acid batteries, glass and ceramics, rubber and plastic products	u
Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2-dicarboxylic anhydride [3] [The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry]	13149-00-3	Skin and respiratory sensitizers	D	EC1907/2006/C	Plasticizers, polyester, alkydes, motor insulation, hardener for epoxy resin	u
Sodium pentachlorophenolate	131-52-2	PBT	P	EU2019/1021/POP	P: In Europe	u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	13/66

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lithium perfluorobutanesulfonate	131651-65-5	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C	Use as flame retardant or catalyst in polymers	D: In Europe (PFBS)	n
Lead monoxide (lead oxide)	1317-36-8	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Stabilizers, pigments, raw material for glass and ceramics manufacturing		u
Trilead bis(carbonate) dihydroxide	1319-46-6	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2 CANNPRI	Pigment in colour, Ceramic materials, oil paintings		
Asbestos (incl. Brown, blue and white asbestos, Tremolite)	132207-32-0	CMR	P	EC1907/2006/XVII(N/Af or1332-21-4) CHSR814.81A1 CANNPRI CANTSL US40CFRCh CP65	Thermal insulation		
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid	13252-13-6	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C			u
Diarsenic trioxide	1327-53-3	CMR	P	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII CHSR814.81A2 CANNPRI	Used in dyeing of glass and enamel. Used in the manufacture of special glass. Has previously been used as wood preservative.	EU: sunset date 21/05/2015	
Beta-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid ion(1-)(1:1)	1329995-45-0	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
Gamma-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid ion(1-)(1:1)	1329995-69-8	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
Disodium tetraborate, anhydrous	1330-43-4	CMR	D	EC1907/2006/C	Used as wood preservative, flame retardant etc. Can be used in treated wood and flame-proof insulation.		u

SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS Approved	SECURITY LEVEL Internal	DOCUMENT ID. 8DAA5005282	REV. C	LANG. en	PAGE 14/66
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Asbestos (incl. Brown, blue and white asbestos, Tremolite)	1332-21-4	CMR	P	EC1907/2006/XVII(N/Af or1332-21-4) CHSR814.81A1 CANNPRI CANTSL US40CFRCh CP65	Thermal insulation	
Chromium trioxide	1333-82-0	CMR	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A2 2011/65/EU CANNPRI CANTSL CP65	Electric and electronic equipment covered by RoHS. Wood preservative. Surface treatment of metals.	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes"
Pentachlorothiophenol (PCTP)	133-49-3	PBT	P;R	USTSCA	Used to reduce viscosity during the production of rubber materials	In EU: Not included in the CoRAP List (not yet classified as a SVHC) not REACH registered *Regulated in the US by US EPA under TSCA §751.411 from 08/03/2021
Polychlorinated biphenyl (PCB)	1336-36-3	PBT; Health hazard; Acute toxicity to aquatic organisms	P	CHSR814.81A2 EU2019/1021/POP 96/59/EC CANTSL US40CFRCh CP65	Transformers & capacitors	P: In Europe and Canada
Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (a - HBCDD, B-HBCDD, v- HBCDD)	134237-50-6	PBT	P	EC1907/2006/C EC1907/2006/XVII 2011/65/EU EU2019/1021/POP CHSR814.81A1 CANTSL	Used as flame retardant in the plastics industry, mainly in polystyrene. Used as an additive flame retardant primarily in expanded polystyrene (EPS) and extruded polystyrene (XPS), used as insulating materials in the construction industry.	EU: sunset date 21/08/2015 P: In Europe and Canada

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	15/66

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Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (a - HBCDD, B-HBCDD, v- HBCDD)	134237-51-7	PBT	P	EC1907/2006/C EC1907/2006/XVII 2011/65/EU EU2019/1021/POP CHSR814.81A1 CANTSL	Used as flame retardant in the plastics industry, mainly in polystyrene. Used as an additive flame retardant primarily in expanded polystyrene (EPS) and extruded polystyrene (XPS), used as insulating materials in the construction industry.	EU: sunset date 21/08/2015 P: In Europe and Canada	u
Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (a - HBCDD, B-HBCDD, v- HBCDD)	134237-52-8	PBT	P	EC1907/2006/C EC1907/2006/XVII 2011/65/EU EU2019/1021/POP CHSR814.81A1 CANTSL	Used as flame retardant in the plastics industry, mainly in polystyrene. Used as an additive flame retardant primarily in expanded polystyrene (EPS) and extruded polystyrene (XPS), used as insulating materials in the construction industry.	EU: sunset date 21/08/2015 P: In Europe and Canada	u
Lead diazide, Lead azide	13424-46-9	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Mainly used as initiator or booster in detonators for both civilian and military uses and as initiator in pyrotechnic devices.		u
Lead sulphochromate yellow (C.I. Pigment Yellow 34)	1344-37-2	CMR	P	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII CHSR814.81A2 2011/65/EU CANNPRI CANTSL CP65	Dyes and pigments. Corrosion protection.	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes"	u
Perboric acid (H3BO2(O2)), monosodium salt, trihydrate	13517-20-9	CMR	D;P	EC1907/2006/C EC1907/2006/XIV		P: Sunset date 2023	u
Zinc chromate	13530-65-9	CMR; Hazardous to the environment; Skin sensitizer	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A2 2011/65/EU CANNPRI CANTSL CP65	Surface treatment. Pigment in e.g. paint.	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes"	u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	16/66

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Acids generated from chromium trioxide and their oligomers. Group containing: Chromic acid, Dichromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid	13530-68-2	CMR	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A2 2011/65/EU CANNPRI CANTSL CP65	Wood preservatives. Surface treatment of metals.	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes"	u
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	13560-89-9	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
(1S,2S,5R,6R,9S,10S,13R,14R)-1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.1 <sup>6</sup> , <sup>9</sup> .0 <sup>2</sup> , <sup>13</sup> .0 <sup>5</sup> , <sup>10</sup> ]octadeca-7,15-diene	135821-03-3	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
(1S,2S,5S,6S,9R,10R,13R,14R)-1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.1 <sup>6</sup> , <sup>9</sup> .0 <sup>2</sup> , <sup>13</sup> .0 <sup>5</sup> , <sup>10</sup> ]octadeca-7,15-diene	135821-74-8	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
Polybrominated diphenyl-ethers (PBDE) Polybrominated biphenyls (PBB) (di-, tetra-, hexa-, octa-, decabromobiphenyl)	13654-09-6	PBT; vPvB	P;R	EC1907/2006/XVII 2011/65/EU CHSR814.81A1 EU2019/1021/POP CANTSL	Electric and electronic equipment	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w.	
N2-benzyl pentachlorophenyl N2-carboxy-L-(2-aminoglutaramate)	13673-51-3	PBT	P	EU2019/1021/POP		P: In Europe	u
Perchlorophenyl N-(benzyloxycarbonyl)-L-isoleucinate	13673-53-5	PBT	P	EU2019/1021/POP		P: In Europe	u
Perchlorophenyl S-benzyl-N-(benzyloxycarbonyl)-L-cysteinate	13673-54-6	PBT	P	EU2019/1021/POP		P: In Europe	u
Alkanes, C <sub>14-16</sub> , chloro (Medium-chain chlorinated paraffins; MCCP)	1372804-76-6	PBT; vPvB	D	EC1907/2006/C	Flame retardants, plasticising additives in plastics, sealants, rubber and textiles, cutting oil lubricant		n



## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	17/66

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Calcium chromate	13765-19-0	CMR	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A2 2011/65/EU CANNPRI CANTSL CP65	Used for surface treatment.	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes"	u
Lead bis(tetrafluoroborate)	13814-96-5	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Surface treatment, electroplating, laboratory chemical		u
Orthoboric acid, sodium salt	13840-56-7	CMR	D	EC1907/2006/C	Not registered under REACH. May be used as solvent and corrosion inhibitor.		n
4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	CMR; Endocrine disrupting properties	D;P;R	EC1907/2006/C CHSR814.81A1 CANNPRI	Used in varnish and paint and for surface treatment and may occur in products of plastics and rubber	In Switzerland P in certain applications.	u
Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2-dicarboxylic anhydride [3] [The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry]	14166-21-3	Skin and respiratory sensitizers	D	EC1907/2006/C	Plasticizers, polyester, alkydes, motor insulation, hardener for epoxy resin		u
4-(1-Ethyl-1,4-dimethylpentyl)phenol	142731-63-3	CMR; Endocrine disrupting properties	D	EC1907/2006/C	adhesives and sealants, coating products and polymers	See note 1 in "Notes"	u
Zirconia Aluminosilicate Refractory Ceramic Fibres	142844-00-6	CMR	D;R	EC1907/2006/C CANTSL	Insulation materials for industrial use. Fire protection in industrial equipment.	EU-SVHC group entry	u
Bis(2-(2-methoxyethoxy)ethyl)ether	143-24-8	CMR	R	EC1907/2006/C EC1907/2006/XIV	Solvent/extraction agent		
Chlordecone	143-50-0	PBT	P	EU2019/1021/POP CP65		P: In Europe	u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	18/66

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3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	CMR	D	EC1907/2006/C			u
26-(4-Nonylphenoxy)-3,6,9,12,15,18,21,24-octaohexacosan-1-ol	14409-72-4	Endocrine disrupting properties	P	EC1907/2006/C EC1907/2006/XIV	Cleaning agent	EU: Sunset date 4/1/2021 See note 2 in "Notes"	u
Sulfonium, triphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	144116-10-9	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
Triphenylsulfonium perfluorobutane sulfonate	144317-44-2	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C	Use as flame retardant or catalyst in polymers	D: In Europe (PFBS)	n
Quinolinium, 1-(carboxymethyl)-4-[2-[4-[4-(2,2-diphenylethenyl)phenyl]-1,2,3,3a,4,8b-hexahydrocyclopent[b]indol-7-yl]ethenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1462414-59-0	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one	15087-24-8	Endocrine disrupting properties	D	EC1907/2006/C			u
Sodium perborate; perboric acid, sodium salt	15120-21-5	CMR	D	EC1907/2006/C	Bleach in laundry and dishwasher detergents		u
2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA);	1522-92-5	CMR	D	EC1907/2006/C	TBNPA: polymer production manufacture of plastics products, including compounding and conversion and as an intermediate.		n
Lead styphnate	15245-44-0	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Mainly used as a primer for small caliber and rifle ammunition. Other common uses are in munition pyrotechnics, powder actuated devices and detonators for civilian use.		u
Iodonium, diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	153443-35-7	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	19/66

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2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	CMR	D	EC1907/2006/C	Might be used as heat stabilizer in plastic (mainly PVC processing)	u
Triethyl arsenate	15606-95-8	CMR	P;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2 CANNPRI	May occur in the electronics industry in integrated circuits.	u
4-t-Nonylphenol-diethoxylate	156609-10-8	Endocrine disrupting properties	P	EC1907/2006/C EC1907/2006/XIV	Cleaning agent	EU: Sunset date 4/1/2021 See note 2 in "Notes" u
1,1-dichloro-1-fluoroethane (HCFC-141b)	1717-00-6	Substance that deplete the ozone layer	P;R	CHSR814.81A1 CHSR814.81A2 EC1005/2009 CANTSL USEPA	Cooling agents, blowing agent PUR foam; fire extinguisher	May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications u
p-(1-methyloctyl)phenol	17404-66-9	CMR; Endocrine disrupting properties	D	EC1907/2006/C	adhesives and sealants, coating products and polymers	See note 1 in "Notes" u
Lead(II) bis(methanesulfonate)	17570-76-2	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Surface coating in the manufacture of electronic components such as circuit boards	u
2,2',3,4,4'-Pentabromodiphenyl ether	182346-21-0	PBT	P	EU2019/1021/POP		P: In Europe u
Phenol, 4-[2-methyl-1-(1-methylethyl)propyl]-	1824346-00-0	Endocrine disrupting properties	D	EC1907/2006/C		u
2,2',3,4,4',5'-Hexabromodiphenyl ether	182677-30-1	PBT	P	EU2019/1021/POP		P: In Europe u
1,3-Dioxane, 2-(2,4-dimethyl-3-cyclohexen-1-yl)-5-methyl-5-(1-methylpropyl)-	186309-28-4	vPvB	D;P	EC1907/2006/C EC1907/2006/XIV		P: Sunset date 2023 u
4-(1-Ethyl-1,3-dimethylpentyl)phenol	186825-36-5	CMR; Endocrine disrupting properties	D	EC1907/2006/C	adhesives and sealants, coating products and polymers	See note 1 in "Notes" u
4-(3-ethylheptan-2-yl)phenol	186825-39-8	CMR; Endocrine disrupting properties	D	EC1907/2006/C	adhesives and sealants, coating products and polymers	See note 1 in "Notes" u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS Approved	SECURITY LEVEL Internal	DOCUMENT ID. 8DAA5005282	REV. C	LANG. en	PAGE 20/66
--------------------	----------------------------	-----------------------------	-----------	-------------	---------------

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Dibromofluoromethane	1868-53-7	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher	May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications	n
Pentanoic acid, 3,3,4,4,5,5,5-heptafluoro-2-(1,1,2,2,2-pentafluoroethyl)-2-(trifluoromethyl)-	1882109-63-8	PBT	P	EU2019/1021/POP		P: In Europe	u
Pentanoic acid, 3,4,4,5,5,5-hexafluoro-2,2,3-(trifluoromethyl)-	1882109-69-4	PBT	P	EU2019/1021/POP		P: In Europe	u
Pentanoic acid, 3,3,4,5,5,5-hexafluoro-2,2,4-tris(trifluoromethyl)-	1882109-70-7	PBT	P	EU2019/1021/POP		P: In Europe	u
2,3',4,4'-Tetrabromodiphenyl ether	189084-61-5	PBT	P	EU2019/1021/POP		P: In Europe	u
1,3-dibromo-2-(3,4-dibromophenoxy)benzene	189084-62-6	PBT	P	EU2019/1021/POP		P: In Europe	u
2,4,4',6-Tetrabromodiphenyl ether	189084-63-7	PBT	P	EU2019/1021/POP		P: In Europe	u
2,3',4,4',6-Pentabromodiphenyl ether	189084-66-0	PBT	P	EU2019/1021/POP		P: In Europe	u
Methanaminium, N,N,N-trimethyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1)	189274-31-5	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
Benzo[ghi]perylene	191-24-2	PBT; vPvB	D	EC1907/2006/C	Not registered under REACH. Normally not produced intentionally but rather occurs as a constituent or impurity in other substances		u
Indeno[1,2,3-cd]pyrene	193-39-5	PBT	P	EU2019/1021/POP CANNPRI CP65		P: In Europe	u
Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CP65	Azo dyes		u
Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride	19438-60-9	Respiratory sensitizing properties	D	EC1907/2006/C	Motor insulation, hardener for epoxy resin		u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	21/66

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<p>[3], Hexahydro-3-methylphthalic anhydride [4]. The individual isomers [2], [3] and [4] (including their cis- and trans- stereo isomeric forms) and all possible combi- nations of the isomers [1] are covered by this entry</p>					
4-heptylphenol	1987-50-4	Endocrine disrupt- ing properties	D	EC1907/2006/C	u
Tetradecane, chloro derivs. (Medium- chain chlorinated paraffins; MCCP)	198840-65-2	PBT; vPvB	D	EC1907/2006/C	Flame retardants, plasticising addi- tives in plastics, sealants, rubber and textiles, cutting oil lubricant n
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd.with 2-methyl-2-propanamine (1:1)	202189-84-2	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams P: In Europe (PFOS) u
2-[2-(4-nonylphenoxy)ethoxy]ethanol	20427-84-3	Endocrine disrupt- ing properties	P	EC1907/2006/C EC1907/2006/XIV	Cleaning agent EU: Sunset date 4/1/2021 See note 2 in "Notes" u
4,4'-dichlorobiphenyl	2050-68-2	PBT	P	CHSR814.81A2 EU2019/1021/POP 96/59/EC CANTSL US40CFRCh CP65	P: worldwide (PCB/PCT); Specific ob- ligations for mainte- nance and repairs u
Decachloro-1,1'-biphenyl	2051-24-3	PBT	P	CHSR814.81A2 EU2019/1021/POP 96/59/EC CANTSL US40CFRCh CP65	P: worldwide (PCB/PCT); Specific ob- ligations for mainte- nance and repairs u
2-chlorobiphenyl	2051-60-7	PBT	P	CHSR814.81A2 EU2019/1021/POP 96/59/EC CANTSL	P: worldwide (PCB/PCT); Specific ob- ligations for mainte- nance and repairs u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	22/66

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				US40CFRCh CP65			
3-chlorobiphenyl	2051-61-8	PBT	P	CHSR814.81A2 EU2019/1021/POP 96/59/EC CANTSL US40CFRCh CP65	P: worldwide (PCB/PCT); Specific ob- ligations for mainte- nance and repairs	u	
4-chlorobiphenyl	2051-62-9	PBT	P	CHSR814.81A2 EU2019/1021/POP 96/59/EC CANTSL US40CFRCh CP65	P: worldwide (PCB/PCT); Specific ob- ligations for mainte- nance and repairs	u	
Henicosafleuroundecanoic acid	2058-94-8	vPvB	D	EC1907/2006/C	Used in the production of fluoropoly- mers	u	
Benzo[e]acephenanthrylene	205-99-2	PBT; CMR	P;R	EC1907/2006/C EC1907/2006/XVII EU2019/1021/POP CANNPRI	P: In Europe	u	
2,3,3,3-tetrafluoro-2-(heptafluoro- propoxy)propionyl fluoride	2062-98-8	Serious effects to human health or environment (Arti- cle 57(f))	D	EC1907/2006/C		u	
3,6,9,12-Tetraoxatetradecan-1-ol, 14-(4- nonylphenoxy)-	20636-48-0	Endocrine disrupt- ing properties	P	EC1907/2006/C EC1907/2006/XIV	Cleaning agent	EU: Sunset date 4/1/2021 See note 2 in "Notes"	u
Fluoranthene	206-44-0	PBT; vPvB	D	EC1907/2006/C	Impurities in carbon black, which is used as coloring agent in plastics and softener in rubbers	u	
Benzo[k]fluoranthene	207-08-9	CMR; PBT; vPvB	P	EC1907/2006/C EC1907/2006/XVII EU2019/1021/POP CANNPRI CP65	Impurities in carbon black, which is used as coloring agent in plastics and softener in rubbers	P: In Europe u	

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	23/66

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Lead cyanamidate	20837-86-9	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2			u
Cadmium hydroxide	21041-95-2	CMR; STOT RE	P;R	EC1907/2006/C EC1907/2006/XVII 2011/65/EU	Used for the manufacture of electrical, electronic and optical equipment and in laboratory chemicals.	See note 3 in "Notes"	u
Perfluorononan-1-oic-acid and its sodium and ammonium salts	21049-39-8	CMR; PBT	D	EC1907/2006/C	Processing aid for fluoropolymer manufacture/lubricating oil additive/surfactant for fire extinguishers/cleaning agent/textile antifouling finishing agent/polishing surfactant/waterproofing agents and in liquid crystal display panels		u
Iodonium, bis[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	213740-81-9	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
2,4,6-triisopropyl-m-phenylene diisocyanate	2162-73-4	CMR; skin sensitizer; respiratory sensitizer	R	EC1907/2006/XVII	Use as monomer in polymers like PU-foams, and adhesives	R: In Europe (Diisocyanates)	n
Chrysene	218-01-9	CMR; PBT; vPvB	R	EC1907/2006/C EC1907/2006/XVII CANNPRI CP65	Normally not produced intentionally but rather occurs as a constituent or impurity in other substances		
dimethyl(phenyl)sulfanium perfluorobutanesulfonate	220133-51-7	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C	Use as flame retardant or catalyst in polymers	D: In Europe (PFBS)	n
tetrabutyl-phosphonium nonafluorobutane-1-sulfonate	220689-12-3	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C	Use as flame retardant or catalyst in polymers	D: In Europe (PFBS)	n
Dibutylbis(pentane-2,4-dionato-O,O')tin	22673-19-4	CMR	D	EC1907/2006/C			u
2-[2-[4-(1,1,3,3-tetramethylbutyl)phenoxy]ethoxy]ethanol, 2-[2-[4-(2,4,4-trimethylpentan-2-yl)phenoxy]ethoxy]ethanol	2315-61-9	Endocrine disrupting properties	P	EC1907/2006/C EC1907/2006/XIV		P: Sunset date 2021	u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	24/66

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2-[4-(1,1,3,3-tetramethylbutyl)phenoxy]ethanol	2315-67-5	Endocrine disrupting properties	P	EC1907/2006/C EC1907/2006/XIV		P: Sunset date 2021	u
Pentachlorophenyl N-[[4-methoxyphenyl)methoxy]carbonyl]-L-serinate	23234-97-1	PBT	P	EU2019/1021/POP		P: In Europe	u
Dodecachloropentacyclo[5.2.1.02,6.03,9.05,8]decane	2385-85-5	PBT	P	EU2019/1021/POP CANTSL CP65		P: In Europe and Canada	u
Potassium perfluorooctanoate	2395-00-8	PBT	P	EU2019/1021/POP CANTSL		P: In Europe and Canada	u
2,2',4,4'-tetrachlorobiphenyl	2437-79-8	PBT	P	CHSR814.81A2 EU2019/1021/POP 96/59/EC CANTSL US40CFRCh CP65		P: worldwide (PCB/PCT); Specific obligations for maintenance and repairs	u
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (TGIC) Triglycidylisocyanurate (TGIC)	2451-62-9	CMR	D	EC1907/2006/C CP65	Curing-agent. Coating and laminating, printing ink, screen printing. Powder paints		u
Dichromium tris(chromate)	24613-89-6	CMR	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A2 2011/65/EU CANNPRI CANTSL CP65	Used for surface treatment.	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes"	u
20-[4-(1,1,3,3-tetramethylbutyl)phenoxy]-3,6,9,12,15,18-hexaoxaicosan-1-ol	2497-59-8	Endocrine disrupting properties	P	EC1907/2006/C EC1907/2006/XIV		P: Sunset date 2021	u
Nonylphenol (4-Nonylphenol, branched and linear)	25154-52-3	CMR; Endocrine disrupting properties	P;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A1 CANNPRI CANTSL	Corrosion inhibitor; Cleaning agent; adhesives and sealants, coating products and polymers; cleaning agents	EU: Sunset date 4/1/2021 See note 1 in "Notes"	u
Trixylyl phosphate	25155-23-1	CMR	D	EC1907/2006/C	In lubricants		u
Formaldehyde, oligomeric reaction products with aniline	25214-70-4	CMR	P;R	EC1907/2006/C EC1907/2006/XIV CANTSL	Hardener for epoxy resins, for glue, paint and varnish.	EU: sunset date 22/08/2017	



SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	25/66

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2,2'-Methylenediphenyl diisocyanate / Methanediisocyanate (MDI)	2536-05-2	CMR; skin sensitizer; respiratory sensitizer	R	EC1907/2006/XVII	Use as monomer in polymers like PU-foams, and adhesives	R: In Europe (Diisocyanates)	u
Pentachloro[1,1'-biphenyl]	25429-29-2	PBT	P	CHSR814.81A2 EU2019/1021/POP 96/59/EC CANTSL US40CFRCh CP65		P: worldwide (PCB/PCT); Specific obligations for maintenance and repairs	u
Dibromotetrafluoroethane	25497-30-7	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher	May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications	n
Dichlorobiphenyl	25512-42-9	PBT	P	CHSR814.81A2 EU2019/1021/POP 96/59/EC CANTSL US40CFRCh CP65		P: worldwide (PCB/PCT); Specific obligations for maintenance and repairs	u
Sulphur hexafluoride (SF6)	2551-62-4	Greenhouse gas	D;P;R	EU517/2004	Widely used in HV-Industry (e.g. GIS)	Europe: Use widely Prohibited or Restricted with reporting obligations and exemptions for several applications.	n
Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4]. The individual isomers [2], [3] and [4] (including their cis- and trans- stereo	25550-51-0	Respiratory sensitizing properties	D	EC1907/2006/C	Motor insulation, hardener for epoxy resin		u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	26/66

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isomeric forms) and all possible combinations of the isomers [1] are covered by this entry						
N,N,N-triethylethanaminium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulfonate	25628-08-4	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C	Use as flame retardant or catalyst in polymers	D: In Europe (PFBS) n
Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (a - HBCDD, B-HBCDD, v- HBCDD)	25637-99-4	PBT	P	EC1907/2006/C EC1907/2006/XVII 2011/65/EU EU2019/1021/POP CHSR814.81A1 CANTSL	Used as flame retardant in the plastics industry, mainly in polystyrene. Used as an additive flame retardant primarily in expanded polystyrene (EPS) and extruded polystyrene (XPS), used as insulating materials in the construction industry.	EU: sunset date 21/08/2015 u
4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)	2580-56-5	CMR	D	EC1907/2006/C	Ink, paint, detergents. Dyeing of paper, packaging textiles and plastic products. Paper products, packaging materials, textiles and plastics.	u
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	PBT; vPvB	D	EC1907/2006/C	UV-absorbers, especially for transparent plastic materials. UV-protection agents in coatings especially for cars and special industrial wood coatings. UV-protection agents for plastics, rubber and polyurethanes.	u
4-Nonylphenol, ethoxylated 1 - 2.5 moles ethoxylated	26027-38-3	Endocrine disrupting properties	P;R	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII	Cleaning agent	EU: Sunset date 4/1/2021 See note 2 in "Notes" u
14-(nonylphenoxy)-3,6,9,12-tetraoxatetradecan-1-ol	26264-02-8	Endocrine disrupting properties	P	EC1907/2006/C EC1907/2006/XIV	Cleaning agent	EU: Sunset date 4/1/2021 See note 2 in "Notes" u
Methanediisocyanate (MDI)	26447-40-5	Skin and respiratory sensitising properties	R	EC1907/2006/XVII;	PUR-foam, adhesives	

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	27/66

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m-tolylidene diisocyanate	26471-62-5	CMR; skin sensitizer; respiratory sensitizer	R	EC1907/2006/XVII	Use as monomer in polymers like PU-foams, and adhesives	R: In Europe (Diisocyanates)	n
tris(4-nonylphenyl, branched) phosphite, tris(nonylphenyl) phosphite	26523-78-4	Endocrine disrupting properties	D	EC1907/2006/C	Rubber manufacturing, rubber products	TNPP derivatives	u
p-isononylphenol	26543-97-5	CMR; Endocrine disrupting properties	D	EC1907/2006/C	adhesives and sealants, coating products and polymers	See note 1 in "Notes"	u
26-(nonylphenoxy)-3,6,9,12,15,18,21,24-octaoxahehexacosan-1-ol	26571-11-9	Endocrine disrupting properties	P	EC1907/2006/C EC1907/2006/XIV	Cleaning agent	EU: Sunset date 4/1/2021 See note 2 in "Notes"	u
23-(nonylphenoxy)-3,6,9,12,15,18,21-heptaoxatricosan-1-ol	27177-05-5	Endocrine disrupting properties	P	EC1907/2006/C EC1907/2006/XIV	Cleaning agent	EU: Sunset date 4/1/2021 See note 2 in "Notes"	u
Chloro-1,1'-biphenyl	27323-18-8	PBT	P	CHSR814.81A2 EU2019/1021/POP 96/59/EC CANTSL US40CFRCh CP65		P: worldwide (PCB/PCT); Specific obligations for maintenance and repairs	u
1,3-bis(1-isocyanato-1-methylethyl)benzene	2778-42-9	CMR; skin sensitizer; respiratory sensitizer	R	EC1907/2006/XVII	Use as monomer in polymers like PU-foams, and adhesives	R: In Europe (Diisocyanates)	n
Polybrominated diphenyl-ethers (PBDE) Polybrominated biphenyls (PBB) (di-, tetra-, hexa-, octa-, decabromobiphenyl)	27858-07-7	PBT; vPvB	P;R	EC1907/2006/XVII 2011/65/EU CHSR814.81A1 EU2019/1021/POP CANTSL	Electric and electronic equipment	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w.	
20-(4-nonylphenoxy)-3,6,9,12,15,18-hexaoxaicosan-1-ol	27942-27-4	Endocrine disrupting properties	P	EC1907/2006/C EC1907/2006/XIV	Cleaning agent	EU: Sunset date 4/1/2021 See note 2 in "Notes"	u
1-chloro-1,2,2,2-tetrafluoroethane	2837-89-0	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher	May be subject to national CFC/HFC/HCFC reduction programs, re-	n

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	28/66

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						restrictions or exemptions for specific applications
Heptachloro-1,1'-biphenyl	28655-71-2	PBT	P	CHSR814.81A2 EU2019/1021/POP 96/59/EC CANTSL US40CFRCh CP65		P: worldwide (PCB/PCT); Specific obligations for maintenance and repairs
Phenol, 4-tert-heptyl-	288864-02-8	Endocrine disrupting properties	D	EC1907/2006/C		
Perchlorophenyl 5-oxo-L-prolinate	28990-85-4	PBT	P	EU2019/1021/POP		P: In Europe
Zinc bis(pentachlorophenolate)	2917-32-0	PBT	P	EU2019/1021/POP		P: In Europe
Potassium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate	29420-49-3	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C	Use as flame retardant or catalyst in polymers	D: In Europe (PFBS)
Lead di(acetate)	301-04-2	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2 CP65	Laboratory Chemical, in color, paint strippers and thinners	
Hydrazine	302-01-2	CMR	D;R	EC1907/2006/C CANNPRI US40CFRCh CP65	Corrosion inhibitor in cooling systems.	
Phenol, 4-nonyl-, phosphite (3:1)	3050-88-2	Endocrine disrupting properties	D	EC1907/2006/C	Rubber manufacturing, rubber products	TNPP derivates
Undecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-tricosafuoro-11-iodo-	307-50-6	PBT	P	EU2019/1021/POP		P: In Europe
Tricosafuorododecanoic acid	307-55-1	vPvB	D	EC1907/2006/C		
Phenol, 4-(1-ethyl-1,2-dimethylpropyl)-	30784-27-1	Endocrine disrupting properties	D	EC1907/2006/C		
p-(1,1-dimethylheptyl)phenol	30784-30-6	CMR; Endocrine disrupting properties	D	EC1907/2006/C	adhesives and sealants, coating products and polymers	See note 1 in "Notes"

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	29/66
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Phenol, 4-(1,1-dimethylpentyl)-	30784-31-7	Endocrine disrupting properties	D	EC1907/2006/C	u
4-(3-methylhexan-3-yl)phenol	30784-32-8	Endocrine disrupting properties	D	EC1907/2006/C	u
Aldrin	309-00-2	PBT	P	EU2019/1021/POP CP65	P: In Europe u
Perfluorooctylethyldichloromethyl silane	3102-79-2	PBT	P	EU2019/1021/POP	P: In Europe u
Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	3108-42-7	CMR; PBT	D	EC1907/2006/C	Lubricant, wetting agent, plasticisers u
Cadmium sulphate	31119-53-6	CMR	P;R	EC1907/2006/C EC1907/2006/XVII 2011/65/EU	Used for the electroplating of cadmium in electronic circuits. It is also a precursor to cadmium-based pigment such as cadmium sulfide. It is also used for electrolyte in a Weston standard cell as well as a pigment in fluorescent screens. See note 3 in "Notes" u
Tetrachloro(tetrachlorophenyl)benzene	31472-83-0	PBT	P	EU2019/1021/POP 96/59/EC	P: In Europe u
Phenol, p-isononyl-, phosphite (3:1)	31631-13-7	Endocrine disrupting properties	D	EC1907/2006/C	Rubber manufacturing, rubber products TNPP derivates u
1,5-naphthylene diisocyanate	3173-72-6	CMR; skin sensitizer; respiratory sensitizer	R	EC1907/2006/XVII	Use as monomer in polymers like PU-foams, and adhesives R: In Europe (Diisocyanates) n
Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (a - HBCDD, B-HBCDD, v- HBCDD)	3194-55-6	PBT	P	EC1907/2006/C EC1907/2006/XVII 2011/65/EU EU2019/1021/POP CHSR814.81A1 CANTSL	Used as flame retardant in the plastics industry, mainly in polystyrene. Used as an additive flame retardant primarily in expanded polystyrene (EPS) and extruded polystyrene (XPS), used as insulating materials in the construction industry. EU: sunset date 21/08/2015 P: In Europe and Canada u
(1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ ,4 $\alpha$ ,5 $\beta$ ,6 $\beta$ )-1,2,3,4,5,6-hexachlorocyclohexane	319-84-6	PBT	P	EU2019/1021/POP	P: In Europe u
(1 $\alpha$ ,2 $\beta$ ,3 $\alpha$ ,4 $\beta$ ,5 $\alpha$ ,6 $\beta$ )-1,2,3,4,5,6-hexachlorocyclohexane	319-85-7	PBT	P	EU2019/1021/POP	P: In Europe u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	30/66

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Diphenyl ether, pentabromo derivative	32534-81-9	PBT	P	EU2019/1021/POP CANTSL		P: In Europe and Canada	u
Phosphine, tris[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl)phenyl]-	325459-92-5	PBT	P	EU2019/1021/POP		P: In Europe	u
2,2-bis(bromomethyl)propane1,3-diol (BMP);	3296-90-0	CMR	D	EC1907/2006/C CP65	BMP: manufacture of polymer resins and in one component foam (OCPF) application.		n
Phenol, 4-(1,1,3-trimethylbutyl)-	33104-11-9	Endocrine disrupting properties	D	EC1907/2006/C			u
beta-Endosulfan	33213-65-9	PBT	P	EU2019/1021/POP		P: In Europe	u
Perfluorooctanoic anhydride	33496-48-9	PBT	P	EU2019/1021/POP		P: In Europe	u
Pentadecafluorooctanoic acid (PFOA)	335-67-1	PBT, CMR	P	EC1907/2006/C EC1907/2006/XVII EU2019/1021/POP CP65	Surfactant in the polymerization of fluoropolymers.	P: In Europe (PFOA); >200 group substances under ( <a href="https://echa.europa.eu/de/list-of-substances-subject-to-pops-regulation">https://echa.europa.eu/de/list-of-substances-subject-to-pops-regulation</a> )	u
Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	335-76-2	CMR; PBT	D	EC1907/2006/C	Lubricant, wetting agent, plasticisers		u
Silver(1+) perfluorooctanoate	335-93-3	PBT	P	EU2019/1021/POP CANTSL		P: In Europe and Canada	u
Sodium pentadecafluorooctanoate	335-95-5	PBT	P	EU2019/1021/POP CANTSL		P: In Europe and Canada	u
2-Chloro-1,1-difluoroethane	338-65-8	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher	May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications	n
Propane, 2,3-dichloro-1,1,1-trifluoro-	338-75-0	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher	May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications	n

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	31/66

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2,2',4,4',6,6'-hexachlorobiphenyl	33979-03-2	PBT	P	CHSR814.81A2 EU2019/1021/POP 96/59/EC CANTSL US40CFRCh CP65		P: worldwide (PCB/PCT); Specific obligations for maintenance and repairs	u
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, gallium salt (9Cl)	341035-71-0	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
Sulfonium, bis(4-methylphenyl)phenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	341548-85-4	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
p-Nonylphenol hexaethoxylate	34166-38-6	Endocrine disrupting properties	P	EC1907/2006/C EC1907/2006/XIV	Cleaning agent	EU: Sunset date 4/1/2021 See note 2 in "Notes"	u
1,3-Dioxane, 2-[(1R,2R)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, cis-rel-	343934-04-3	vPvB	D;P	EC1907/2006/C EC1907/2006/XIV		P: Sunset date 2023	u
1,3-Dioxane, 2-[(1R,2R)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, trans-rel-	343934-05-4	vPvB	D;P	EC1907/2006/C EC1907/2006/XIV		P: Sunset date 2023	u
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, scandium(3+) salt (3:1)	350836-93-0	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
1-Bromo-3-fluoropropane	352-91-0	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher	May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications	n
Bromochlorodifluoromethane (Halon-1211)	353-59-3	Substance that deplete the ozone layer	P;R	CHSR814.81A1 CHSR814.81A2 EC1005/2009 CANNPRI CANTSL US40CFRCh	Fire extinguisher	Europe: Some Application exempted	u

SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	32/66

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1,1,2-Trichlor-1,2-difluoroethane	354-15-4	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher	May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications	n
perfluorohexane-1-sulphonic acid	355-46-4	vPvB	D	EC1907/2006/C			u
1,3-bis(isocyanatomethyl)benzene	3634-83-1	CMR; skin sensitizer; respiratory sensitizer	R	EC1907/2006/XVII	Use as monomer in polymers like PU-foams, and adhesives	R: In Europe (Diisocyanates)	n
Polybrominated diphenyl-ethers (PBDE) Polybrominated biphenyls (PBB) (di-, tetra-, hexa-, octa-, decabromo-biphenyl)	36355-01-8	PBT; vPvB	P;R	EC1907/2006/XVII 2011/65/EU CHSR814.81A1 EU2019/1021/POP CANTSL	Electric and electronic equipment	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w.	
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	vPvB	D	EC1907/2006/C	UV-protection agents in coatings, plastics, rubber and cosmetics		u
Diocetyl tin dilaurate	3648-18-8	CMR	D	EC1907/2006/C			u
2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA);	36483-57-5	CMR	D	EC1907/2006/C	TBNPA: polymer production manufacture of plastics products, including compounding and conversion and as an intermediate.		n
Diphenyl ether, hexabromo derivative	36483-60-0	PBT	P	EU2019/1021/POP CANTSL		P: In Europe and Canada	u
Trilead diarsenate	3687-31-8	CMR	P	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2 CANNPRI US40CFRCh	Present in complex raw materials imported for manufacture of copper, lead and a range of precious metals.		u
Isononylphenol, ethoxylated	37205-87-1	Endocrine disrupting properties	P;R	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII CHSR814.81A1 CANNPRI	Cleaning agent	EU: Sunset date 4/1/2021 See note 2 in "Notes"	u



## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	33/66

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Bromofluoromethane	373-52-4	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher	May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications	n
1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonic acid	375-73-5	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C	Use as flame retardant or catalyst in polymers	D: In Europe (PFBS)	n
Perfluorononan-1-oic-acid and its sodium and ammonium salts	375-95-1	CMR; PBT	D	EC1907/2006/C	Processing aid for fluoropolymer manufacture/lubricating oil additive/surfactant for fire extinguishers/cleaning agent/textile antifouling finishing agent/polishing surfactant/waterproofing agents and in liquid crystal display panels		u
Tridecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13-heptacosafuoro-13-iodo-	376-04-5	PBT	P	EU2019/1021/POP		P: In Europe	u
Heptacosafuorotetradecanoic acid	376-06-7	vPvB	D	EC1907/2006/C	Used in the production of fluoropolymers		u
Pentachlorophenyl laurate	3772-94-9	PBT	P	EU2019/1021/POP		P: In Europe	u
Phenol, 4-(1,1-diethylpropyl)-	37872-24-5	Endocrine disrupting properties	D	EC1907/2006/C			u
Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	CMR	D	EC1907/2006/C	Processing aid in the production of fluoropolymers		u
Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	3830-45-3	CMR; PBT	D	EC1907/2006/C	Lubricant, wetting agent, plasticisers		u
2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	PBT; vPvB	D;R	EC1907/2006/C; Japan(LawConcerningtheExaminationandRegulationofManufacture)	UV-absorbers, especially for transparent plastic materials. UV-protection agents in coatings especially for cars and special industrial wood coatings. UV-protection agents for plastics, rubber and polyurethanes.		u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	34/66

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2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	vPvB	D	EC1907/2006/C	UV-protection agents in coatings, plastics, rubber and cosmetics		u
potassium perfluorohexane-1-sulphonate	3871-99-6	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
Diphenyl ether, tetrabromo derivative	40088-47-9	PBT	P	EU2019/1021/POP CANTSL		P: In Europe and Canada	u
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	CMR; skin sensitizer; respiratory sensitizer	R	EC1907/2006/XVII	Use as monomer in polymers like PU-foams, and adhesives	R: In Europe (Diisocyanates)	n
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, neodymium(3+) salt (3:1)	41184-65-0	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, yttrium(3+) salt (3:1)	41242-12-0	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
Perfluorononan-1-oic-acid and its sodium and ammonium salts	4149-60-4	CMR; PBT	D	EC1907/2006/C	Processing aid for fluoropolymer manufacture/lubricating oil additive/surfactant for fire extinguishers/cleaning agent/textile antifouling finishing agent/polishing surfactant/waterproofing agents and in liquid crystal display panels		u
2-bromo-1,1,1-trifluoroethane	421-06-7	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher	May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications	n
Sulfonium, (thiodi-4,1-phenylene)bis(diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:2)	421555-73-9	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
Iodonium, bis[4-(1,1-dimethylpropyl)phenyl]-, salt with	421555-74-0	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	35/66

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1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic						
Sulfonium, tris[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	425670-70-8	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS) u
Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4]. The individual isomers [2], [3] and [4] (including their cis- and trans- stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry						
Pentazinc chromate octahydroxide	49663-84-5	CMR	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A2 2011/65/EU CANNPRI CANTSL CP65	Used for surface treatment and as pigment in paint.	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes" u
Clofenotane (Dichlorodiphenyltrichloroethane (DDT))	50-29-3	PBT	P	EU2019/1021/POP CANTSL CP65		P: In Europe and Canada u
morpholinium perfluorobutanesulfonate	503155-89-3	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C	Use as flame retardant or catalyst in polymers	D: In Europe (PFBS) n
Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	CMR;PBT;vPvB	P	EC1907/2006/C EC1907/2006/XVII EU2019/1021/POP		P: In Europe u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS Approved	SECURITY LEVEL Internal	DOCUMENT ID. 8DAA5005282	REV. C	LANG. en	PAGE 36/66
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				CANNPRI CP65			
magnesium perfluorobutanesulfonate	507453-86-3	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C	Use as flame retardant or catalyst in polymers	D: In Europe (PFBS)	n
4,4'-methylenedicyclohexyl diisocyanate	5124-30-1	CMR; skin sensitizer; respiratory sensitizer	R	EC1907/2006/XVII	Use as monomer in polymers like PU-foams, and adhesives	R: In Europe (Diisocyanates)	n
Cadmium carbonate	513-78-0	CMR; STOT RE	P;R	EC1907/2006/C EC1907/2006/XVII 2011/65/EU	Used as a pH regulator and in water treatment products, laboratory chemicals, cosmetics and personal care products.	See note 3 in "Notes"	u
Cobalt(II) carbonate	513-79-1	CMR	D;R	EC1907/2006/C CANTSL	A precursor to cobalt carbonyl and various cobalt salts		u
Acetic acid, lead salt, basic	51404-69-4	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Coatings, paints, laboratory chemicals	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes"	u
4-(1,1,5-Trimethylhexyl)phenol	521947-27-3	CMR; Endocrine disrupting properties	D	EC1907/2006/C	adhesives and sealants, coating products and polymers	See note 1 in "Notes"	u
4-(1-ethyl-1-methylhexyl)phenol	52427-13-1	CMR; Endocrine disrupting properties	D	EC1907/2006/C	adhesives and sealants, coating products and polymers	See note 1 in "Notes"	u
Nonachloro-1,1'-biphenyl	53742-07-7	PBT	P	CHSR814.81A2 EU2019/1021/POP 96/59/EC CANTSL US40CFRCh CP65		P: worldwide (PCB/PCT); Specific obligations for maintenance and repairs	u
Dodecamethylcyclohexasiloxane (D6)	540-97-6	PBT; vPvB	D	EC1907/2006/C	Used in washing and cleaning products, polishes and waxes, cosmetics and personal care products		u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	37/66

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Decamethylcyclopentasiloxane (D5)	541-02-6	PBT; vPvB	D;R	EC1907/2006/C EC1907/2006/XVII	Used in washing and cleaning products, polishes and waxes, cosmetics and personal care products, textile treatment products and dyes	u
4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)	548-62-9	CMR	D	EC1907/2006/C CP65	Dyeing of paper, ink used in cartridges and ballpoint pens, plant dyeing. Laboratory chemicals, paper goods.	u
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, lithium salt (1:1)	55120-77-9	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS) u
Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride) (TMA)	552-30-7	Respiratory sensitising properties - human health	D	EC1907/2006/C	Used in the manufacture of esters and polymers	u
Octamethylcyclotetrasiloxane (D4)	556-67-2	PBT; vPvB	D;R	EC1907/2006/C EC1907/2006/XVII	Used in washing and cleaning products, polishes and waxes and cosmetics and personal care products	u
4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol, with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)	561-41-1	CMR	D	EC1907/2006/C	Manufacture of ink and paint. Staining of different materials.	u
Tetrachloromethane (carbon tetrachloride)	56-23-5	Acute toxicity; Hazardous to the environment; Substance that deplete the ozone layer	P	CHSR814.81A1 CHSR814.81A2 EC1005/2009 CANNPRI CANTSL USEPA CP65	Degreasing; Cooling agents; fire extinguisher	May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications u
Bis(tributyltin)oxide (TBTO)	56-35-9	PBT	D;R	EC1907/2006/C US40CFRCh.	Occurs as a preservative in textiles, paper, leather, rubber and polymer materials	u
Benz[a]anthracene	56-55-3	CMR; PBT; vPvB	R	EC1907/2006/C EC1907/2006/XVII	Normally not produced intentionally but rather occurs as a constituent or impurity in other substances.	

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	38/66

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CANNPRI CP65					
Hexahydro-3-methylphthalic anhydride	57110-29-9	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C	u
Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	CMR	D;R	EC1907/2006/C EC1907/2006/XVII	Azo dyes u
Chlordane , pur	57-74-9	PBT	P	EU2019/1021/POP CP65	P: In Europe u
4-methyl-m-phenylene diisocyanate	584-84-9	CMR; skin sensitizer; respiratory sensitizer	R	EC1907/2006/XVII	Use as monomer in polymers like PU-foams, and adhesives R: In Europe (Diisocyanates) n
2,4'-Methylenediphenyl diisocyanate (Methanediisocyanate, MDI)	5873-54-1	CMR; skin sensitizer; respiratory sensitizer	R	EC1907/2006/XVII	Use as monomer in polymers like PU-foams, and adhesives R: In Europe (Diisocyanates) n
1,2,3,4,5,6-hexachlorocyclohexane (lindane)	58-89-9	Acute toxicity; Hazardous to the environment; Serious health hazard	P	CHSR814.81A1 EU2019/1021/POP US40CFRCh	Insecticide P in all applications. CH: P in all applications. Limit value: 0.001% w/w of total halogenated biphenyls in lubrication oils and greases manufactured from waste oils. u
Polybrominated diphenyl-ethers (PBDE) Polybrominated biphenyls (PBB) (di-, tetra-, hexa-, octa-, decabromobiphenyl)	59536-65-1	PBT; vPvB	P;R	EC1907/2006/XVII 2011/65/EU CHSR814.81A1 EU2019/1021/POP CANTSL	Electric and electronic equipment EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w.
1,3,5-tris-[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H, 3H, 5H)-trione (β-TGIC)	59653-74-6	CMR	D	EC1907/2006/C	Metal products such as tools. Plastic goods (softener) u
Polybrominated diphenyl-ethers (PBDE) Polybrominated biphenyls (PBB) (di-,	60044-25-9	PBT; vPvB	P;R	EC1907/2006/XVII 2011/65/EU CHSR814.81A1	Electric and electronic equipment EU: P in all applications covered by RoHS.

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	39/66

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tetra-, hexa-, octa-, decabromo-biphenyl)				EU2019/1021/POP CANTSL		CH: P in packaging, limit value: 0.01% w/w.	
4-Aminoazobenzene	60-09-3	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CP65	Textile		u
Diisopentylphthalate	605-50-5	CMR	P	EC1907/2006/C EC1907/2006/XIV	Explosives	EU: sunset date 4/7/2020	
Dieldrin	60-57-1	PBT	P	EU2019/1021/POP CP65		P: In Europe	u
BHC or HCH	608-73-1	PBT	P	EU2019/1021/POP		P: In Europe	u
Pentachlorobenzene	608-93-5	PBT	P	EU2019/1021/POP CANTSL		P: In Europe and Can- ada	u
Perfluorohexylperfluorooctyl phosphinate	610800-34-5	PBT	P	EU2019/1021/POP		P: In Europe	u
Terphenyl hydrogenated	61788-32-7	vPvB	D	EC1907/2006/C	Used as a plastic additive, solvent, in coatings/inks, in adhesives and sealants, and heat transfer fluids		u
ammonium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate	62037-80-3	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C			u
Sulfurous acid, lead salt, dibasic	62229-08-7	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Stabilizers for PVC, plastic goods		u
Dimethylfumarate (DMFu)	624-49-7	Health hazard	P;R	EC1907/2006/XVII CHSR814.81A1	Drying and anti-mold agents, silica gel	CH: P; EU: R	u
Methoxyacetic acid	625-45-6	CMR	D	EC1907/2006/C	Lime remover		u
1,2-diethoxyethane	629-14-1	CMR	D	EC1907/2006/C			u
Phenol, 4-(1-propylbutyl)-	6465-71-0	Endocrine disrupting properties	D	EC1907/2006/C			u
Phenol, 4-(1-ethylpentyl)-	6465-74-3	Endocrine disrupting properties	D	EC1907/2006/C			u
Diethyl sulphate	64-67-5	CMR	D;R	EC1907/2006/C CANNPRI CANTSL	An intermediate		u

SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS Approved	SECURITY LEVEL Internal	DOCUMENT ID. 8DAA5005282	REV. C	LANG. en	PAGE 40/66
--------------------	----------------------------	-----------------------------	-----------	-------------	---------------

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				US40CFRCh CP65		
Lead dipicrate	6477-64-1	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Lead dipicrate is an explosive like lead diazide and lead styphnate.	u
Pitch, coal tar, high temp.	65996-93-2	CMR; PBT; vPvB	P	EC1907/2006/C EC1907/2006/XIV	Used in manufacture of anthracene and carbon black. Corrosion protection.	EU: sunset date 4/10/2020
1,2-dichloro-1,1,2,3,3,3-hexafluoropropane	661-97-2	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher	May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications
potassium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionate	67118-55-2	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C		u
1,3-Dioxane, 2-[(1S,2S)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, cis-	676367-02-5	vPvB	D;P	EC1907/2006/C EC1907/2006/XIV		P: Sunset date 2023 u
1,3-Dioxane, 2-[(1S,2R)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, cis-	676367-03-6	vPvB	D;P	EC1907/2006/C EC1907/2006/XIV		P: Sunset date 2023 u
1,3-Dioxane, 2-[(1R,2S)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, cis-	676367-04-7	vPvB	D;P	EC1907/2006/C EC1907/2006/XIV		P: Sunset date 2023 u
1,3-Dioxane, 2-[(1R,2R)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, cis-	676367-05-8	vPvB	D;P	EC1907/2006/C EC1907/2006/XIV		P: Sunset date 2023 u
1,3-Dioxane, 2-[(1S,2S)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, trans-	676367-06-9	vPvB	D;P	EC1907/2006/C EC1907/2006/XIV		P: Sunset date 2023 u
1,3-Dioxane, 2-[(1S,2R)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, trans-	676367-07-0	vPvB	D;P	EC1907/2006/C EC1907/2006/XIV		P: Sunset date 2023 u



## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	41/66
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1,3-Dioxane, 2-[(1R,2S)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, trans-	676367-08-1	vPvB	D;P	EC1907/2006/C EC1907/2006/XIV	P: Sunset date 2023 u
1,3-Dioxane, 2-[(1R,2R)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, trans-	676367-09-2	vPvB	D;P	EC1907/2006/C EC1907/2006/XIV	P: Sunset date 2023 u
$\alpha,\alpha$ -Bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)	6786-83-0	CMR	D	EC1907/2006/C	Ink. Dyeing of paper, packaging materials textiles and plastic products. Washer fluid. Paper products, packaging materials, textiles and plastics. u
2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	CMR	D	EC1907/2006/C	Raw material for epoxy resins, polycarbonate resin, Thermal paper, Chemicals, Surface coatings, Inks, Adhesives, Synthetic resin additives, Liquid crystal materials, Photosensitizers, Information recording agents, Engineering plastic materials, Electronic functional materials, Optical functional materials; may be used as substitute for BPA u
N,N-dimethylformamide	68-12-2	CMR	D	EC1907/2006/C CANNPRI CP65	Solvents, laboratory chemical u
Propanamide, 3-[( $\gamma$ - $\omega$ -perfluoro-C4-10-alkyl)thio] derivs.	68187-42-8	PBT	P	EU2019/1021/POP CANTSL	P: In Europe and Canada u
ammonium perfluorohexane-1-sulphonate	68259-08-5	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams P: In Europe (PFOS) u
Ammonium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate	68259-10-9	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C	Use as flame retardant or catalyst in polymers D: In Europe (PFBS) n
Dibutyltin dichloride (DBTC)	683-18-1	CMR	D	EC1907/2006/C	Rubber manufacturing, rubber products u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	42/66

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4-Nonylphenol, branched, ethoxylated / Poly (oxy-1,2-ethanediyl), alpha - (nonylphenyl)-omega-hydroxy-, branched	68412-54-4	Endocrine disrupting properties	P;R	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII CHSR814.81A1 CANNPRI	Cleaning agent	EU: Sunset date 4/1/2021 Corresponding Polymer See note 2 in "Notes"	u
Phosphinic acid, bis(perfluoro-C6-12-alkyl) derivs.	68412-69-1	PBT	P	EU2019/1021/POP CANTSL		P: In Europe and Canada	u
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	CMR	P	EC1907/2006/C EC1907/2006/XIV	Used in PVC products	EU: sunset date 4/7/2020	
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	CMR	D	EC1907/2006/C	In plastic articles		u
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate	68515-51-5	CMR	D	EC1907/2006/C	Used to make polymer foils, PVC products, plastic products, and rubber products, in coatings, cable compounding, cable applications, artist supplies and adhesives		u
Phenol, 4-(1-methylhexyl)-	6863-24-7	Endocrine disrupting properties	D	EC1907/2006/C			u
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate	68648-93-1	CMR	D	EC1907/2006/C	Used to make polymer foils, PVC products, plastic products, and rubber products, in coatings, cable compounding, cable applications, artist supplies and adhesives		u
Silicic acid (H <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> ), barium salt (1:1), lead-doped	68784-75-8	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Paint, coating in light-bulbs		u
Diphenyl ether, heptabromo derivative	68928-80-3	PBT	P	EU2019/1021/POP CANTSL		P: In Europe and Canada	u
Phenol, isopropylated phosphate (3:1) (PIP (3:1))	68937-41-7	PBT	P;R	USTSCA	Flame retardant and/or plasticizer in polymers such as flexible polyurethane foam and PVC, lubricant, hydraulic fluid, adhesives and sealants.	In EU: Included in the CoRAP List (not yet classified as a SVHC) but as CMR *Regulated in the US by US EPA under TSCA §751.407 from 08/09/2021	n

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	43/66

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Phthalato(2-)dioxotrilead	69011-06-9	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Stabilizers for PVC, rubber products, plastic products	u
2-methylimidazole	693-98-1	CMR	D	EC1907/2006/C CP65		u
2,4,4'-trichlorobiphenyl	7012-37-5	PBT	P	CHSR814.81A2 EU2019/1021/POP 96/59/EC CANTSLS US40CFRCh CP65	P: worldwide (PCB/PCT); Specific ob- ligations for mainte- nance and repairs	u
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, zinc salt	70136-72-0	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS) u
tridecafluorohexanesulphonic acid, compound with 2,2'-iminodiethanol (1:1)	70225-16-0	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS) u
Naphthalene, chloro derivs.	70776-03-3	PBT	P	EU2019/1021/POP CANTSLS		P: In Europe and Can- ada u
Cobalt(II) diacetate	71-48-7	CMR	D;R	EC1907/2006/C CANNPRI	Surface treatment of metals.	u
1,1,1-trichloroethane	71-55-6	Substance that deplete the ozone layer	P	CHSR814.81A1 CHSR814.81A2 EC1005/2009 CANTox.Subs USEPA	Degreasing; Cooling agents; fire extin- guisher	May be subject to na- tional CFC/HFC/HCFC reduction programs, re- strictions or exemp- tions for specific appli- cations u
Pentanoic acid, 4,4-bis[(γ-w-perfluoro- C8-20-alkyl)thio]derivs., compds. with diethanolamine	71608-61-2	PBT	P	EU2019/1021/POP CANTSLS		P: In Europe and Can- ada u
Diisohexyl phthalate	71850-09-4	CMR	R	EC1907/2006/C	Not registered under REACH	u
2-methyl-1-(4-methylthiophenyl)-2-mor- pholinopropan-1-one	71868-10-5	CMR; Endocrine disrupting proper- ties	R	EC1907/2006/C	The substance is used in polymer pro- duction	u
1,2-Benzenedicarboxylic acid, di-C6-8- branched alkyl esters, C7-rich	71888-89-6	CMR	P	EC1907/2006/C EC1907/2006/XIV	Used in PVC products	EU: sunset date 4/7/2020

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS Approved	SECURITY LEVEL Internal	DOCUMENT ID. 8DAA5005282	REV. C	LANG. en	PAGE 44/66
--------------------	----------------------------	-----------------------------	-----------	-------------	---------------

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Phenol, 4-(1,3-dimethylpentyl)-	71945-81-8	Endocrine disrupting properties	D	EC1907/2006/C			u
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. with N,N-diethylethanamine (1:1)	72033-41-1	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
Endrin	72-20-8	PBT	P	EU2019/1021/POP CP65		P: In Europe	u
Phenol, heptyl derivs.	72624-02-3	Endocrine disrupting properties	D	EC1907/2006/C	Monomer residues in a polymers		u
Pentacosafluorotridecanoic acid	72629-94-8	vPvB	D	EC1907/2006/C			u
Phenol, 4-(1,1,2,2-tetramethylpropyl)-	72861-06-4	Endocrine disrupting properties	D	EC1907/2006/C			u
2-[2-[2-(4-nonylphenoxy)ethoxy]ethoxy]ethoxy]ethanol	7311-27-5	Endocrine disrupting properties	P	EC1907/2006/C EC1907/2006/XIV	Cleaning agent	EU: Sunset date 4/1/2021 See note 2 in "Notes"	u
2,4,6-tris(tert-butyl)phenol (2,4,6-TTBP)	732-26-3	PBT	P;R	USTSCA	Used as an additive in fuel, oils and lubricants	In EU: Included in the CoRAP List (not yet classified as a SVHC) *Regulated in the US by US EPA under TSCA §751.409 from 08/03/2021	n
Lead	7439-92-1	CMR	P;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2 2011/65/EU CANNPRI CANTSL US40CFRCh	Used in metals, welding and soldering products, metal surface treatment products, and polymers	see group entry lead (and lead compounds)	
Mercury (and mercury compounds)	7439-97-6	Acute toxicity; Hazardous to the environment; Serious health hazard	P;R	EC1907/2006/XVII CHSR814.81A1 CHSR814.81A2 2011/65/EU CANNPRI	Electric and electronic equipment covered by RoHS	P in anti fouling, wood preservation, textiles, water treatment and in batteries and accumu- lators; 2% w/w in but- ton cells.	

SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS Approved	SECURITY LEVEL Internal	DOCUMENT ID. 8DAA5005282	REV. C	LANG. en	PAGE 45/66
--------------------	----------------------------	-----------------------------	-----------	-------------	---------------

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				CANTSL US40CFRCh		R in all other applica- tions. EU: P in all applications covered by RoHS. CH: P in all applications except certain types of EEE. Limit value: 0.0005% w/w. -in portable batteries; 2% w/w, - in button cells; 0.01% w/w - in packaging; 0.0025% w/w - in wood-based mate- rials; - in EEE 0.1% w/w.	
Cadmium and cadmium compounds	7440-43-9	CMR; Flammable; Acute toxicity; Hazardous to the environment; Serious health hazard	P;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2 2011/65/EU 2006/66/EC CANNPRI CANTSL US40CFRCh	Cadmium and cadmium compounds. Electric and electronic equipment cov- ered by RoHS	See note 3 in "Notes"	u
Perfluorooctylethyldimethylchlorosilane	74612-30-9	PBT	P	EU2019/1021/POP		P: In Europe	u
bromomethane	74-83-9	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher	May be subject to na- tional CFC/HFC/HCFC reduction programs, re- strictions or exemp- tions for specific appli- cations	n
dibromomethane	74-95-3	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher	May be subject to na- tional CFC/HFC/HCFC reduction programs, re-	n

SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS Approved	SECURITY LEVEL Internal	DOCUMENT ID. 8DAA5005282	REV. C	LANG. en	PAGE 46/66
--------------------	----------------------------	-----------------------------	-----------	-------------	---------------

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					restrictions or exemptions for specific applications
bromoethane	74-96-4	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher  May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications
Bromochloromethane	74-97-5	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher  May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications
Dichloromethane (methylene chloride)	75-09-2	Health hazard	P;R	EC1907/2006/XVII CHSR814.81A1 CANNPRI CANTSL US40CFRCh USEPA 96/55/EC EC1005/2009 CP65	solvent Paint stripping (prohibited) Other applications such as degreasing (restricted)
Formamide	75-12-7	CMR	D	EC1907/2006/C	Intermediate. Laboratory chemical
Dichlorofluoromethane	75-43-4	Substance that deplete the ozone layer	P	CHSR814.81A1 CHSR814.81A2 EC1005/2009 CANNPRI US40CFRCh	Cooling agents, blowing agent PUR foam.
Chlorodifluoromethane (HCFC-22)	75-45-6	Substance that deplete the ozone layer	R	CHSR814.81A1 CHSR814.81A2 EC1005/2009 CANNPRI US40CFRCh	Cooling agents, blowing agent PUR foam.

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	47/66

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Methyloxirane (Propylene oxide)	75-56-9	CMR	D;R	EC1907/2006/C CANNPRI CANTSL US40CFRCh CP65	For surfactants	u
Propanoic acid, 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-, (+)-	75579-39-4	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C		u
Propanoic acid, 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-, (-)-	75579-40-7	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C		u
Dibromodifluoromethane	75-61-6	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher	May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications n
Trifluorobromomethane (Halon-1301)	75-63-8	Substance that deplete the ozone layer	P	CHSR814.81A1 CHSR814.81A2 EC1005/2009 CANNPRI CANTSL US40CFRCh	Fire extinguisher	u
1-chloro-1,1-difluoroethane (HCFC-142b)	75-68-3	Substance that deplete the ozone layer	R	CHSR814.81A1 CHSR814.81A2 EC1005/2009 CANNPRI US40CFRCh	Cooling agents, blowing agent PUR foam	u
Trichlorofluoromethane (CFC-11)	75-69-4	Substance that deplete the ozone layer	P	CHSR814.81A1 CHSR814.81A2 EC1005/2009 CANTSL US40CFRCh	Cooling agent	u

SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS Approved	SECURITY LEVEL Internal	DOCUMENT ID. 8DAA5005282	REV. C	LANG. en	PAGE 48/66
--------------------	----------------------------	-----------------------------	-----------	-------------	---------------

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Dichlorodifluoromethane (CFC-12)	75-71-8	Substance that deplete the ozone layer	P	CHSR814.81A1 CHSR814.81A2 EC1005/2009 CANTSL US40CFRCh	Cooling agent	u
Chlorotrifluoromethane	75-72-9	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher	May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications n
Tetrafluoromethane (CF4)	75-73-0	Greenhouse gas	R	EU517/2004	Semiconductor manufacturing (additives to SF6 excluded)	
1,2-dibromo-1,1-difluoroethane	75-82-1	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher	May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications n
Chloro-1,1,1-trifluoroethane	75-88-7	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher	May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications n
Tetrachloro-1,2-difluoroethane	76-12-0	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher	May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications n
1,1,2-Trichloro-1,2,2-trifluoroethane (CFC-113)	76-13-1	Substance that deplete the ozone layer	P	CHSR814.81A1 CHSR814.81A2 EC1005/2009 CANTSL US40CFRCh	Cooling agent	u



## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	49/66

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1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC-114 / Cryofluorane)	76-14-2	Substance that deplete the ozone layer	P	CHSR814.81A1 CHSR814.81A2 EC1005/2009 CANNPRI CANTSL US40CFRCh	Cooling agent	u
1-Chloro-1,1,2,2,2-pentafluoroethane (CFC-115)	76-15-3	Substance that deplete the ozone layer	P	EC1005/2009 CANNPRI CANTSL US40CFRCh	Cooling agent	u
1-bromo-2-fluoroethane	762-49-2	Substance that deplete the ozone layer	R	EC1005/2009 USEPA	Cooling agents; fire extinguisher	May be subject to national CFC/HFC/HCFC reduction programs, restrictions or exemptions for specific applications n
Sodium peroxometaborate	7632-04-4	CMR	D	EC1907/2006/C	Bleach in laundry and dishwasher detergents	u
Heptachlor	76-44-8	PBT	P	EU2019/1021/POP CP65	P: In Europe	u
Cobalt dichloride	7646-79-9	CMR	D;R	EC1907/2006/C CANTSL	Surface treatment	u
Phenolphthalein	77-09-8	CMR	D;R	EC1907/2006/C CP65	Used in labs as pH-indicator and may occur as corrosion inhibitor.	u
Acids generated from chromium trioxide and their oligomers. Group containing: Chromic acid, Dichromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid	7738-94-5	CMR	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A2 2011/65/EU CANNPRI CANTSL CP65	Wood preservatives. Surface treatment of metals.	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes" u
4,4'-(1-methylpropylidene)bisphenol	77-40-7	Endocrine disrupting properties	D	EC1907/2006/C	Not registered under REACH. May be used in manufacture of phenolic and polycarbonate resin.	n
Asbestos (incl. Brown, blue and white asbestos, Tremolite)	77536-66-4	CMR	P	EC1907/2006/XVII(N/Af or1332-21-4)	Thermal insulation	

SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	50/66

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Substance	Reference	Regulation	Restriction	Material	Application	Notes
				CHSR814.81A1 CANNPRI CANTSL US40CFRCh CP65		
Asbestos (incl. Brown, blue and white asbestos, Tremolite)	77536-67-5	CMR	P	EC1907/2006/XVII(N/Af or1332-21-4) CHSR814.81A1 CANNPRI CANTSL US40CFRCh CP65	Thermal insulation	
Asbestos (incl. Brown, blue and white asbestos, Tremolite)	77536-68-6	CMR	P	EC1907/2006/XVII(N/Af or1332-21-4) CHSR814.81A1 CANNPRI CANTSL US40CFRCh CP65	Thermal insulation	
Lead chromate	7758-97-6	CMR	P	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII CHSR814.81A2 2011/65/EU CANNPRI CANTSL CP65	Dyes and pigments. Corrosion protection. Electric and electronic equipment covered by RoHS	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes" u
N-pentyl-isopentylphthalate	776297-69-9	CMR	P	EC1907/2006/C EC1907/2006/XIV		EU: sunset date 4/7/2020
Sodium chromate	7775-11-3	CMR	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A2 2011/65/EU CANNPRI CANTSL CP65	Laboratory chemical	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes" u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	51/66

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Dimethyl sulphate	77-78-1	CMR	D;R	EC1907/2006/C CANNPRI CANTSL US40CFRCh CP65	Used as intermediate in chemicals production		u
Arsenic acid	7778-39-4	CMR	P;R	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII CANNPRI	Mainly used to remove gas bubbles from ceramic glass melt and in the production of laminated printed circuit boards	EU: sunset date 22/08/2017	u
Calcium arsenate	7778-44-1	CMR	P;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2 CANNPRI US40CFRCh	Present in complex raw materials imported for manufacture of copper, lead and a range of precious metals. It appears mainly to be used as precipitating agent in copper smelting and to manufacture diarsenic trioxide.		u
Potassium dichromate	7778-50-9	CMR	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A2 2011/65/EU CANNPRI CANTSL CP65	Surface coating of metals.	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes"	u
Potassium pentachlorophenolate	7778-73-6	PBT	P	EU2019/1021/POP		P: In Europe	u
Lead hydrogen arsenate	7784-40-9	CMR	P;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2 CANNPRI	Has previously been used as pesticide.	R in all applications. CH: P - in non-removable batteries, Limit value: 0.1% w/w; - in packaging, limit value: 0.01% w/w.	u
Potassium chromate	7789-00-6	CMR	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A2 2011/65/EU CANNPRI CANTSL CP65	Surface coating of metals.	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes"	u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	52/66

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Strontium chromate	7789-06-2	CMR	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A2 2011/65/EU CANNPRI CANTSL CP65	Corrosion protection in pigment of paints and varnish.	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes"	u
Ammonium dichromate	7789-09-5	CMR	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A2 2011/65/EU CANNPRI CANTSL CP65	Used for surface coating	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes"	u
Sodium dichromate (anhydrous and dihydrate)	7789-12-0	CMR	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A2 2011/65/EU CANNPRI CANTSL CP65	Surface treatment of metal and electroplating products.	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes"	u
Cadmium fluoride	7790-79-6	CMR	P;R	EC1907/2006/C EC1907/2006/XVII 2011/65/EU	Used in oxygen-sensitive applications, such as metal production.	See note 3 in "Notes"	u
Tetraethyllead	78-00-2	CMR	P;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Fuel additive	see group entry lead (and lead compounds)	u
Hydrazine	7803-57-8	CMR	D;R	EC1907/2006/C CANNPRI US40CFRCh CP65	Corrosion inhibitor in cooling systems.		u
1,1,2-trichloroethene (Trichloroethylene)	79-01-6	CMR	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A1 CANNPRI CANTSL	Solvent, cleaning agent	EU: sunset date 21/04/2016	

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	53/66

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				US40CFRCh CP65			
Acrylamide	79-06-1	CMR	R	EC1907/2006/C EC1907/2006/XVII CANNPRI CANTSL US40CFRCh CP65	Plastic packaging.		u
N-methylacetamide	79-16-3	CMR	D	EC1907/2006/C	Laboratory chemical		u
Toxaphene	8001-35-2	PBT	P	EU2019/1021/POP CP65		P: In Europe	u
4,4'-isopropylidenediphenol (bisphenol A; BPA)	80-05-7	CMR; Endocrine disrupting properties	D;R	EC1907/2006/C EC1907/2006/XVII CANNPRI CP65	Manufacture of polycarbonate, epoxy resins and chemicals; hardener in epoxy resins		u
Pyrochlore, antimony lead yellow	8012-00-8	CMR	P;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Dye, pigment, ink toner	see group entry lead (and lead compounds)	u
p-(1,1-dimethylpropyl)phenol	80-46-6	Endocrine disrupting properties, skin sensitizer	D	EC1907/2006/C	Manufacture of chemicals and plastic products		u
5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	vPvB	P	EC1907/2006/C EC1907/2006/XIV	Used in rinsing agents, detergents and metal polish	EU: sunset date 21/08/2014	
Hexamethylene diisocyanate	822-06-0	CMR; skin sensitizer; respiratory sensitizer	R	EC1907/2006/XVII	Use as monomer in polymers like PU-foams, and adhesives	R: In Europe (Diisocyanates)	n
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, sodium salt	82382-12-5	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
Trimethoxy(1H,1H,2H,2H-heptafluorodecyl)silane	83048-65-1	PBT	P	EU2019/1021/POP		P: In Europe	u
4,4'-methylenedi-o-toluidine	838-88-0	CMR	D;R	EC1907/2006/C CP65	An intermediate to paint, textiles		u
Dicyclohexyl phthalate (DCHP)	84-61-7	CMR; Endocrine disrupting properties	D	EC1907/2006/C	Used in plastisol, PVC, rubber and plastic articles. A further use is also as		u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	54/66

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					a phlegmatizer and dispersing agent for formulations of organic peroxides		
Diisobutyl phthalate (DIBP)	84-69-5	CMR; Endocrine disrupting proper- ties	P;R	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII 2011/65/EU	Solvent in adhesives, inks for paper and packaging.	EU: sunset date 21/02/2015	u
Dibutyl phthalate (DBP)	84-74-2	CMR; Endocrine disrupting proper- ties	P;R	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII 2011/65/EU CANNPRI US40CFRCh CP65	Occurs in various articles of plastic, mainly PVC. Occurs in glue, paints, plastics, rubber etc.	EU: sunset date 21/02/2015	u
Dihexyl phthalate	84-75-3	CMR	P	EC1907/2006/C EC1907/2006/XIV CP65	Plasticizer in PVC		u
1,2-Benzenedicarboxylic acid, dipen- tylester, branched and linear	84777-06-0	CMR	P	EC1907/2006/C EC1907/2006/XIV	Explosives, phlegmatizer	EU: sunset date 4/7/2020	
Nonylphenol (4-Nonylphenol, branched and linear)	84852-15-3	CMR; Endocrine disrupting proper- ties	P;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A1 CANNPRI CANTSL	Corrosion inhibitor; Cleaning agent adhesives and sealants, coating prod- ucts and polymers	EU: Sunset date 4/1/2021 See note 1 in "Notes"	u
Phenanthrene	85-01-8	vPvB	D	EC1907/2006/C	Impurities in carbon black, which is used as coloring agent in plastics and softener in rubbers		u
Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhy- dride [2], trans-cyclohexane-1,2-dicarboxylic an- hydride [3] [The individual cis- [2] and trans- [3] iso- mer substances and all possible combi- nations of the cis- and trans-isomers [1] are covered by this entry]	85-42-7	Skin and respira- tory sensitizers	D	EC1907/2006/C	Plasticizers, polyester, alkydes, motor insulation, hardener for epoxy resin		u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	55/66

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Phenol, 4-(1-ethyl-3-methylbutyl)-	854904-92-0	Endocrine disrupting properties	D	EC1907/2006/C			u
Phenol, 4-(1,2-dimethylpentyl)-	854904-93-1	Endocrine disrupting properties	D	EC1907/2006/C			u
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	PBT; vPvB	P	EC1907/2006/C EU2019/1021/POP CHSR814.81A1 CANTSL	Used as flame retardants. Occurs in paints and sealants, coolant and lubricants, in articles of plastics and rubber, cutting oils and cutting fluids.	In Switzerland P in paints and varnishes, sealants, plastics and rubbers, and textiles. Limit value: 1% w/w.	u
Alkanes, C14-17, chloro (Medium-chain chlorinated paraffins; MCCP)	85535-85-9	PBT; vPvB	D	EC1907/2006/C	Flame retardants, plasticising additives in plastics, sealants, rubber and textiles, cutting oil lubricant	Included in EU CoRAP	u
Benzyl butyl phthalate (BBP)	85-68-7	CMR; Endocrine disrupting properties	P;R	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII 2011/65/EU CANNPRI	Used as plasticizer in polymer products, mainly in PVC. Occurs in colours, materials to plastic, rubber, glue, filling medium and raw materials for paints.	EU: sunset date 21/05/2015	u
Phenol, 4-(1,4-dimethylpentyl)-	857629-71-1	Endocrine disrupting properties	D	EC1907/2006/C			u
Phenol, 4-(1-ethyl-2,2-dimethylpropyl)-	861010-65-3	Endocrine disrupting properties	D	EC1907/2006/C			u
4-(2,3-dimethylpentan-2-yl)phenol	861011-60-1	Endocrine disrupting properties	D	EC1907/2006/C			u
Iodonium, bis[(1,1-dimethylethyl)phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1) (9CI)	866621-50-3	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
1-methyl-2-pyrrolidone	872-50-4	CMR	R	EC1907/2006/C EC1907/2006/XVII CANNPRI US40CFRCh CP65	Solvent in paint, varnish, cleaning agents, pesticides etc.		
Hexachlorobutadiene (HCBD)	87-68-3	PBT	P;R	EC1907/2006/C CP65 EU2019/1021/POP	Mainly used to make rubber compounds. It is also used as a solvent, and to make lubricants, in gyroscopes,	In EU: Included in the POPs regulation as P. *Regulated in the US by US EPA under TSCA	u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	56/66

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					as a heat transfer liquid, and as a hydraulic fluid	\$751.413 from 08/03/2021	
Pentachlorophenol	87-86-5	PBT	P	EU2019/1021/POP CANTSL CP65		P: In Europe and Canada	u
Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	CMR	D	EC1907/2006/C	Pesticide		u
2-[4-(2,4,4-trimethylpentan-2-yl)phenoxy]ethanol	9002-93-1	Endocrine disrupting properties	D	EC1907/2006/C EC1907/2006/XIV			u
2-Methoxyaniline; o-Anisidine	90-04-0	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CP65	Mainly used in the manufacture of dyes for tattooing and coloration of paper, polymers and aluminum foil.		u
Nonylphenol, ethoxylated / Nonylphenolpolyglycoether	9016-45-9	Endocrine disrupting properties	P;R	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII CHSR814.81A1 CANNPRI	Cleaning agent	EU: Sunset date 4/1/2021 Polymeric forms also covered See note 2 in "Notes"	u
Polyethylene glycol mono(tert-octylphenyl) ether	9036-19-5	Endocrine disrupting properties	P	EC1907/2006/C EC1907/2006/XIV		P: Sunset date 2021	u
Phenol, nonyl-, branched	90481-04-2	CMR; Endocrine disrupting properties	D	EC1907/2006/C	adhesives and sealants, coating products and polymers	See note 1 in "Notes"	u
Borate(2-), tetrahydroxybis[μ-(peroxy-κO1:κO2)]di-, sodium (1:2)	90568-23-3	CMR	D	EC1907/2006/C EC1907/2006/XIV			u
Anthracene oil	90640-80-5	CMR; PBT; vPvB	P	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII CHSR814.81A2	Used in manufacture of anthracene and carbon black.	EU: sunset date 4/10/2020	
Anthracene oil, anthracene paste	90640-81-6	CMR; PBT; vPvB	D	EC1907/2006/C	Used in manufacture of anthracene and carbon black.		u
Anthracene oil, anthracene-low	90640-82-7	CMR; PBT; vPvB	D	EC1907/2006/C	Used in manufacture of anthracene and carbon black.		u
4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	CMR	D;R	EC1907/2006/C CANNPRI CP65	Dyeing of paper, ink in cartridges and pens, plant dyeing. Laboratory chemicals, paper goods.		u



## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	57/66

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Fatty acids, C16-18, lead salts	91031-62-8	CMR	P;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2	Stabilizers for PVC, plastic goods	see group entry lead (and lead compounds)	u
Sulfonium, (4-methylphenyl)diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	910606-39-2	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
2-methyl-m-phenylene diisocyanate	91-08-7	CMR; skin sensitizer; respiratory sensitizer	R	EC1907/2006/XVII	Use as monomer in polymers like PU-foams, and adhesives	R: In Europe (Diisocyanates)	n
Sulfonium, [4-[(2-methyl-1-oxo-2-propen-1-yl)oxy]phenyl]diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	911027-68-4	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
Sulfonium, [4-[(2-methyl-1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1), polymer with 2-ethyltricyclo[3.3.1.1 <sup>3,7</sup> ]dec-2-yl 2-methyl-2-propenoate, 3-hydroxytricyclo[3.3.1.1 <sup>3,7</sup> ]dec-1-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate	911027-69-5	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
Phenol, 4-(3-ethylpentyl)-	911370-98-4	Endocrine disrupting properties	D	EC1907/2006/C			u
Phenol, 4-(1,2,2-trimethylbutyl)-	911371-06-7	Endocrine disrupting properties	D	EC1907/2006/C			u
Phenol, 4-(1,3,3-trimethylbutyl)-	911371-07-8	Endocrine disrupting properties	D	EC1907/2006/C			u
Stannane, dioctyl-, bis(coco acyloxy) derivs.	91648-39-4	CMR	D	EC1907/2006/C			u
3,3'-dimethylbiphenyl-4,4'-diyl diisocyanate	91-97-4	CMR; skin sensitizer; respiratory sensitizer	R	EC1907/2006/XVII	Use as monomer in polymers like PU-foams, and adhesives	R: In Europe (Diisocyanates)	n
Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	CMR; PBT; vPvB	D	EC1907/2006/C	Used in manufacture of anthracene and carbon black.		u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	58/66

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Anthracene oil, anthracene paste, distn. lights	91995-17-4	CMR; PBT; vPvB	D	EC1907/2006/C	Used in manufacture of anthracene and carbon black.		u
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, cesium salt (1:1)	92011-17-1	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
Biphenyl-4-ylamine	92-67-1	CMR	R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A1 US40CFRCh CP65	Intermediate, dyes, pigments, textiles		
Dibenzo[k,n][1,4,7,10,13]tetraoxathia-cyclopentadecinium, 19-[4-(1,1-dimethylethyl)phenyl]-6,7,9,10,12,13-hexahydro-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	928049-42-7	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
Polybrominated diphenyl-ethers (PBDE) Polybrominated biphenyls (PBB) (di-, tetra-, hexa-, octa-, decabromo-biphenyl)	92-86-4	PBT; vPvB	P;R	EC1907/2006/XVII 2011/65/EU CHSR814.81A1 EU2019/1021/POP CANTSL	Electric and electronic equipment	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w.	
Phosphinic acid, bis(perfluoro-C6-12-alkyl) derivs., aluminum salts	93062-53-4	PBT	P	EU2019/1021/POP		P: In Europe	u
Benzene, 1,1'-oxybis[3,4-dibromo-	93703-48-1	PBT	P	EU2019/1021/POP		P: In Europe	u
Formaldehyde, reaction products with branched and linear heptylphenol, carbon disulfide and hydrazine	93925-00-9	Endocrine disrupting properties	D	EC1907/2006/C	Polymers		u
Dibutyl phthalate (DBP)	93952-11-5	CMR; Endocrine disrupting properties	P;R	EC1907/2006/C EC1907/2006/XIV EC1907/2006/XVII 2011/65/EU CANNPRI US40CFRCh CP65	Occurs in various articles of plastic, mainly PVC. Occurs in glue, paints, plastics, rubber etc.	EU: sunset date 21/02/2015	u
Butyl 4-hydroxybenzoate	94-26-8	Endocrine disrupting properties	D	EC1907/2006/C			u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	59/66

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o-toluidine	95-53-4	CMR	P	EC1907/2006/C EC1907/2006/XVII EU2019/1021/POP CP65	P: In Europe	u
4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	CMR	D	EC1907/2006/C EC1907/2006/XVII CP65	Textile. Intermediate for the production of toluene diisocyanate and dyes	u
alpha-Endosulfan	959-98-8	PBT	P	EU2019/1021/POP	P: In Europe	u
2,3-dibromo-1-propanol (2,3-DBPA)	96-13-9	CMR	D	EC1907/2006/C CP65	DBPA: registered as an intermediate.	n
1,2,3-Trichloropropane	96-18-4	CMR	D;R	EC1907/2006/C US40CFRCh.(7-1-10Edition)#372;65(a) CP65	Painter mediate and varnish remover, solvent, degreasing agent	u
Imidazolidine-2-thione (2-imidazoline-2-thiol)	96-45-7	CMR	D;R	EC1907/2006/C CANNPRI US40CFRCh CP65	Used in rubber manufacturing	u
o-aminoazotoluene	97-56-3	CMR	D;R	EC1907/2006/C EC1907/2006/XVII CP65	Dyes, pigments, textile, intermediate for dyes	u
4-tert-butylphenol	98-54-4	CMR; Endocrine disrupting properties	D	EC1907/2006/C	Used in coating products, polymers, adhesives, sealants and for the synthesis of other substances.	u
Nitrobenzene	98-95-3	CMR	D	EC1907/2006/C CP65		u
Lead (and lead compounds)	group entry	Acute toxicity; Serious health hazard; Hazardous to the environment	P;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2 2011/65/EU CANNPRI CANTSL US40CFRCh	Electric and electronic equipment covered by RoHS	P in packaging; completely banned in paints (lead carbonate and sulphates). R in all other applications. EU: P in all applications covered by RoHS. FR: P in in non-removable batteries and accumulators. Limit value,

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	60/66

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						0.4% w/w. CH: P - in non-removable batteries, limit value: 0.1% w/W; - in wood-based materials, limit value: 0.009% w/w; - in packaging, limit value: 0.01% w/w.
2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers	group entry	CMR	D	EC1907/2006/C	Cleaning agents, cosmetics, in scented articles, polishes and wax blends.	n
Aluminosilicate Refractory Ceramic Fibres	group entry	CMR	D;R	EC1907/2006/C CANTSL	Insulation materials for industrial use. Fire protection in industrial equipment.	u
Diocetyl tin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety	group entry	CMR	R	EC1907/2006/C	The mono-constituent form of the substance (dioctyltin dilaurate) is used as an additive in the production of plastics and rubber tires.	Not registered under REACH as a group of substances. However, one of the three group members (Diocetyl tin dilaurate) is registered u
Chrome (VI+) and compounds containing Cr(VI)	group entry	CMR	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A2 2011/65/EU CANNPRI CANTSL CP65	Electric and electronic equipment covered by RoHS. Surface treatment. Pigment in paint.	EU: P in all applications covered by RoHS. CH: P in packaging, limit value: 0.01% w/w. See note 4 in "Notes" u
Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)	group entry	CMR	D	EC1907/2006/C	Might be used as heat stabilizer in plastic (mainly PVC processing)	u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	61/66

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Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)	group entry	CMR; Endocrine disrupting properties	D	EC1907/2006/C	Primarily used as an antioxidant to stabilise polymers. Rubber manufacturing, rubber products	TNPP derivatives	u
4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	group entry	CMR; Endocrine disrupting properties	D;P	EC1907/2006/C EC1907/2006/XVII	adhesives and sealants, coating products and polymers; cleaning agents	See note 1 in "Notes"	u
4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated (covering well-defined substances and UVCB substances, polymers and homologues)	group entry	CMR; Endocrine disrupting properties	P	EC1907/2006/C EC1907/2006/XIV		EU: Sunset date 4/1/2021	
Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/or combinations thereof (PDDP)	group entry	CMR; Endocrine disrupting properties	D	EC1907/2006/C	Preparation of lubricant additive materials and of fuel system cleaners.		n
Diisocyanates, O = C=N-R-N = C=O, with R an aliphatic or aromatic hydrocarbon unit of unspecified length	group entry	CMR; skin sensitizer; respiratory sensitizer	R	EC1907/2006/XVII	Use as monomer in polymers like PU-foams, and adhesives	R: In Europe (Diisocyanates)	n
4-Nonylphenol, branched and linear, ethoxylated [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]	group entry	Endocrine disrupting properties	P	EC1907/2006/C EC1907/2006/XIV CHSR814.81A1 CANNPRI	Cleaning agent	EU: Sunset date 4/1/2021 See note 2 in "Notes"	u
4-heptylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon	group entry	Endocrine disrupting properties	D	EC1907/2006/C	Manufacture of polymers; formulation into lubricants		u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	62/66

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number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]

Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) [with ≥0.1% w/w 4-heptylphenol, branched and linear]	group entry	Endocrine disrupting properties	D	EC1907/2006/C	Used as a lubricant additive in lubricants and greases.	u
Perfluorobutane sulfonic acid (PFBS) and its salts	group entry	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C	Use as flame retardant or catalyst in polymers	D: In Europe (PFBS) n
Endosulfan and its isomers	group entry	PBT	P	EU2019/1021/POP	P: In Europe	u
Heptabromodiphenyl ether	group entry	PBT	P	EU2019/1021/POP	P: In Europe	u
Hexabromocyclododecane (HBCDD)	group entry	PBT	P	EU2019/1021/POP	P: In Europe	u
Hexabromodiphenyl ether	group entry	PBT	P	EU2019/1021/POP	P: In Europe	u
Hexachlorocyclohexanes, including lindane	group entry	PBT	P	EU2019/1021/POP	P: In Europe	u
Pentabromodiphenyl ether	group entry	PBT	P	EU2019/1021/POP	P: In Europe	u
Pentachlorophenol and its salts and esters	group entry	PBT	P	EU2019/1021/POP	P: In Europe	u
Perfluorooctane sulfonic acid and its derivatives (PFOS) C <sub>8</sub> F <sub>17</sub> SO <sub>2</sub> X, (X = OH, Metal salt (O-M+), halide, amide, and other derivatives including polymers)	group entry	PBT	P	EU2019/1021/POP	P: In Europe	u
Polychlorinated biphenyls (PCB) and Polychlorinated terphenyls (PCTs)	group entry	PBT	P	CHSR814.81A2 EU2019/1021/POP 96/59/EC CANTSL US40CFRCh CP65	P: worldwide (PCB/PCT); Specific obligations for maintenance and repairs	u
Polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/PCDF)	group entry	PBT	P	CHSR814.81A2 EU2019/1021/POP CANTSL	P: In Europe	u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	63/66

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				US40CFRCh CP65		
Polychlorinated naphthalenes	group entry	PBT	P	CHSR814.81A2 EU2019/1021/POP CANTSL US40CFRCh CP65	P: In Europe	u
Polycyclic aromatic hydrocarbons (PAHs)	group entry	PBT	P	EU2019/1021/POP	P: In Europe	u
rel-(1R,4S,4aS,6aS,7S,10R,10aR,12aR)-1,2,3,4,7,8,9,10,13,13,14,14-dodeca-chloro-1,4,4a,5,6,6a,7,10,10a,11,12,12a-dodecahydro-1,4:7,10-dimethanodibenzo[a,e]cyclooctene	group entry	PBT	P	EU2019/1021/POP	P: In Europe	u
Tetrabromodiphenyl ether	group entry	PBT	P	EU2019/1021/POP	P: In Europe	u
Perfluorooctanoic acid (PFOA), its salts and PFOA-related substances; C9-C14 perfluorocarboxylic acids (C9-C14 PFCA), their salts and C9-C14 PFCA-related substances	group entry	PBT	P	EU2019/1021/POP EC1907/2006/XVII	P: In Europe (PFOA); >200 group substances under ( <a href="https://echa.europa.eu/de/list-of-substances-subject-to-pops-regulation">https://echa.europa.eu/de/list-of-substances-subject-to-pops-regulation</a> )	u
Di-, tri- and tetrachlorotetradecane (Medium-chain chlorinated paraffins; MCCP)	group entry	PBT; vPvB	D	EC1907/2006/C	Flame retardants, plasticising additives in plastics, sealants, rubber and textiles, cutting oil lubricant	n
Medium-chain chlorinated paraffins (MCCP); UVCB substances consisting of more than or equal to 80% linear chloroalkanes with carbon chain lengths within the range from C14 to C17	group entry	PBT; vPvB	D	EC1907/2006/C	Flame retardants, plasticising additives in plastics, sealants, rubber and textiles, cutting oil lubricant	n
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof)	group entry	Probable serious effects to the environment and probable serious effects to human health	D	EC1907/2006/C	Processing aid in the production of fluorinated polymers.	u

## SA-S-204-01 PG LIST OF PROHIBITED AND RESTRICTED SUBSTANCES

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	64/66

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Arsenic compounds	group entry	Toxic to aquatic organisms; May cause long-term adverse effects in the aquatic environment	P;R	EC1907/2006/C EC1907/2006/XVII CHSR814.81A2 CANNPRI US40CFRCh	Electronic equipment; antifouling coatings	Germany: P in treatment of water and in wood-based materials. CH: P in wood-based materials. Limit value: 0,0025 % w/w.	u
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 ("Dechlorane Plus"™) [covering any of its individual anti- and syn-isomers or any combination thereof]	group entry	vPvB	D	EC1907/2006/C	Used as a non-plasticising flame retardant, used in adhesives and sealants and in binding agents.	EU restriction of Dechlorane Plus is under evaluation	u
5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]	group entry	vPvB	D	EC1907/2006/C	Fragrance ingredient		u
Perfluorohexane-1-sulphonic acid and its salts (PFHxS / PFOS)	group entry	vPvB	P	EC1907/2006/C EU2019/1021/POP	May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams	P: In Europe (PFOS)	u
1-(4-butoxy-1-naphthalenyl)tetrahydrothiophenium 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefulfonate	no CAS available	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C	Use as flame retardant or catalyst in polymers	D: In Europe (PFBS)	n
bis(4-t-butylphenyl)iodonium perfluorobutanefulfonate	no CAS available	Serious effects to human health or environment (Article 57(f))	D	EC1907/2006/C	Use as flame retardant or catalyst in polymers	D: In Europe (PFBS)	n



## SA-S-204-01 PG list of prohibited and restricted substances

PREPARED BY Jens Molter	APPROVED BY Johanna Flood	APPROVAL DATE 2021-08-24	DOCUMENT KIND Regulation		
STATUS Approved	SECURITY LEVEL Internal	DOCUMENT ID. 8DAA5005282	REV. C	LANG. en	PAGE 65/66

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## 4. Notes

No.	Details	Link to external resources
1	<p><b>4-Nonylphenol, branched and linear – A <u>non-exhaustive</u> list of substances covered by the group entry is included to the table</b></p> <p><b>Group entry name:</b> 4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]</p> <p>Restriction conditions</p>	<p>Restriction conditions and group details:</p> <p style="color: red;"><a href="#">4-Nonylphenol, branched and linear - Substance Information</a></p>
2	<p><b>4-Nonylphenol, branched and linear, ethoxylated – A <u>non-exhaustive</u> list of substances covered by the group entry is included to the table</b></p> <p><b>Group entry name:</b> 4-Nonylphenol, branched and linear, ethoxylated [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]</p>	<p>Restriction conditions and group details:</p> <p style="color: red;"><a href="#">4-Nonylphenol, branched and linear, ethoxylated</a></p>
3	<p>Threshold values for Cadmium and Cadmium compounds:</p> <p><b>R in all applications</b></p> <p><b>EU: P</b></p> <ul style="list-style-type: none"> <li>- as pigment in polymer materials and paints, except for safety reasons;</li> <li>- as stabilizer in mixtures or articles manufactured from polymers or copolymers of vinyl chloride, except for safety reasons. Limit value: 0.01 % w/w.</li> <li>- in EEE, limit value: 0.01% w/w.</li> </ul> <p><b>France: P</b></p> <ul style="list-style-type: none"> <li>- in portable batteries, limit value: 0.002 % w/w;</li> <li>- in zinc-carbon batteries, limit value: 0.015% w/w.</li> </ul> <p><b>Germany: P</b> as coating of metal surfaces, except to ensure functional reliability.</p> <p><b>CH: P</b></p> <ul style="list-style-type: none"> <li>- in portable batteries, including those contained in appliances, limit value: 0.2% w/w;</li> <li>- in plastics, limit value 0.01% w/w;</li> <li>- in paints, limit value: 0.01% w/w,</li> <li>- in paint with high zinc content 0.1% w/w;</li> <li>- as coating of metal surfaces, except to ensure functional reliability;</li> <li>- in zinc-plated articles, limit value: 0.025% w/w; in packaging, limit value: 0.01% w/w;</li> <li>- in wood based materials, limit value: 0.005% w/w;</li> <li>- in EEE, limit value: 0.01% w/w.</li> </ul>	
4	<p><b>Chrome (VI) and compounds containing Cr(VI) subject to authorisation</b></p> <p>IEC62474 Cr(VI) compounds, ECHA lists Chrome(VI) Compounds and substances for Chromic acids in its authorization list.</p> <p>The entries are a non-exhaustive lists of Chrome (VI) containing substances.</p>	

STATUS	SECURITY LEVEL	DOCUMENT ID.	REV.	LANG.	PAGE
Approved	Internal	8DAA5005282	C	en	66/66

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## 1. Reference

Abbreviation	Legislation	link to external Ressource
<b>2001/852/EC</b>	Commission Decision of 19 November 2001 on adopting Community import decisions pursuant to Council Regulation (EEC) no 2455/92 concerning the export and import of certain dangerous chemicals and amending Decision 2000/657/EC. "PIC-Regulation"	<a href="#">PIC</a>
<b>2011/65/EU</b>	Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment	<a href="#">2015/863/EU (Amended Annex-II of RoHS-II)</a>
<b>96/59/EC</b>	Council Directive 96/59/EC of 16 September 1996 on the disposal of polychlorinated biphenyls and polychlorinated terphenyls (PCB/PCT)	<a href="#">EU-PCB/PCT-legislation</a>
<b>CP65</b>	California Proposition 65, formally titled "The Safe Drinking Water and Toxic Enforcement Act".	<a href="#">California Prop 65 List</a>
<b>CANNPRI</b>	Canadian National Pollutant Release Inventory changes in reporting requirements for 2010 (Canada)	<a href="#">CANAD-Substance list by threshold</a>
<b>CANTSL</b>	Canadian Toxic Substances List - Schedule 1. (Canada)	<a href="#">CANADA-Toxic substances list: schedule 1</a>
<b>CHSR814.81A1</b>	SR 814.81 Ordinance on the Reduction of Risks relating to the Use of Certain Particularly Dangerous Substances, Preparations and Articles (Chemical Risk Reduction Ordinance, ORRChem) of 18 May 2005 – Annex 1 Provisions relating to specific substances. (Switzerland)	<a href="#">CH-ChemRRV</a>
<b>CHSR814.81A2</b>	814.81 Ordinance on the Reduction of Risks relating to the Use of Certain Particularly Dangerous Substances, Preparations and Articles (Chemical Risk Reduction Ordinance, ORRChem) of 18 May 2005 – Annex 2 Provisions relating to groups of preparations and articles. (Switzerland)	<a href="#">CH-ChemRRV</a>
<b>EC1005/2009</b>	REGULATION (EC) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer	<a href="#">EU-Ozone Depletion Substance Regulation</a>
<b>EC1907/2006/C</b>	Regulation No 1907/2006/EC of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): Candidate List	<a href="#">ECHA Candidate List of SVHC</a>  <a href="#">European Court of Justice ruling for REACH article 33</a>
<b>EC1907/2006/XIV</b>	Regulation No 1907/2006/EC of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): Annex XIV-Authorisation List	<a href="#">ECHA- Authorisation List</a>
<b>EC1907/2006/XVII</b>	Regulation No 1907/2006/EC of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): Annex XVII - Restriction List	<a href="#">ECHA-Restriction List</a>
<b>EU2019/1021/POP</b>	The consolidated version of the Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants (POP Regulation): ANNEX I substances	<a href="#">ECHA-POP List</a>
<b>EU517/2014</b>	Regulation No EU 517/2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006 ("F-Gas" Regulation)	<a href="#">F-Gas-Regulation</a>
<b>US40CFRCh</b>	US Environmental Protection Agency, Public Information Regulations, CFR Title 40 – Protection of Environment	<a href="#">Consolidated List of Lists   US EPA</a>
<b>USEPA</b>	United States Environmental Protection Agency. United States Environmental Protection Agency   US EPA	-
<b>USTSCA</b>	US Toxic Substance Control Act. TSCA Chemical Substance Inventory   US EPA	-