BD Materials of Concern List

BD Materials of Concern List (BD MOC List) contains substances the Company has put special emphasis on, for example PVC, Phthalates and BPA (at time of initial issuance). These are substances that BD has chosen to avoid and/or eliminate from BD products. The list contains both regulated and non-regulated substances that are materials of concern for BD and is usually updated twice a year.

March 5, 2021

BD Supply Base Compliance
Email: bd_moc@bd.com
bd.com/sustainability

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
4-tert-butylphenol	202-679-0	98-54-4	Endocrine disrupting properties (Article 57(f) – environment)						Used in coating products, polymers, adhesives, sealants and for the synthesis of other substances.
[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)]	219-943-6	2580-56-5	Carcinogenic (Article 57a)						Used in the formulation of inks, cleaners, and coatings, as well as for dyeing paper, packaging, textiles, plastic products, and other types of articles. It is also used in diagnostic and analytical applications.
[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)]	208-953-6	548-62-9	Carcinogenic (Article 57a)						Used mainly for paper colouring and inks supplied in printer cartridges and ball pens. Further uses include staining of dried plants, use as a marker for increasing the visibility of liquids, staining in microbial and clinical laboratories.
[Phthalato(2-)]dioxotrilead	273-688-5	69011-06-9	Toxic for reproduction (Article 57c)						Stabiliser used in production of PVC products.
1,2,3-trichloropropane	202-486-1	96-18-4	Carcinogenic (Article 57a); Toxic for reproduction (Article 57c)						TCP is used as an industrial solvent, as a monomer and as an intermediate for the synthesis of chlorinated solvents, some cross-linking agents and chlorinated solvents. Historically it had uses in consumer products

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									such as paint strippers but must no longer be supplied to the general public in the EU.
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)	271-094-0, 272-013-1	68515-51-5; 68648-93-1	Toxic for reproduction (Article 57c)		X				These substances are used for example as plasticisers and lubricants, including use in adhesives, coatings, building material, cable compounding, polymer foils, PVC compounds and artist supply (e.g. modelling clay and finger paints).
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	276-158-1	71888-89-6	Toxic for reproduction (article 57c)						This substance may be used as a plasticiser for PVC and some ink and coatings formulations.
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	271-084-6	68515-42-4	Toxic for reproduction (article 57c)						This substance may be used as a plasticiser for PVC.
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	271-093-5	68515-50-4	Toxic for reproduction (Article 57c)		X				Raw material for the synthesis of other cadmium compounds, including cadmium pigments. Electroplating and electrogalvanising - coating parts made from iron, steel, brass and aluminium, including bolts, connectors and fasteners. Electrical, electronic, aerospace, mining, offshore, automotive and defence industries. Production of photovoltaic modules (solar cells). Laboratory agent. Solid film lubricant. Fungicide. Photography, photocopying, dyeing and printing. Production of special mirrors and vacuum tubes. This is also called dihexyl phthalate and so is another phthalate plasticiser added to the candidate list. It will

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									have similar uses to other phthalates with similar alkyl chain lengths (e.g. dipentyl) so may be used in flexible PVC, rubbers, inks, lacquers, etc. The Annex XV dossier includes uses in automobile parts such as battery covers and air filters, tool handles, dishwasher baskets, PVC flooring, notebook covers, traffic cones, gloves, toys, shoes and conveyor belts.
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	84777-06-0	Toxic for reproduction (Article 57c)		X				This phthalate may be used as a plasticiser for plastic materials. It was not registered for the 2010 deadline and thus is thought to be in low usage in the EEA. However, it may be present in imported plastic articles.
1,2-bis(2-methoxyethoxy)ethane (**TEGDME**; triglyme)	203-977-3	112-49-2	Toxic for reproduction (Article 57c)						Mainly used as a solvent or as a processing aid in the manufacture and formulation of industrial chemicals. Minor uses in brake fluids and repair of motor vehicles.
1,2-Dichloroethane	203-458-1	107-06-2	Carcinogenic (Article 57a)						1,2-Dichloroethane is mainly used for manufacture of other substances. Minor uses as solvent in the chemical and pharmaceutical industry.
1,2-diethoxyethane	211-076-1	629-14-1	Toxic for reproduction (Article 57c)						This substance is a glycol ether and belongs to the glyme family of chemicals and is expected to have similar applications; monoglyme, diglyme and triglyme are also included on the Candidate List. Globally, common uses for glycol ethers are as a solvent in formulations such as paints, inks and cleaning fluids. They may be used in fabric cleaning compounds such as dry powder carpet cleaner, in stain

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									removers, in mildew removers, oven cleaners and multi-purpose detergents. Non-solvent uses for glycol ethers include hydraulic and brake fluids, anti-icing agents and as chemical intermediates. This substance was not registered for the 2010 deadline and is thus thought to be in low usage in the EEA.
1,2-dimethoxyethane; ethylene glycol dimethyl ether (**EGDME**)	203-794-9	110-71-4	Toxic for reproduction (Article 57c)						Mainly used as a solvent or as a processing aid in the manufacture and formulation of industrial chemicals, including use as an electrolyte solvent in lithium batteries.
1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (**TGIC**)	219-514-3	2451-62-9	Mutagenic (Article 57b)						Mainly used as a hardener in resins and coatings. Also used in inks for the printed circuit board industry, electrical insulation material, resin moulding systems, laminated sheeting, silk screen printing coatings, tools, adhesives, lining materials and stabilisers for plastics.
1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (**β-TGIC**)	423-400-0	59653-74-6	Mutagenic (Article 57b)						Mainly used as a solder mask ink in the EU. Also used in electrical insulation material, resin moulding systems, laminated sheeting, silk screen printing, coatings, tools, adhesives, lining materials and stabilisers for plastics.
1,3-propanesultone	214-317-9	1120-71-4	Carcinogenic (Article 57a)						Electrolyte fluid of lithium ion batteries, manufacture of chemicals and chemical products, Manufacture of batteries and accumulators, Manufacture of fine chemicals, Manufacture of computer, electronic and optical products, electrical equipment, Scientific research and development, Metal

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									surface treatment products, including galvanic and electroplating products, Machinery, mechanical appliances, electrical/electronic articles
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"™)	-	-	vPvB (Article 57e)					x	Used as a non-plasticising flame retardant, used in adhesives and sealants and in binding agents.
1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1] heptan-2-one	239-139-9	15087-24-8	Endocrine disrupting properties (Article 57(f) - environment)						Not registered use
1-bromopropane (n-propyl bromide)	203-445-0	106-94-5	Toxic for reproduction (Article 57c)						This substance has been registered for REACH. According to the dissemination portal, it is used as an industrial solvent, surface cleaner and degreasing agent. Used in electronics industry for cleaning circuit boards.
1-methyl-2-pyrrolidone	212-828-1	872-50-4	Toxic for reproduction (article 57c)						This substance is used as an intermediate and as an industrial solvent for surface treatment of textiles, resins and metal coated plastics or as a paint stripper. It is also used in the pharmaceutical and agrochemical industries.
1-vinylimidazole	214-012-0	1072-63-5	Toxic for reproduction (Article 57 (c))						In formulations and as a monomer in the production of polymers
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (**UV-350**)	253-037-1	36437-37-3	vPvB (Article 57e)						UV-protection agents in coatings, plastics, rubber and cosmetics,

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (**UV-328**)	247-384-8	25973-55-1	PBT (Article 57d); vPvB (Article 57e)						Used as an additive; a UV absorber/stabilisers used particularly in transparent plastics. Also used for light-stabilising rubbers and plastics, and in coatings for wood and the automotive sector. Some use in cosmetics. Possibly also used in sealants and adhesives. Concentrations could be up to about 2% in the material - well above the 0.1% reporting threshold in articles.
2,2-bis(4'-hydroxyphenyl)-4-methylpentane	401-720-1	6807-17-6	Toxic for reproduction (Article 57c)						Potential use in plastics and thermal paper
2,2'-dichloro-4,4'-methylenedianiline (**MOCA**)	202-918-9	101-14-4	Carcinogenic (Article 57a)						Mainly used as curing agent in resins and in the production of polymer articles and also for manufacture of other substances. The substance may further be used in construction and arts.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof)	-	-	Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment) Equivalent level of concern having probable serious effects to human health (Article 57(f) – human health)						Processing aid in the production of fluorinated polymers.
2,4-Dinitrotoluene	204-450-0	121-14-2	Carcinogenic (Article 57a)						2,4-dinitrotoluene is used in the production of toluene diisocyanate, which is used for the manufacture of flexible polyurethane foams. The substance is also used as gelatinizing-plasticizing agent for the manufacture of explosives.
2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (**UV-327**)	223-383-8	3864-99-1	vPvB (Article 57e)						UV-protection agents in coatings, plastics, rubber and cosmetics
2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	223-346-6	3846-71-7	PBT (Article 57d); vPvB (Article 57e)						Used as an additive; a UV absorber/stabilisers used particularly in transparent plastics. Also used for light-stabilising rubbers and plastics, and in coatings for wood and the automotive sector. Some use in cosmetics. Possibly also used in sealants and adhesives. Concentrations

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									could be up to about 2% in the material - well above the 0.1% reporting threshold in articles.
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	404-360-3	119313-12-1	Toxic for reproduction (Article 57c)						The substance is used in polymer production
2-Ethoxyethanol	203-804-1	110-80-5	Toxic for reproduction (article 57c)						2-ethoxyethanol is mainly used as a chemical intermediate. Further minor uses are as a solvent or a laboratory chemical.
2-ethoxyethyl acetate	203-839-2	111-15-9	Toxic for reproduction (article 57c)						This substance is used as a solvent in some industrial adhesives and coatings, including wood stains, paints and varnishes.
2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (**DOTE**)	239-622-4	15571-58-1	Toxic for reproduction (Article 57c)						Present in a reaction mass with the corresponding monooctyltin compound, MOTE; used as a heat stabiliser in the production of rigid PVC and some other plastics; found in some adhesives and pigment dispersions. Reference material for laboratory use. DOTE is a tin containing polymer stabiliser possibly present at about 1% in the polymer. DOTE is approved for use in contact with food so kitchen equipment and food packaging, for example are a vulnerable group of products.
2-Methoxyaniline; o-Anisidine	201-963-1	90-04-0	Carcinogenic (Article 57a)						2-Methoxyaniline; o-Anisidine is mainly used in the manufacture of dyes for tattooing and coloration of paper, polymers and aluminium foil

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
2-Methoxyethanol	203-713-7	109-86-4	Toxic for reproduction (article 57c)						2-methoxyethanol is mainly used as a chemical intermediate. Further minor uses are as a solvent or a laboratory chemical.
2-methoxyethyl acetate	203-772-9	110-49-6	Toxic for reproduction (Article 57 (c))						Potential use as solvent
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	400-600-6	71868-10-5	Toxic for reproduction (Article 57c)						The substance is used in polymer production
2-methylimidazole	211-765-7	693-98-1	Toxic for reproduction (Article 57 (c))						As a catalyst in the production of coating products
3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	421-150-7	143860-04-2	Toxic for reproduction (Article 57c)						Used in reactive paints and surface coatings, for example in solvent free paints (low VOC).
4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)	205-426-2	140-66-9	Endocrine disrupting properties (Article 57(f) - environment)						The family of 4-tert-OPnEO substances are widely used under the trade mark of Triton X. The most commonly used by the IVD industry is Triton X-100 (4-(1,1,3,3-Tetramethylbutyl)phenyl-polyethylene glycol, t-Octylphenoxypolyethoxyethanol, Polyethylene glycol tert-octylphenyl ether). Tritons are used in purification processes, biochemistry and manufacturing of IVDs. They are particularly useful for enabling lysis of cell membranes, dissolving lipids from membranes, dissolving proteins within their native form so that they remain immunologically active, (in contrast to the use of the surfactant sodium dodecylsulfate, SDS).

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									Tritons are not binding to DNA and prevent blocking of chromatography columns. They have an important role in population blood bank screening and virus safety by enabling inactivation of encapsulated viruses including HBV, HIV and HCV viruses in IVD diagnostic medical devices. Tritons are also an important component of the final IVD assay, being critical for sensitivity, specificity and stability of assays, reducing unspecific reactions, preventing binding on surfaces, preventing aggregation of protein or microparticles and performing biocidal action by lysing microorganisms. Tritons are also used in the manufacture of polymer preparations and of ethoxylates, a component in adhesives, coatings, inks and rubber articles.
4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	-	-	Endocrine disrupting properties (Article 57(f) - environment)						This substance was not registered for the 2010 deadline. Uses of the similar substance 4-tert-octylpenol include formulation and end-use of paints, as an emulsifier in emulsion polymerisation, and as an intermediate. This is part of the alkyl phenol ethoxylate group of substances used in detergents, inks, etc and have been voluntarily removed from the market by many companies. One concern is endocrine effects from environmental release. Found in printed papers, especially glossy printing from outside Europe

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
4,4'- Diaminodiphenylmethane (**MDA**)	202-974-4	101-77-9	Carcinogenic (Article 57a)						Diaminodiphenylmethane (MDA) is used as a reagent in the manufacture of rubber, plastics, diisocyanates, dyes and adhesives. In this use it is normally substantially consumed by conversion to other chemials. Historically, there is some evidence of trace residual amounts in flexible rubber products where used as a curing agent. This substance is unlikely to be present above 0.1% in a supplied article.
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)]	209-218-2	561-41-1	Carcinogenic (Article 57a)						Used in the formulation of writing inks and potentially other inks, as well as for dyeing a variety of materials.
4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	202-027-5	90-94-8	Carcinogenic (Article 57a)						Used as an intermediate in the manufacture of triphenylmethane dyes and other substances. Further potential uses include use as an additive (photosensitiser) in dyes and pigments, in dry film products and as a process chemical in the production of electronic circuit boards.
4,4'-isopropylidenediphenol (**BPA**, Bisphenol A)	201-245-8	80-05-7	Toxic for reproduction (Article 57c); Endocrine disrupting properties (Article 57(f) - environment);	X					Bisphenol A, commonly abbreviated as BPA, is an organic compound with two phenol functional groups. It is used to make polycarbonate plastic and epoxy resins, along with other applications such as epoxy circuit boards, epoxy adhesive, polycarbonate.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
			Endocrine disrupting properties (Article 57(f) - human health)						
4,4'-methylenedi-o-toluidine	212-658-8	838-88-0	Carcinogenic (Article 57a)						This substance is used as an intermediate in the production of elastomers, dyes and colourants.
4,4'-oxydianiline and its salts	-	-	Carcinogenic (Article 57a); Mutagenic (Article 57b)						Production of polymers such as polyimides for uses in wiring, printed circuits, and other high temperature applications. Residues may remain in articles of this nature.
4-aminoazobenzene	200-453-6	60-09-3	Carcinogenic (Article 57a)						Also known as aniline yellow, CI 11000 or under many other common historical names. This chemical was implicated in the 1980s vegetable oil poisoning incident when added to industrial oil that was put into the food market. It is used in many industrial dying activities, markers and in some ink-jet printers.
4-heptylphenol, branched and linear substances with a linear and/or branched alkyl chain with a carbon 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	-	-	Endocrine disrupting properties (Article 57(f) - environment)						Manufacture of polymers; formulation into lubricants

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
4-methyl-m-phenylenediamine (toluene-2,4-diamine)	202-453-1	95-80-7	Carcinogenic (Article 57a)						Used mainly as an intermediate, but also may appear as residue in polyurethane foams from polymer production
4-Nonylphenol, branched and linear	-	-	Endocrine disrupting properties (Article 57(f) - environment)						This is part of the alkyl phenol ethoxylate group of substances used in detergents, inks, etc and have been voluntarily removed from the market by many companies. One concern is endocrine effects from environmental release. Found in printed papers, especially glossy printing from outside Europe. Degradation product of 'alkyl phenol ethoxylates' that may themselves be polymers (higher ethoxylates) and no-longer polymer (lower level of ethoxylation). Also found in some oil additives. Can also be residual on imported textiles.
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]	-	-	Endocrine disrupting properties (Article 57(f) - environment)						4-nonylphenol ethoxylates are non-ionic surfactants contained in products used as detergents, paints and pesticides. They are also used in the mining industry as a floating agent.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
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]	700-927-7	-	vPvB (Article 57e)						This group of substances covers for example, the product with the trade name "karanal". Public information sources indicate that the main use of karanal is as a fragrance ingredient.
5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	201-329-4	81-15-2	vPvB (article 57e)						A fragrance which may be incorporated into complex fragrance mixtures. Although not manufactured in the EU it may be formulated into imported fragrance compositions. This substance is very unlikely to be present in any EU produced articles. BUT it may be found in fragrances in imported articles such as toilet blocks or candles. The concentration is unpredictable and may exceed 0.1%.
6-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8	Carcinogenic (Article 57a)						Used in dying of textiles and leather goods.
Acetic acid, lead salt, basic	257-175-3	51404-69-4	Toxic for reproduction (Article 57c)						Lead acetate is used in dying and pigmentation aid for textiles, hair products, paints etc. Use in Europe restricted under regulations on use of lead, but may be found in imported products, especially painted ornamental goods
Acids generated from chromium trioxide and their oligomers	-	-	Carcinogenic (Article 57a)						-
Acrylamide	201-173-7	79-06-1	Carcinogenic (Article 57a);						Acrylamide is almost exclusively used for the synthesis of polyacrylamides, which are used in various applications, in particular in waste

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
			Mutagenic (Article 57b)						water treatment and paper processing. Minor uses of acrylamide comprise the preparation of polyacrylamide gels for research purposes and as a grouting agent in civil engineering.
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	287-476-5	85535-84-8	PBT and vPvB (articles 57d and 57e)	X					SCCPs have had a variety of uses, including extreme pressure additives in metalworking fluids, flame retardants for rubbers and textiles, in leather processing and as a plasticiser in paints and sealing compounds. The major recent use has been in metal working fluids. These substances are very unlikely to be present in articles above 0.1%.
Alkanes, C10-C21, chloro	-	84082-38-2		X					Substances have had a variety of uses, including extreme pressure additives in metalworking fluids, flame retardants for rubbers and textiles, in leather processing and as a plasticiser in paints and sealing compounds. The major recent use has been in metal working fluids. These substances are very unlikely to be present in articles above 0.1%.
Alkanes, C12-C13, chloro	-	71011-12-6		X					Substances have had a variety of uses, including extreme pressure additives in metalworking fluids, flame retardants for rubbers and textiles, in leather processing and as a plasticiser in paints and sealing compounds. The major recent use has been in metal working fluids. These substances are very unlikely to be present in articles above 0.1%.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
Alkanes, C14-C17, chloro	-	85535-85-9		X					Substances have had a variety of uses, including extreme pressure additives in metalworking fluids, flame retardants for rubbers and textiles, in leather processing and as a plasticiser in paints and sealing compounds. The major recent use has been in metal working fluids. These substances are very unlikely to be present in articles above 0.1%.
Alkanes, C18-C20, chloro	-	106232-85-3		X					Substances have had a variety of uses, including extreme pressure additives in metalworking fluids, flame retardants for rubbers and textiles, in leather processing and as a plasticiser in paints and sealing compounds. The major recent use has been in metal working fluids. These substances are very unlikely to be present in articles above 0.1%.
Alkanes, C18-C28, chloro	-	85535-86-0		X					Substances have had a variety of uses, including extreme pressure additives in metalworking fluids, flame retardants for rubbers and textiles, in leather processing and as a plasticiser in paints and sealing compounds. The major recent use has been in metal working fluids. These substances are very unlikely to be present in articles above 0.1%.
Alkanes, C6-C18, chloro	-	68920-70-7		X					Substances have had a variety of uses, including extreme pressure additives in metalworking fluids, flame retardants for

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									rubbers and textiles, in leather processing and as a plasticiser in paints and sealing compounds. The major recent use has been in metal working fluids. These substances are very unlikely to be present in articles above 0.1%.
Alkanes, chloro; chloroparaffins	-	91788-76-9		X					Substances have had a variety of uses, including extreme pressure additives in metalworking fluids, flame retardants for rubbers and textiles, in leather processing and as a plasticiser in paints and sealing compounds. The major recent use has been in metal working fluids. These substances are very unlikely to be present in articles above 0.1%.
Alkenes, C12-C24, chloro	-	68527-02-6		X					Substances have had a variety of uses, including extreme pressure additives in metalworking fluids, flame retardants for rubbers and textiles, in leather processing and as a plasticiser in paints and sealing compounds. The major recent use has been in metal working fluids. These substances are very unlikely to be present in articles above 0.1%.
Alkenes, polymerized, chlorinated	-	98410-99-1		X					Substances have had a variety of uses, including extreme pressure additives in metalworking fluids, flame retardants for rubbers and textiles, in leather processing and as a plasticiser in paints and sealing compounds. The major recent use has been in

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									metal working fluids. These substances are very unlikely to be present in articles above 0.1%.
Aluminosilicate Refractory Ceramic Fibres (**RCF**) (Remark 2)	-	-	Carcinogenic (Article 57a)						Refractory ceramic fibres are used for high-temperature insulation, almost exclusively in industrial applications (insulation of industrial furnaces and equipment, equipment for the automotive and aircraft/aerospace industry) and in fire protection (buildings and industrial process equipment).
Ammonium dichromate	232-143-1	7789-09-5	Carcinogenic (Article 57a); Mutagenic (Article 57b); Toxic for reproduction (Article 57c)						Ammonium dichromate is mainly used as an oxidising agent. Other known uses are in the manufacture of photosensitive screens and as mordant in the manufacture of textiles. Minor uses seem to comprise metal treatment and for laboratory analytical agent
Ammonium pentadecafluorooctanoate (**APFO**)	223-320-4	3825-26-1	Toxic for reproduction (Article 57c)						APFO is mainly used as a processing aid in the production of fluoropolymers (PTFE and PVDF) and fluoroelastomers. There is also significant use of APFO in the photographic industry.
Anthracene	204-371-1	120-12-7	PBT (Article 57d)						Anthracene is normally a complex low concentration impurity or trace constituent in petroleum products. It has been found in some wood preservatives and fuels. This substance is very unlikely to feature in any supplied articles over 0.1%.
Anthracene oil	292-602-7	90640-80-5	Carcinogenic (Article 57a); PBT						The substances are mainly used in the manufacture of other substances such as anthracene and carbon black. They may also

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
			(Article 57d); vPvB (Article 57e)						be used as reducing agents in blast furnaces, as components in bunker fuel, for impregnating,sealing and corrosion protection.
Anthracene oil, anthracene paste	292-603-2	90640-81-6	Carcinogenic (Article 57a); Mutagenic (Article 57b); PBT (Article 57d); vPvB (Article 57e)						The substances are mainly used in the manufacture of other substances such as anthracene and carbon black. They may also be used as reducing agents in blast furnaces, as components in bunker fuel, for impregnating,sealing and corrosion protection.
Anthracene oil, anthracene paste, anthracene fraction	295-275-9	91995-15-2	Carcinogenic (Article 57a); Mutagenic (Article 57b); PBT (Article 57d); vPvB (Article 57e)						The substances are mainly used in the manufacture of other substances such as anthracene and carbon black. They may also be used as reducing agents in blast furnaces, as components in bunker fuel, for impregnating,sealing and corrosion protection.
Anthracene oil, anthracene paste,distn. lights	295-278-5	91995-17-4	Carcinogenic (Article 57a); Mutagenic (Article 57b); PBT (Article 57d); vPvB (Article 57e)						The substances are mainly used in the manufacture of other substances such as anthracene and carbon black. They may also be used as reducing agents in blast furnaces, as components in bunker fuel, for impregnating,sealing and corrosion protection.
Anthracene oil, anthracene-low	292-604-8	90640-82-7	Carcinogenic (Article 57a); Mutagenic (Article 57b); PBT (Article 57d); vPvB (Article 57e)						The substances are mainly used in the manufacture of other substances such as anthracene and carbon black. They may also be used as reducing agents in blast furnaces, as components in bunker fuel, for impregnating,sealing and corrosion protection.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
Antimony trioxide	215-175-0	1309-64-4	-	X					The main application is for flame retardants in combination with halogenated materials. Such flame retardants are found in electrical apparatus, textiles, leather, and coatings. Other applications include as an opacifying agent for glasses, ceramics and enamels, some specialty pigments contain antimony. Antimony trioxide is a useful catalyst in the production of polyethylene terephthalate (PET plastic) and the vulcanization of rubber as well as flame retardant for textiles, leather, polymers, and coatings.
Arsenic (& compounds)	231-148-6	7440-38-2	-			X			Arsenic and its compounds, especially the trioxide, are used in the production of pesticides (treated wood products), herbicides, and insecticides. The main use of metallic arsenic is for strengthening alloys of copper and especially lead (for example, in automotive batteries).
Arsenic acid	231-901-9	7778-39-4	Carcinogenic (Article 57a)						Arsenic acid is mainly used to remove gas bubbles from ceramic glass melt and in the production of laminated printed circuit boards
Benz[a]anthracene	200-280-6	56-55-3; 1718-53-2	Carcinogenic (Article 57a); PBT (Article 57d); vPvB (Article 57e)						Not registered under REACH. Normally not produced intentionally but rather occurs as a constituent or impurity in other substances.
Benzene-1,2,4-tricarboxylic acid 1,2 anhydride	209-008-0	552-30-7	Respiratory sensitising properties (Article						This substance is used by professional workers (widespread uses), in formulation or re-packing, at industrial sites and in

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
			57(f) - human health)						manufacturing.This substance is used in polymers.
Benzo[def]chrysene	200-028-5	50-32-8	Carcinogenic (Article 57a); Mutagenic (Article 57b) Toxic for reproduction (Article 57c); PBT (Article 57d); vPvB (Article 57e)						Benzo[def]chrysene, also called benzo[a]pyrene and this is one of the family of substances referred to as Polycyclic Aromatic Hydrocarbons (PAH). PAHs are not intentionally produced or used, but are generated from fires, burning food, from vehicle exhausts and combustion of fuels such as wood, coal and oil. They are present in carbon black pigment, which is added to plastics as a black colorant for a very wide variety of applications. Human exposure occurs mainly from the air and from food.PAH are also restricted in the EU in toys, food contact materials, tyres and in consumer products.
Benzo[ghi]perylene	205-883-8	191-24-2	PBT (Article 57d); vPvB (Article 57e)						Only relatively small amounts of benzo(g,h,i)perylene are intentionally manufactured. It is extracted from coal tar to be used in dyes. It is also found (as part of a complex mixture of PAHs) in creosote, tar paints, waterproof membranes and other products.
Benzo[k]fluoranthene	205-916-6	207-08-9	Carcinogenic (Article 57a) PBT (Article 57d) vPvB (Article 57e)						Impurities in UVCB-substances that are derived from coal or in several petroleum streams

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
Benzyl butyl phthalate (**BBP**)	201-622-7	85-68-7	Toxic for reproduction (Article 57c); Endocrine disrupting properties (Article 57(f) - human health)		X		X		BBP is mostly used as a plasticiser for PVC, commonly in floor tiles. Other uses include in food conveyor belts, and artificial leather. This substance may be present above 0.1% in the articles described above. Action required to investigate, particularly in the supply of replacement parts (tiles and conveyor belting). Flexible, clear PVC tubing.
Beryllium	231-150-7	7440-41-7				X			Beryllium is used primarily as a hardening agent in alloys, notably beryllium copper. In structural applications, high flexural rigidity, thermal stability, thermal conductivity and low density (1.85 times that of water) make beryllium a quality aerospace material for high-speed aircraft, missiles, space vehicles and communication satellites.
Biphenyl-4-ylamine	202-177-1	92-67-1	Carcinogenic (Article 57a)						Starting chemical for many azo dyes and will be a residue from production or may even form as a metabolite (breakdown product) from certain materials. Possible residue in textiles and coloured materials.
Bis (2-ethylhexyl)phthalate (**DEHP**)	204-211-0	117-81-7	Toxic for reproduction (Article 57c); Endocrine disrupting properties (Article 57(f) - environment); Endocrine		X		X		DEHP is widely used as a plasticizer for PVC (usually >> 1%). Plasticised PVC has a wide but diminishing use ranging from party clothing to gaskets, seals and medical devices. It should not be confused with UPVC, the plasticiser free version, which is used for rigid applications such as building products. DEHP is also used as a hydraulic fluid and as a dielectric fluid in liquid filled capacitors. DEHP may also be used

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
			disrupting properties (Article 57(f) - human health)						in lightsticks. The wide range of uses and attractive price of this substance means that its use in plasticised PVC articles (especially those) described above is foreseeable. This makes it a priority for investigation in the fabric, tubing, adult and childrens toys, engineering, medical devices, electronics and electrical and novelty products sectors.
Bis(2-(2-methoxyethoxy)ethyl) ether	205-594-7	143-24-8	Toxic for reproduction (Article 57c)						Solvent/extraction agent. This substance can be found in products with material based on: paper (e.g. tissues, feminine hygiene products, nappies, books, magazines, wallpaper). It is used in the following products: inks and toners, welding & soldering products, plant protection products and extraction agents. This substance is used in the following areas: printing and recorded media reproduction. It is used for the manufacture of: chemicals.
Bis(2-methoxyethyl) ether	203-924-4	111-96-6	Toxic for reproduction (article 57c)						Used primarily as a reaction solvent or process chemical in a wide variety of applications. Used also as solvent for battery electrolytes, and possibly in other products such as sealants, adhesives, fuels and automotive care products.
Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8	Toxic for reproduction (article 57c)		X				No registration for this phthalate compound has been submitted to ECHA. Hence, the substance seems not to be manufactured in or imported to the EU in quantities above 1 t/y. Main uses in the past were as plasticiser in

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									polymeric materials and paints, lacquers and varnishes, including printing inks.
Bis(pentabromophenyl) ether (decabromodiphenyl ether; **DecaBDE**)	214-604-9	1163-19-5	PBT (Article 57d); vPvB (Article 57e)				X	X	One of a family of brominated fire retardants used in plastics and foams. These chemicals can leach out of plastics, especially during recycling activities and are functionally very persistent and environmental groups are concerned at build up in sea water. The chemical "is always used in conjunction with antimony trioxide" in polymers, mainly in "high impact polystyrene (HIPS) which is used in the television industry for cabinet backs." DecaBDE is also used for "polypropylene drapery and upholstery fabric" by means of backcoating and "may also be used in some synthetic carpets." Examples also include polyamides, polyolefins.
Bis(tributyltin)oxide (**TBTO**)	200-268-0	56-35-9	PBT (Article 57d)			X			This substance is a biocide with major use in external wood treatment. It is possible that this substance could be found in some imported timber products intended for outdoor use. The quantity used in the final treated article may vary and monitoring may be difficult. Possible concern for garden products including toys and play equipment and pallets. Tributyltin oxide (TBTO), or bis(tri-n-butyltin)oxide, is also used in evaporative condenser water cooling systems, and oilfield and petrochemical water subsurface injection

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									systems, microbiocide and fungicide formulations for use in hospitals, laboratory and institutional premises.
Boric acid	233-139-2, 234-343-4	10043-35-3; 11113-50-1	Toxic for reproduction (article 57c)						Boric acid is widely used on account of its consistency-influencing, flameretarding, antiseptic and preservative properties. It is a component of detergents and cleaners, adhesives, toys, industrial fluids, brake fluids, glass, ceramics, flame retardants, paints, disinfectants, cosmetics, food additives, fertilisers, insecticides and other products.
Butyl 4-hydroxybenzoate (Butylparaben)	202-318-7	94-26-8	Endocrine disrupting properties - human health (Article 57(f) – human health)						Cosmetics, personal care products and pharmaceuticals
Cadmium (to be reported if >0.01%)	231-152-8	7440-43-9	Carcinogenic (Article 57a); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)			X	X		Cadmium and its compounds are used in many processes and products including: alloyed with copper and other metals in alloys for fire detection systems, electrical cables and in some solders; in pigments for plastics, ceramics and glasses; in stabilisers for polyvinylchloride; as a protective plating on steel; nickel-cadmium battery manufacture

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
Cadmium carbonate	208-168-9	513-78-0	Carcinogenic (Article 57a); Mutagenic (Article 57b); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)				x		Used as a pH regulator and in water treatment products, laboratory chemicals, cosmetics and personal care products.
Cadmium chloride	233-296-7	10108-64-2	Carcinogenic (Article 57a); Mutagenic (Article 57b); Toxic for reproduction (Article 57c); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)						Raw material for the synthesis of other cadmium compounds, including cadmium pigments. Electroplating and electrogalvanising - coating parts made from iron, steel, brass and aluminium, including bolts, connectors and fasteners. Electrical, electronic, aerospace, mining, offshore, automotive and defence industries. Production of photovoltaic modules (solar cells). Laboratory agent. Solid film lubricant. Fungicide. Photography, photocopying, dyeing and printing. Production of special mirrors and vacuum tubes.): Several other cadmium compounds are already SVHCs. Cadmium chloride is used primarily as a process chemical, so is very unlikely to occur in finished products. Its uses include the production of pigments (which are restricted by REACH), electroplating (also restricted by REACH, but there are exclusions), manufacture of cadmium telluride photovoltaic modules

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									and as a laboratory reagent. Historical uses include photography, photocopying and dying.
Cadmium fluoride	232-222-0	7790-79-6	Carcinogenic (Article 57a); Mutagenic (Article 57b); Toxic for reproduction (Article 57c); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)						Used in the manufacture of glass and phosphors, and in the production of metallic alloys. Also used in optics and electronics, luminescent screens, batteries, solar cells, electric brushes, dielectric ceramics for capacitors, as a fluxing agent in brazing and soldering applications, as a lubricant and as a laboratory reagent. Cadmium fluoride is used to make alloys but is not known to be present in articles.
Cadmium hydroxide	244-168-5	21041-95-2	Carcinogenic (Article 57a); Mutagenic (Article 57b); Specific target organ toxicity after repeated exposure (Article				x		Used in laboratory chemicals and for the manufacture of electrical, electronic and optical equipment.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
			57(f) - human health)						
Cadmium nitrate	233-710-6	10022-68-1; 10325-94-7	Carcinogenic (Article 57a); Mutagenic (Article 57b); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)				x		Used in laboratory chemicals and for the manufacture of glass, porcelain and ceramic products.
Cadmium oxide	215-146-2	1306-19-0	Carcinogenic (Article 57a); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)						The major uses of cadmium oxide are as an ingredient in cadmium-plating baths, and in the electrodes of silver-zinc batteries. It is also used in heat resistant enamels and coatings.
Cadmium sulphate	233-331-6	10124-36-4; 31119-53-6	Carcinogenic (Article 57a); Mutagenic (Article 57b); Toxic for reproduction (Article 57c);						Used in metal surface coatings, in photovoltaic component manufacture, lead-acid batteries as a lubricant and as a laboratory reagent. Also used as an intermediate in the production of other cadmium compounds, particularly pigments

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
			Specific target organ toxicity after repeated exposure (Article 57(f) - human health)						
Cadmium sulphide	215-147-8	1306-23-6	Carcinogenic (Article 57a); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)						Bright yellow pigment (used in polymers (90%), ceramic glazes (6%) and in paints and coatings (4%)), in photo-electronics (solar cells etc.) and in light dependent resistors.
Calcium arsenate	231-904-5	7778-44-1	Carcinogenic (Article 57a)						Cadmium alloys are incorporated into many commercially available articles including electric contacts, engines and gearboxes, radiators and jewelry. Alloyed with copper and other metals in alloys for fire detection systems.
Chlorowax	-	51990-12-6		X					Substances have had a variety of uses, including extreme pressure additives in metalworking fluids, flame retardants for rubbers and textiles, in leather processing and as a plasticiser in paints and sealing compounds. The major recent use has been in metal working fluids. These substances are very unlikely to be present in articles above 0.1%.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
Chromium trioxide	215-607-8	1333-82-0	Carcinogenic (Article 57a); Mutagenic (Article 57b)						Chromium trioxide is mainly used in metal finishing, such as electroplating (e.g. hard chrome and decorative plating), conversion coatings and brightening. It is also used as a fixing agent in waterborne wood preservatives. Minor uses are e.g. in the manufacture of pigments and paints, in catalyst and detergent manufacture, and as an oxidising agent.
Chrysene	205-923-4	218-01-9	Carcinogenic (Article 57a)#PBT (Article 57d)#vPvB (Article 57e)						Not registered under REACH. Normally not produced intentionally but rather occurs as a constituent or impurity in other substances.
Cobalt dichloride	231-589-4	7646-79-9	Carcinogenic (Article 57a); Toxic for reproduction (Article 57c)			X			Cobalt dichloride most common use is for the detection of moisture, for example as a colour indicator in drying agents such as silica gel. Paper impregnated with cobalt chloride, known as "cobalt chloride paper" has been used to detect the presence of water. This substance is very unlikely to be present above 0.1% in any article other than dessicants and laboratory test paper.
Cobalt(II) carbonate	208-169-4	513-79-1	Carcinogenic (Article 57a); Toxic for reproduction (Article 57c)						Cobalt(II) carbonate is mainly used in the manufacture of catalysts. Minor uses may include as a feed additive, in the manufacture of other chemicals including pigments, and as an adhesive in ground coat frit.
Cobalt(II) diacetate	200-755-8	71-48-7	Carcinogenic (Article 57a);						Cobalt(II) diacetate is mainly used in the manufacture of catalysts or as a catalyst.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
			Toxic for reproduction (Article 57c)						Minor uses may include the manufacture of other chemicals including pigments, surface treatments, in alloys, dyes, rubber adhesion, and as a feed additive.
Cobalt(II) dinitrate	233-402-1	10141-05-6	Carcinogenic (Article 57a); Toxic for reproduction (Article 57c)						Cobalt(II) dinitrate is mainly used in the manufacture of other chemicals including catalysts. Further applications may include surface treatment and in batteries.
Cobalt(II) sulphate	233-334-2	10124-43-3	Carcinogenic (Article 57a); Toxic for reproduction (Article 57c)						Cobalt(II) sulphate is mainly used in the manufacture of other chemicals including pigments and possibly catalysts, driers. Further applications comprise surface treatments (such as electroplating), corrosion prevention, decolourisation (in glass, pottery), in batteries, animal food supplements and soil fertilisers.
Cyclohexane-1,2-dicarboxylic anhydride all possible combinations of the cis- and trans-isomers	-	-	Respiratory sensitising properties (Article 57(f) - human health)						Used as hardeners for epoxy resins, intermediates for alkyds, plasticizers, insect repellents and rust inhibitors
Decamethylcyclopentasiloxane	208-764-9	541-02-6	PBT (Article 57d); vPvB (Article 57e)						Cosmetics and personal care products, washing & cleaning products, polishes and waxes, pharmaceuticals and textile treatment products and dyes.
Diarsenic pentaoxide	215-116-9	1303-28-2	Carcinogenic (Article 57a)						Diarsenic pentoxide is used in the manufacture of arsenates, weed killer, metal adhesives, insecticides, fungicides, and wood preservatives. It has been used in glass manufacture but this is now very unlikely to

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									occur. The substance is very unlikely to be present in articles above 0.1% except for some old optical glasses.
Diarsenic trioxide	215-481-4	1327-53-3	Carcinogenic (Article 57a)						Lead alloys (especially in lead-acid batteries), glass (and, to a lesser extent, enamel) production and as a source of highpurity arsenic for use in the electronics.
Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	204-650-8	123-77-3	Respiratory sensitising properties (Article 57(f) - human health)						This substance is used as a catalyst, in the production of electrical equipment and as an industrial blowing agent in the production of rubber and plastic products. It may also be used in adhesives, paints and coatings and consumer-use air fresheners.
Diboron trioxide	215-125-8	1303-86-2	Toxic for reproduction (Article 57c)						Used in a multitude of applications, e.g. in glass and glass fibres, frits, ceramics, flame retardants, catalysts, industrial fluids, metallurgy, nuclear, electrical equipment, adhesives, inks/paints, film developing solutions, detergents and cleaners, reagent chemicals, biocides and insecticides.
Dibutyl phthalate (**DBP**)	201-557-4	84-74-2	Toxic for reproduction (Article 57c); Endocrine disrupting properties (Article 57(f) - human health)		X		X		This substance has widespread historical use as a plasticiser. It was also used as an additive to adhesives or printing inks. Although responsible industry has been phasing out the use of this substance there are concerns that it is still widely used. When used as a plasticiser the amounts may be well above 0.1% in final products. This threshold is unlikely to be exceeded in any ink coated article. This substance should be regarded as priority for

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									investigation of its presence in any soft plastics and adhesives. Any business sector dealing with these articles should be alert to this risk. Examples include, flexible, clear PVC tubing
Dibutylbis(pentane-2,4-dionato-O,O')tin	245-152-0	22673-19-4	Toxic for reproduction (Article 57 (c))						As a catalyst and as an additive in the production of plastics
Dibutyltin dichloride (**DBTC**)	211-670-0	683-18-1	Toxic for reproduction (Article 57c)						This substance is used as an additive in the production of tyres and other rubber products. It is also used as a stabiliser in PVC, for example in water pipes, PVC textile products and packing materials), as a catalyst in the production of polyurethanes and silicones. It may be present above 0.1% w/w in such (parts of) articles. Note that this substance is covered by Entries 20 and 30 of Annex XVII. Also used in parts of the World in timber preservation.
Dichromium tris(chromate)	246-356-2	24613-89-6	Carcinogenic (Article 57a)						Dichromium tris(chromate) is mainly used in mixtures for metal surface treatment in the aeronautic, aerospace, construction, steel and aluminium coating sectors.
Dicyclohexyl phthalate (DCHP)	201-545-9	84-61-7	Toxic for reproduction (Article 57c); Endocrine disrupting properties (Article 57(f) - human health)		X				Adhesives and sealants, coating products, fillers, putties, plasters, modelling clay, finger paints, non-metal-surface treatment products, inks and toners, polishes and waxes, polymers and textile treatment products and dyes.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
Diethyl sulphate	200-589-6	64-67-5	Carcinogenic (Article 57a); Mutagenic (Article 57b)						Used mainly as a reagent in chemical synthesis.
Dihexyl phthalate (**DnHP**)	201-559-5	84-75-3	Toxic for reproduction (Article 57c)		X				DNHP is a high performance plasticizer useful in polyvinyl chloride (PVC) for the applications in the industry of automotive, building & construction material, cable, and flooring. Plasticiser in cellulose esters and PVC. Use examples: automobile parts (air filters, battery covers) and dip-molded products (tool handles, dishwasher baskets). In PVC in traffic cones, toys, gloves, conveyor belts, etc
Diisobutyl phthalate (**DIBP**)	201-553-2	84-69-5	Toxic for reproduction (Article 57c); Endocrine disrupting properties (Article 57(f) - human health)		X		X		Diisobutyl phthalate is used as plasticiser for nitrocellulose, cellulose ether, polyacrylate and polyacetate dispersions, and as a gelling aid in combination with other plasticisers, which are widely used for plastics, lacquers, adhesives, explosive material and nail polish.
Diisodecyl phthalate (**DIDP**)	271-091-4 247-977-1	68515-49-1; 26761-40-0	-		X				Diisodecyl phthalate (DIDP) is a commonly used plasticizer used in the production of plastic and plastic coating to increase flexibility. Examples include, automotive tubing; electrical insulation; connector overmold
Diisohexyl phthalate	276-090-2	71850-09-4	Toxic for reproduction (Article 57c)						Not registered use

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
Diisononyl phthalate (**DINP**)	249-079-5 271-090-9	28553-12-0 68515-48-0	-		X				Di-isononyl phthalate (DINP) is a commonly used plasticiser, mainly for making PVC soft and flexible.
Diisopentylphthalate (**DIPP**)	210-088-4	605-50-5	Toxic for reproduction (Article 57c)		x				This phthalate is used as a plasticiser in plastic goods and may be present above 0.1% w/w in such articles. It is also used in the manufacture of propellants and explosives and as such may be found in ammunition and rifle powders above 0.1% w/w.
Dimethyl fumarate	210-849-0	624-49-7	-			X			Dimethylfumarate (DMF) is used by producers as a biocide to kill moulds that may cause furniture or shoe leather to deteriorate during storage and transportation in a humid climate. Placed in sachets, which are fixed inside the furniture or added to the footwear boxes, DMF evaporates and impregnates the leather, protecting it from moulds. EU Decision 2009/251 establishes a maximum concentration in products of 0.1 ppm as of 1 May 2009.
Dimethyl sulphate	201-058-1	77-78-1	Carcinogenic (Article 57a)						Dimethyl sulfate is a strong methylating agent used to convert compounds such as phenols, amines, and thiols to the corresponding methyl derivatives. It is also used as a methylating or sulfating agent in the manufacture of methyl esters, ethers, and amines in dyes, drugs, perfumes, pesticides, phenol derivatives, fabric softeners, polyurethane-based adhesives, and other organic chemicals. Dimethyl sulfate is also

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									used as a solvent for the separation of mineral oils, for the analysis of auto fluids, and with boron to stabilize liquid sulfur trioxide. It was formerly used as a chemical weapon.
Di-n-octyl phthalate (**DnOP**)	204-214-7	117-84-0	-		X				Di-n-octylphthalate is a colorless, odorless, oily liquid that doesn't evaporate easily. It is a man-made substance used to keep plastics soft or more flexible. This type of plastic can be used for medical tubing and blood storage bags, wire and cables, carpetback coating, floor tile, and adhesives. It is also used in cosmetics and pesticides.
Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	88-85-7	Toxic for reproduction (Article 57c)						Miticide, herbicide (withdrawn from use). High temperature polymerization inhibitor for styrene, methylstyrene and other styrene analogues. Also used as organic intermediate
Dioctyltin dilaurate	222-883-3	3648-18-8	Toxic for reproduction (Article 57c)						This substance is used in the following products: adhesives and sealants. It can be found in products with material based on: fabrics, textiles and apparel (e.g. clothing, mattress, curtains or carpets, textile toys) and leather (e.g. gloves, shoes, purses, furniture). This substance is used in the following products: adhesives and sealants, coating products, paper chemicals and dyes, polymers and textile treatment products and dyes. It is used in the following products: polymers, adhesives and sealants, coating products, metal surface treatment products, non-metal-

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									surface treatment products, paper chemicals and dyes, polishes and waxes, textile treatment products and dyes, washing & cleaning products, fillers, putties, plasters, modelling clay, pH regulators and water treatment products and leather treatment products. This substance has an industrial use resulting in manufacture of another substance (use of intermediates). It is used for the manufacture of: plastic products and rubber products.
Dioctyltin 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	-	-	Toxic for reproduction (Article 57c)						The mono-constituent form of the substance (dioctyltin dilaurate) is used as an additive in the production of plastics and rubber tyres.
Dioxobis(stearato)trilead	235-702-8	12578-12-0	Toxic for reproduction (Article 57c)						Stabiliser used in production of pvc products, particularly construction products such as piping, cables, etc.
Dipentyl phthalate (**DPP**)	205-017-9	131-18-0	Toxic for reproduction (Article 57c)		X				DPP is used as a plasticiser to make polyvinyl chloride (PVC) softer and more flexible. In this form, PVC is used in clothing, upholstery and cable insulation.
Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	209-358-4	573-58-0	Carcinogenic (Article 57a)						Red pigment.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
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)	217-710-3	1937-37-7	Carcinogenic (Article 57a)						Black colorant, has been used in plastics and textiles
Disodium octaborate	234-541-0	12008-41-2	Toxic for reproduction (Article 57c)						Anti-freeze products, heat transfer fluids, lubricants and greases and washing & cleaning products; fertilisers, biocides (e.g. disinfectants, pest control products), coating products, inks and toners, photo-chemicals and washing & cleaning products. This substance is used in the following areas: building & construction work and agriculture, forestry and fishing.
Disodium tetraborate, anhydrous	215-540-4	1303-96-4; 1330-43-4; 12179-04-3	Toxic for reproduction (Article 57c)						Disodium tetraborate and tetraboron disodium heptaoxide form the same compounds in aqueous solutions. Uses include a multitude of applications, e.g. in detergents and cleaners, in glass and glass fibres, ceramics, industrial fluids, metallurgy, adhesives, flame retardants, personal care products, biocides, fertilisers.
Dodecamethylcyclohexasiloxane	208-762-8	540-97-6	PBT (Article 57d); vPvB (Article 57e)						Washing & cleaning products, polishes and waxes, cosmetics and personal care products and pharmaceuticals, and semiconductors.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
Ethylenediamine	203-468-6	107-15-3	Respiratory sensitising properties (Article 57(f) - human health)						Adhesives and sealants, coating products, fillers, putties, plasters, modelling clay and pH regulators and water treatment products. This substance is used in the following areas: municipal supply (e.g. electricity, steam, gas, water) and sewage treatment, health services and scientific research and development.
Fatty acids, C16-18, lead salts	292-966-7	91031-62-8	Toxic for reproduction (Article 57c)						Stabiliser used in production of pvc products, particularly construction products such as piping, cables, etc.
Fluoranthene	205-912-4	206-44-0; 93951-69-0	PBT (Article 57d) vPvB (Article 57e)						Impurities in UVCB-substances that are derived from coal or in several petroleum streams
Formaldehyde	200-001-8	50-00-0	-			X			The textile industry uses formaldehyde-based resins as finishers to make fabrics crease-resistant. Formaldehyde-based materials are key to the manufacture of automobiles, and used to make components for the transmission, electrical system, engine block, door panels, axles and brake shoes. An aqueous solution of formaldehyde can be useful as a disinfectant as it kills most bacteria and fungi (including their spores).
Formaldehyde, oligomeric reaction products with aniline (technical MDA)	500-036-1	25214-70-4	Carcinogenic (Article 57a)						Formaldehyde, oligomeric reaction products with aniline (technical MDA) are mainly used for manufacture of other substances. Minor uses are as hardener for epoxy resins, e.g. for the production of rolls, pipes and moulds, and as well for adhesives. Curing agent for polymers.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
Formamide	200-842-0	75-12-7	Toxic for reproduction (Article 57c)						Mainly used as an intermediate in the manufacture of agrochemicals, pharmaceuticals and industrial chemicals. Minor uses as a solvent, as a laboratory reagent for quality control purposes in forensic laboratories, hospitals, pharmaceutical companies, food and drinks manufacturers and research laboratories. The substance seems to also be used as a plasticiser.
Furan	203-727-3	110-00-9	Carcinogenic (Article 57a)						Furan is used primarily as an intermediate in the synthesis and production of tetrahydrofuran, pyrrole, and thiophene. Furan is also used in the formation of lacquers, as a solvent for resins, and in the production of agricultural chemicals, stabilizers, and pharmaceuticals.
Henicosafluoroundecanoic acid	218-165-4	2058-94-8	vPvB (Article 57e)						Processing aids in the production of fluoropolymers and fluoroelastomers and in other surfactant uses / impurity
Heptacosafluorotetradecanoic acid	206-803-4	376-06-7	vPvB (Article 57e)						Used as processing aids in the production of fluoropolymers and fluoroelastomers and in other surfactant uses / impurity
Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: - Alpha-hexabromocyclododecane - Beta-hexabromocyclododecane	247-148-4, 221-695-9	25637-99-4, 3194-55-6 (134237-50-6) (134237-51-7)	PBT (Article 57d)					X	This substance is a flame retardant for plastics and fibres. It is used to produce flame retarded polystyrene and to flame proof some clothing and furniture textiles. A narrow use profile but there is a significant possibility that flame resistant polystyrene (as pre formed packaging shapes) may contain this substance. These articles are widely used in the electronics and

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
- Gamma-hexabromocyclododecane		(134237-52-8)							toy industries. Examples include soft and rigid foams, textiles
Hexahydromethylphthalic anhydride including cis- and trans- stereo isomeric forms and all possible combinations of the isomers	-	-	Respiratory sensitising properties (Article 57(f) - human health)						Used as processing aids in the production of fluoropolymers and fluoroelastomers and in other surfactant uses / impurity
Hexavalent Chromium	-	18540-29-9	-			X	X		Hexavalent chromium is used for the production of stainless steel, textile dyes, wood preservation, leather tanning, and as anti-corrosion and conversion coatings as well as a variety of niche uses. Chromium hexavalent (CrVI) compounds, often called hexavalent chromium, exist in several forms. Industrial uses of hexavalent chromium compounds include chromate pigments in dyes, paints, inks, and plastics; chromates added as anticorrosive agents to paints, primers, and other surface coatings; and chromic acid electroplated onto metal parts to provide a decorative or protective coating.
Hydrazine	206-114-9	7803-57-8; 302-01-2	Carcinogenic (Article 57a)						Hydrazine is used as a foaming agent, as a precursor to polymerization catalysts and pharmaceuticals. Additionally, hydrazine is used in various rocket fuels and to prepare the gas precursors used in air bags. Hydrazine is

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									also used as a corrosion inhibitor in steam plants.
Imidazolidine-2-thione (2-imidazoline-2-thiol)	202-506-9	96-45-7	Toxic for reproduction (Article 57c)						Vulcanisation agent
Lead	231-100-4	7439-92-1	Toxic for reproduction (Article 57c)			X	X		Lead is a heavy metal and is used in building construction, lead-acid batteries, bullets and shots, weights, as part of solders, pewters, fusible alloys and as a radiation shield. Lead is used for automobiles, mostly as electrodes in the lead-acid battery, used extensively as a car battery. Lead can also be found in solder for electronics.
Lead azide Lead diazide	236-542-1	13424-46-9	Toxic for reproduction (Article 57c)						Lead azide Lead diazide is mainly used as initiator or booster in detonators for both civilian and military uses and as initiator in pyrotechnic devices.
Lead bis(tetrafluoroborate)	237-486-0	13814-96-5	Toxic for reproduction (Article 57c)						Used as a catalyst in production of linear polyesters, a curing agent for epoxy resins; in electroplating solutions for coating metals with lead, in manufacturing flame-retardants, for electrolytic generation of boron, and in preparations for glazing frits.
Lead chromate	231-846-0	7758-97-6	Carcinogenic (Article 57a); Toxic for reproduction (Article 57c)						Lead chromate is used for manufacturing pigments and dyes, and as a pigment or coating agent in industrial and maritime paint products or varnishes. Further potential uses may be associated with the formulation of detergents and bleaches, photosensitive materials, the manufacture of pyrotechnic

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									powder or the embalming / restoring of art products.
Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	235-759-9	12656-85-8	Carcinogenic (Article 57a); Toxic for reproduction (Article 57c)						Lead chromate molybdate sulphate red (C.I. Pigment Red 104) is used as a colouring, painting and coating agent in sectors such as the rubber, plastic and paints, coatingsand varnishes industries. Applications comprise the production of agricultural equipment, vehicles and aircraft as well as road and airstrip painting.
Lead cynamidate	244-073-9	20837-86-9	Toxic for reproduction (Article 57c)						Pigment, lubricant additive
Lead di(acetate)	206-104-4	301-04-2	Toxic for reproduction (Article 57c)						Information suggests it is used in coatings, paints, fillers, putties, plasters, and modelling clay. However, it is mainly used as a process chemical so presence in final product is doubtful. It is used as a contrast agent for MRI/CT medical procedures
Lead dinitrate	233-245-9	10099-74-8	Toxic for reproduction (Article 57c)						Used in manufacture of explosives, weapons and ammunitions , intermediate in preoduction of pigments and a laboratory agent.
Lead dipicrate	229-335-2	6477-64-1	Toxic for reproduction (Article 57c)						No registration for this substance has been submitted to ECHA. Lead dipicrate is an explosive like lead diazide and lead styphnate. It may be used in low amounts in detonator mixtures together with the two other mentioned lead compounds.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
Lead hydrogen arsenate	232-064-2	7784-40-9	Carcinogenic (Article 57a); Toxic for reproduction (Article 57c)						An insecticide for food. It has been widely banned for many years. This substance is very unlikely to be present in articles above 0.1%.
Lead monoxide (Lead oxide)	215-267-0	1317-36-8	Toxic for reproduction (Article 57c)						Glass and crystal making, ceramics, lead-acid batteries, pigments and paints, vulcanisation of rubber, manufacture of cathode ray tubes, organic synthesis
Lead oxide sulfate	234-853-7	12036-76-9	Toxic for reproduction (Article 57c)						Used in lead batteries, pigments and paints, stabiliser for PVC
Lead styphnate	239-290-0	15245-44-0	Toxic for reproduction (Article 57c)						Lead styphnate is mainly used as a primer for small calibre and rifle ammunition. Other common uses are in munition pyrotechnics, powder actuated devices and detonators for civilian use.
Lead sulfochromate yellow (C.I. Pigment Yellow 34)	215-693-7	1344-37-2	Carcinogenic (Article 57a); Toxic for reproduction (Article 57c)						Lead sulfochromate yellow (C.I. Pigment Yellow 34) is used as a colouring, painting and coating agent in sectors such as the rubber, plastic and paints, coatings and varnishes industries. Applications comprise the production of agricultural equipment, vehicles and aircraft as well as road and airstrip painting. The substance is further used for camouflage or ammunition marking in the defence area.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
Lead titanium trioxide	235-038-9	12060-00-3	Toxic for reproduction (Article 57c)						Used in piezoelectric ceramics, pigments and paints
Lead titanium zirconium oxide	235-727-4	12626-81-2	Toxic for reproduction (Article 57c)						This substance is used in the production of lead titanate zirconate, in electro-ceramic components and piezoceramics. It may be present in such articles above 0.1% w/w.
Lead(II) bis(methanesulfonate)	401-750-5	17570-76-2	Toxic for reproduction (Article 57c)						Mainly used in plating processes (both electrolytic and electroless) for electronic components (such as printed circuit boards). The substance seems to also be used for batteries in special applications.
Mercury	231-106-7	7439-97-6	-			X	X		Mercury is used primarily for the manufacture of industrial chemicals or for electrical and electronic applications. It is used in some thermometers, especially ones which are used to measure high temperatures. A still increasing amount is used as gaseous mercury in fluorescent lamps, while most of the other applications are slowly phased out due to health and safety regulations and is in some applications replaced with less toxic but considerably more expensive Galinstan alloy.
Methoxyacetic acid	210-894-6	625-45-6	Toxic for reproduction (Article 57c)						Used in chemical synthesis, cleaning agent, metal finishing, cosmetics

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
Methyloxirane (Propylene oxide)	200-879-2	75-56-9	Carcinogenic (Article 57a); Mutagenic (Article 57b)						Intermediate in the production of polyether polyols and glycols for use in making polyurethane plastics and resins. Also used in the preparation of lubricants, surfactants, and oil demulsifiers. Used as a fumigant for dried fruits and treating wood for termite resistance. Also used in electron microscopy.
N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	202-959-2	101-61-1	Carcinogenic (Article 57a)						Used as an intermediate in the manufacture of dyes and other substances.
N,N-dimethylacetamide (**DMAC**)	204-826-4	127-19-5	Toxic for reproduction (Article 57c)						Used as solvent, mainly in the manufacture of various substances and in the production of fibres for clothing and other applications. Also used as reagent, and in products such as industrial coatings, polyimide films, insulation paper, paint strippers and ink removers.
N,N-dimethylformamide	200-679-5	68-12-2	Toxic for reproduction (Article 57c)						DMF is widely used as a polar aprotic solvent for the manufacture of IVDs. It is the solvent of choice for reactions as it dissolves substances, offering solubility for inorganic reagents, facilitates chemical reactions that would not otherwise be feasible for many other organic solvents and prevents unspecific reactions. Due to its unique properties, it would be difficult or impossible depending on the assay in question, to substitute DMF for another polar aprotic solvent. Given the biologically active nature of polar aprotic solvents, a big question is if ECHA may designate all polar aprotic solvents as SVHC one by one. DMF is

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									also used as a reagent and solvent in many industrial applications in the chemical industry. It is used in the production and cleaning of polyurethane synthetic/artificial leather and some plastics. It may be used as a degreaser in the metal and electronic/electrical industry. Globally, it may be found in paints, varnishes, cleaning agents, pesticides and adhesives. Trace amounts may be found in finished plastic, leather and textile articles.
Natural Rubber Latex	-	-	-	X					The use of rubber is widespread, ranging from household to industrial products, entering the production stream at the intermediate stage or as final products. Tyres and tubes are the largest consumers of rubber. Other significant uses of rubber are door and window profiles, hoses, belts, matting, flooring and dampeners (antivibration mounts) for the automotive industry and gloves (medical, household and industrial). Some people have a serious latex allergy, and exposure to certain natural rubber latex products such as latex gloves can cause anaphylactic shock.
Nitrobenzene	202-716-0	98-95-3	Toxic for reproduction (Article 57c)						Manufacture of other substances, Uses of substances as such or in preparations at industrial sites, Manufacture of bulk, large scale chemicals (including petroleum products), Professional uses: Public domain (administration, education, entertainment, services, craftsmen),

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
N-methylacetamide	201-182-6	79-16-3	Toxic for reproduction (Article 57c)						Intermediate for chemical synthesis in the production of pharmaceuticals, pesticides and electronic materials
Nonadecafluorodecanoic acid (**PFDA**) and its sodium and ammonium salts	206-400-3, 221-470-5, -	335-76-2; 3108-42-7, 3830-45-3	Toxic for reproduction (Article 57c); PBT (Article 57d)						Lubricant, wetting agent, plasticiser and corrosion inhibitor
Nonylphenols and ethoxylates	-	25154-52-3; 84852-15-3; 11066-49-2	-	X					Nonylphenols and ethoxylates are used in applications as disparate as the processing of wool and metals, as emulsifiers for emulsion polymerization, as laboratory detergents, and as pesticides. Examples include spermicides, emulsifiers. In the environment, nonylphenols arise from the degradation of ethoxylates, which are detergents. Nonylphenol and nonyphenol ethoxylates have been restricted in the European Union as a hazard to human and environmental safety.
N-pentyl-isopentylphthalate	933-378-9	776297-69-9	Toxic for reproduction (Article 57c)		x				Plasticiser for plastic products, adhesives, paints, etc. Not pre-registered, so use likely to be be low or present as an impurity.
o-aminoazotoluene [(4-o-tolylazo-o-toluidine])	202-591-2	97-56-3	Carcinogenic (Article 57a)						Azo dye, may be used as a staining agent in biological sciences. Formerly used for coloring oils, fats, and waxes.
Octa-BDE (Octabromodiphenyl ether)	251-087-9	32536-52-0	-				X	X	Octa-BDE (Octabromodiphenyl ether) is a brominated fire retardant. OctaBDE is used in conjunction with antimony trioxide as a flame retardant in the housings of electrical and electronic equipment, mainly in the plastic

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									acrylonitrile butadiene styrene, but also in high impact polystyrene, polybutylene terephthalate and polyamides. Examples include electronic components, textiles.
Octamethylcyclotetrasiloxane	209-136-7	556-67-2	PBT (Article 57d); vPvB (Article 57e)						Cosmetics and personal care products, washing & cleaning products and polishes and waxes.
Orange lead (Lead tetroxide)	215-235-6	1314-41-6	Toxic for reproduction (Article 57c)						Used in anti-corrosion coatings (red lead primer), also used in optical glass, ceramic glazes and enamel, to make piezofiles, and as a weak oxidizerin the chemical industry
o-toluidine	202-429-0	95-53-4	Carcinogenic (Article 57a)						Intermediate in chemical synthesis of herbicides, rubber chemicals, dye and pigment intermediates, resin hardeners, fungicide intermediates, pharmaceutical intermediates, and others
p-(1,1-dimethylpropyl)phenol	201-280-9	80-46-6	Endocrine disrupting properties (Article 57(f) - environment)						Manufacture of chemicals and plastic products
Parabens; butyl & isobutyl	-	99-76-3; 120-47-8; 94-13-3; 94-26-8	-	X					Parabens are a class of chemicals widely used as preservatives in the cosmetic and pharmaceutical industries. Parabens are effective preservatives in many types of formulas. These compounds, and their salts, are used primarily for their bactericidal and fungicidal properties. They can be found in shampoos, commercial moisturisers, shaving gels,topical/parenteral pharmaceuticals, spray

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									tanning solution, makeup, and toothpaste. They are also used as food additives.
Paraffin waxes, chloro	-	63449-39-8		X					Substances have had a variety of uses, including extreme pressure additives in metalworking fluids, flame retardants for rubbers and textiles, in leather processing and as a plasticiser in paints and sealing compounds. The major recent use has been in metal working fluids. These substances are very unlikely to be present in articles above 0.1%.
Penta-BDE (Pentabromodiphenyl ether)	-	32534-81-9					X	X	Penta-BDE is a brominated flame retardant which belongs to the group of polybrominated diphenyl ethers. Examples include electronic components, textiles such as flexible polyurethane foam.
Pentacosafluorotridecanoic acid	276-745-2	72629-94-8	vPvB (Article 57e)						Processing aids in the production of fluoropolymers and fluoroelastomers and in other surfactant uses / impurity. Laboratory chemical.
Pentadecafluorooctanoic acid (**PFOA**)	206-397-9	335-67-1	Toxic for reproduction (Article 57c); PBT (Article 57d)						A strong surfactant, PFOA is used primarily as a processing aide in the manufacture of fluoropolymers. These in turn are utilised in the manufacture of non-stick cookware and all weather-clothing. PFOA is used by companies, such as DuPont (Teflon®, Stainmaster®, Scotchguard®), to make fluoro-polymers for use in non-stick cookware and all-weather

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									clothing. PFOA's are employed in 100's of industrial uses, including within the fields of aerospace, automotive, building and construction, chemical processing, electronics, semiconductors and textile industries.
Pentalead tetraoxide sulphate	235-067-7	12065-90-6	Toxic for reproduction (Article 57c)						Stabiliser used in production of pvc products, lead batteries
Pentazinc chromate octahydroxide	256-418-0	49663-84-5	Carcinogenic (Article 57a)						Mainly used in coatings in the vehicle coating and aeronautic / aerospace sectors.
Perfluorobutane sulfonic acid (PFBS) and its salts	-	-	Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health) Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment)						Used as a catalyst/ additive/reactant in polymer manufacture and in chemical synthesis. It is also used as a flame retardant in polycarbonate (for electronic equipment).
Perfluorohexane-1-sulfonic acid and its salts (PFHxS)	-	-	vPvB (Article 57e)						May be used as a plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
Perfluorononan-1-oic-acid and its sodium and ammonium salts	206-801-3	375-95-1; 21049-39-8; 4149-60-4	Toxic for reproduction (Article 57c); PBT (Article 57d)						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
Phenanthrene	201-581-5	85-01-8	vPvB (Article 57e)						Impurities in UVCB-substances that are derived from coal or in several petroleum streams
Phenolphthalein	201-004-7	77-09-8	Carcinogenic (Article 57a)						Mainly used as laboratory agent (in pH indicator solutions), for the production of pH-indicator paper and in medicinal products.
Pitch, coal tar, high temp.	266-028-2	65996-93-2	Carcinogenic (Article 57a); PBT (Article 57d); vPvB (Article 57e)						Pitch, coal tar, high temp. is mainly used in the production of electrodes for industrial applications. Smaller volumes are dedicated to specific uses such as heavy duty corrosion protection, special purpose paving, manufacture of other substances and the production of clay targets.
Polybrominated Biphenyl (**PBB**)	-	many	-				X	X	PBBs are used as flame retardants of the brominated flame retardant group. They are added to plastics used in products such as home electrical appliances, textiles, plastic foams, laptop cabinets, etc. to make them difficult to burn.
Polybrominated Diphenylethers (**PBDEs**)	-	many	-				X	X	PBDEs are used as flame retardants of the brominated flame retardant group. They are added to plastics used in products such as home electrical appliances, textiles, plastic

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									foams, laptop cabinets, etc. to make them difficult to burn.
Polystyrene Expanded (**EPS**) *used in Packaging*	500-008-9	9003-53-6	-			X			Expandable polystyrene (EPS) is a rigid cellular form of polystyrene with good thermal insulation and shock absorbing properties, high compressive strength, very low weight and resistance to moisture.
Polystyrene Extruded (**XPS**) *used in Packaging*	500-008-9	9003-53-6	-			X			Extruded Polystyrene (XPS) is manufactured through a plastic extrusion process. The resulting board is almost 100% closed cell, strong, highly moisture resistant and easy to cut and shape. This makes them ideal for applications in the construction industry.
Polystyrene *used in Packaging*	500-008-9	9003-53-6				X			Polystyrene is a "polymer of styrene." Polymers are large molecules consisting of adjoined identical molecules, and styrene is a colorless, oily liquid. When polystyrene is made, its structure is that of a rigid transparent thermoplastic, resembling a stiff white foam. It is one of the most common types of plastic, and it can be found in the home, in the office, at industrial sites, and just about any other place you would find plastics. Businesses rely on polystyrene for a number of uses, including manufacturing, packaging, and construction.
Polyvinyl Chloride (**PVC**)	-	9002-86-2		X					Polyvinyl chloride, commonly abbreviated PVC, is a thermoplastic polymer. PVC is used in multiple applications due to it's durability and cost. Pastiscisers can be used to soften PVC.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									Examples of PVC uses include flexible tubing; cable/wire insulation, clothing, windows & doors, pipes, signs, tiles, furniture, dishes, IV bags.
Potassium chromate	232-140-5	7789-00-6	Carcinogenic (Article 57a); Mutagenic (Article 57b)						Potassium chromate is used as a corrosion inhibitor for treatment and coating of metals, for manufacture of reagents, chemicals and textiles, as a colouring agent in ceramics, in the manufacture of pigments/inks and in the laboratory as analytical agent.
Potassium dichromate	231-906-6	7778-50-9	Carcinogenic (Article 57a); Mutagenic (Article 57b); Toxic for reproduction (Article 57c)						Potassium dichromate is used for chrome metal manufacturing and as corrosion inhibitor for treatment and coating of metals. It is further used as textile mordant, as laboratory analytical agent, for cleaning of laboratory glassware, in the manufacture of other reagents and as oxidising agent in photolithography.
Potassium hydroxyoctaoxodizincatedi-chromate	234-329-8	11103-86-9	Carcinogenic (Article 57a)						Potassium hydroxyoctaoxodizincatedi-chromate is mainly used in anti-corrosion coatings in the aeronautic/ aerospace, steel and aluminium coil coating and vehicle coating sectors.
Pyrene	204-927-3	129-00-0	PBT (Article 57d) vPvB (Article 57e)						Impurities in UVCB-substances that are derived from coal or in several petroleum streams; Used as a transported intermediate for the manufacture of fine chemicals.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
Pyrochlore, antimony lead yellow	232-382-1	8012-00-8	Toxic for reproduction (Article 57c)						Pigment in paints and enamels
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**)	-	-	Toxic for reproduction (Article 57c)						Used as a heat stabiliser in the production of rigid PVC and some other plastics; may be found in some adhesives and pigment dispersions.
Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP)	-	-	Endocrine disrupting properties (Article 57(f) - environment)						Used as a lubricant additive in lubricants and greases.
Silicic acid (H2Si2O5), barium salt (1:1), lead-doped	272-271-5	68784-75-8	Toxic for reproduction (Article 57c)						UV fluorescent tubes
Silicic acid, lead salt	234-363-3	11120-22-2	Toxic for reproduction (Article 57c)						Stabiliser used in production of pvc products
Sodium chromate	231-889-5	7775-11-3	Carcinogenic (Article 57a); Mutagenic (Article 57b); Toxic for						Sodium chromate is mainly used as an intermediate in the manufacture of other chromium compounds as well as a laboratory analytical agent, but this use is limited. Other potential uses are mentioned in the literature but whether they occur in the EU is not clear.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
			reproduction (Article 57c)						
Sodium dichromate	234-190-3	7789-12-0; 10588-01-9	Carcinogenic (Article 57a); Mutagenic (Article 57b); Toxic for reproduction (Article 57c)						This substance is an important reagent for the production of a wide range of chemicals. It is aso used in metal finishing process, leather tanning and in some ceramics / glasses. This substance is very unlikely to be present in articles above 0.1% except in some coloured glazes and glasses. The latter are more likely to be found in craft / specialised articles than general purpose ceramics and glasses.
Sodium perborate, perboric acid, sodium salt	239-172-9; 234-390-0	-	Toxic for reproduction (Article 57c)						This substance has very similar uses to sodium peroxometaborate and its main uses are in detergents for laundries and dishwashers, in denture cleaners and stain removers. It may also be used in cosmetics, which are regulated by EU Regulation 1223/2009.
Sodium peroxometaborate	231-556-4	7632-04-4	Toxic for reproduction (Article 57c)						Bleaching agents in laundry detergents and machine dishwashing products. Detergent/cleaning products. Cosmetics. Non-agricultural pesticides and preservatives. Conductive agent. This substance is used as a source of hydrogen peroxide so is used as a bleach and in laundry products (e.g. washing powder and dishwasher tablets) and may also be used in cosmetics, which are regulated by EU Regulation 1223/2009.

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
Stannane, dioctyl-, bis(coco acyloxy) derivs.	293-901-5	91648-39-4	Toxic for reproduction (Article 57c)						It is known to be used across a wide variety of product categories, including as stabilizers and catalysts in the production of materials such as plastics and rubber.
Strontium chromate	232-142-6	7789-06-2	Carcinogenic (Article 57a)						Strontium chromate pigment is used as an anti-corrosion ingredient for some paints. It has uses in coatings for the aerospace and vehicle sectors as well as in coil coating applications.
Sulfurous acid, lead salt, dibasic	263-467-1	62229-08-7	Toxic for reproduction (Article 57c)						Stabiliser used in production of pvc products
Terphenyl, hydrogenated	262-967-7	61788-32-7	vPvB (Article 57e)						Coating products, adhesives and sealants, fillers, putties, plasters, modelling clay and laboratory chemicals.
Tetraboron disodium heptaoxide, hydrate	235-541-3	12267-73-1	Toxic for reproduction (Article 57c)						Disodium tetraborate and tetraboron disodium heptaoxide form the same compounds in aqueous solutions. Uses include a multitude of applications, e.g. in detergents and cleaners, in glass and glass fibres, ceramics, industrial fluids, metallurgy, adhesives, flame retardants, personal care products, biocides, fertilisers.
Tetraethyllead	201-075-4	78-00-2	Toxic for reproduction (Article 57c)						Formerly used as an an antiknock additive in leaded petrol. It is still used as an additive in aviation fuel for piston engine-powered aircraft
Tetralead trioxide sulphate	235-380-9	12202-17-4	Toxic for reproduction (Article 57c)						Stabiliser used in production of pvc products. Lead batteries

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
Trichloroethylene	201-167-4	79-01-6	Carcinogenic (Article 57a)						Trichlororethylene is mainly used as intermediate in the manufacture of chlorinated and fluorinated organic compounds. Other uses are for cleaning and degreasing of metal parts or as solvent in adhesives.
Triclosan	222-182-2	3380-34-5	-	X					Triclosan is an antibacterial and antifungal agent. Triclosan is used in a variety of common household products, including soaps, mouthwashes, dish detergents, toothpastes, deodorants, and hand sanitizers.
Tricosafluorododecanoic acid	206-203-2	307-55-1	vPvB (Article 57e)						Processing aids in the production of fluoropolymers and fluoroelastomers and in other surfactant uses / impurity. Laboratory chemical.
Triethyl arsenate	427-700-2	15606-95-8	Carcinogenic (Article 57a)						This substance is used in the manufacture of semiconductors and has been used in the production of wood preservatives. In both cases the final quantity of the compound in a finished article is expected to be less than 0.1%.
Trilead bis(carbonate)dihydroxide	215-290-6	1319-46-6	Toxic for reproduction (Article 57c)						Pigment in paints and ceramic glazes. Catalyst in the preparation of polyesters from terephthalic acid and diols, curing agent for peroxides to form improved polyethylene wire insulation, pearlescent pigment, color-changing component of temperature-sensitive inks, red-reflecting pigment in iridescent plastic sheets, smudge-resistant film on electrically sensitive recording sheets,

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
									lubricating grease component, component of ultraviolet light reflective paints to increase solar reflectivity, improved cool gun-propellant stabilizer which decomposes and forms a lubricating lead deposit, heat stabilizer for PVC polymers, component of weighted nylon-reinforced fish nets made from PVC fibers.
Trilead diarsenate	222-979-5	3687-31-8	Carcinogenic (Article 57a); Toxic for reproduction (Article 57c)						Trilead diarsenate is present in complex raw materials imported for manufacture of copper, lead and a range of precious metals. The trilead diarsenate contained in the raw materials is in the metallurgical refinement process transformed to calcium arsenate and diarsenic trioxide. Whereas most of the calcium arsenate appears to be disposed of as waste the diarsenic trioxide is used further.
Trilead dioxide phosphonate	235-252-2	12141-20-7	Toxic for reproduction (Article 57c)						Stabiliser used in production of PVC products.
Tris (2-chloroethyl) phosphate **(TCEP)**	204-118-5	115-96-8	Toxic for reproduction (article 57c)					X	Stabiliser used in production of PVC products.
Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)	-	-	Endocrine disrupting properties (Article 57(f) – environment)						Primarily used as an antioxidant to stabilise polymers.
Trixylyl phosphate	246-677-8	25155-23-1	Toxic for reproduction (Article 57c)					X	Fire retardant for some plastics, Fire retardant in hydraulic fluids (e.g. for industrial generators).

Chemical or Substance Materials of Concern	EC Number	CASRN	EU REACH 'SVHC List' Reason for inclusion	Other MOC	Phthalates	Packaging	ROHS	Flame Retardants	Where it may be found/used (this list is not exhaustive)
Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) (Remark 3)	650-017-00-8	-	Carcinogenic (Article 57a)						Refractory ceramic fibres are used for high-temperature insulation, almost exclusively in industrial applications (insulation of industrial furnaces and equipment, equipment for the automotive and aircraft/aerospace industry) and in fire protection (buildings and industrial process equipment).
α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	229-851-8	6786-83-0	Carcinogenic (Article 57a)						Mainly used in the formulation of printing and writing inks, for dyeing paper and in mixtures such as windscreen washing agents.
Animal Origin / by-products				X					Animal origin such as heparin, steric acid
California Proposition 65 Chemicals http://oehha.ca.gov/prop65/prop65_list/Newlist.html			-						State of California; Safe Drinking Water and Toxic Enforcement Act of 1986 (CalProp65). The BD MOC list includes substances controlled under this act.
Self-identified materials of significant concern									

REMARK 1: for more details on REACH Candidate list and definitions of substances
htttp://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp
REMARK 2: Aluminosilicate Refractory Ceramic Fibres (RCF) are fibres covered by index number 650-017-00-8 in REACH Annex VI, part 3, table 3.2 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the two following conditions: a) Al2O3 and SiO2 are present within the following concentration ranges:Al2O3: 43.5 – 47 % w/w, and SiO2: 49.5 – 53.5 % w/w,orAl2O3: 45.5 – 50.5 % w/w, and SiO2: 48.5 – 54 % w/w,b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm).
REMARK 3: Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) are fibres covered by index number 650-017-00-8 in REACH Annex VI, part 3, table 3.2 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances

and mixtures, and fulfil the two following conditions: a) Al2O3, SiO2 and ZrO2 are present within the following concentration ranges:Al2O3: 35 – 36 % w/w, andSiO2: 47.5 – 50 % w/w, andZrO2: 15 - 17 % w/w, b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm).
REMARK 4: Changes compared to previous version (July 2020) checked with "*" in column A and changes underlined
REMARK 5: List of substances included in Annex XIV of REACH ("Authorization List") https://echa.europa.eu/authorisation-list
REMARK 6: List of substances and included in Annex XVII of REACH: https://echa.europa.eu/substances-restricted-under-reach