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Subject: Vectron's Compliance with EU REACH Regulations 1907/2006 (**REACH-173**)
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To: Vectron's customers or To Whom it May Concern

Vectron has reviewed the requirements of the EU REACH (Registration, Evaluation, Authorisation and Restriction of Chemical) Regulations released on June 1, 2007 which applies to chemicals manufactured in EU or being imported into EU. REACH required pre-registration of chemicals during June 1, 2008 and Dec.1, 2008.

In consultation with its sister companies legally incorporated in Europe and external consultants knowledgeable about the REACH regulations, Vectron has determined that Vectron's products (Articles) are compliant to the regulations and will not require to be registered. Specifically:

- Vectron does not directly export chemicals (either substances or preparations of substances) to the EU but articles which are electronic components (frequency control products).
- Vectron is a downstream users of certain substances (e.g. polymer or polyimide adhesives, solder alloys some of which may contain Pb but are exempt under EU RoHS exemption) used in its products which are then marketed to EU customers directly or to customers who expect to export the Vectron product integrated in their assemblies to the EU.
- There is no intended release of substance or preparations from the Vectron products under normal and foreseeable conditions of use, and the quantities contained are well under the REACH usage and reporting threshold of 1000 tonnes per year per manufacturer or importer. Vectron estimates that based on the shipments to EU, the total quantity of substances in exported products are <1 tonne per year.
- To the best of our knowledge, based on a review of the supplier-provided data for materials incorporated in Vectron products, no Substances of Very high Concern (SVC) are contained in Vectron products as listed below (represents the most current list posted on ECHA website). Vectron has conveyed the REACH requirements to suppliers of substances and/or preparations used in Vectron products so that Vectron can accurately report information regarding the Vectron products when required by the EU regulations and be compliant to REACH regulations.

Candidate List of 173 SVHC's Under EU REACH Regulation (as of Jan. 12 , 2017)

(<http://echa.europa.eu/web/guest/candidate-list-table>)

Substance Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion
<u>4,4'-isopropylidenediphenol</u>	201-245-8	80-05-7	12/01/2017	Toxic for reproduction (Article 57c)
<u>4-Heptylphenol, branched and linear</u> 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	-	-	12/01/2017	Equivalent level of concern having probable serious effects to environment (Article 57 f)

isomers or a combination thereof				
<u>Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts</u> show/hide <u>Nonadecafluorodecanoic acid</u> EC no.: 206-400-3 CAS no.: 335-76-2 <u>Ammonium nonadecafluorodecanoate</u> EC no.: 221-470-5 CAS no.: 3108-42-7 <u>Decanoic acid, nonadecafluoro-, sodium salt</u> EC no.: - CAS no.: 3830-45-3	-	-	12/01/2017	Toxic for reproduction (Article 57c) PBT (Article 57 d)
<u>p-(1,1-dimethylpropyl)phenol</u>	201-280-9	80-46-6	12/01/2017	Equivalent level of concern having probable serious effects to environment (Article 57 f)
Benzo[def]chrysene	200-028-5	50-32-8	2016/6/20	Carcinogenic (Article 57a) Mutagenic (Article 57b) Toxic for reproduction (Article 57c) PBT (Article 57 d) vPvB (Article 57 e)
1,3-propanesultone	214-317-9	1120-71-4	2015/12/17	Carcinogenic (Article 57 a)
-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	223-383-8	3864-99-1	2015/12/17	vPvB (Article 57 e)
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	253-037-1	36437-37-3	2015/12/17	vPvB (Article 57 e)
Nitrobenzene	202-716-0	98-95-3	2015/12/17	Toxic for reproduction (Article 57 c)
Perfluorononan-1-oic-acid and its sodium and ammonium salts	206-801-3	375-95-1 21049-39-8 4149-60-4	2015/12/17	Toxic for reproduction (Article 57 c) PBT (Article 57 d)
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)	271-094-0 272-013-1	68515-51-5 68648-93-1	2015/06/15	Toxic for reproduction (Article 57 c)
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]	-	-	2015/06/15	vPvB (Article 57e)
Bis(2-ethylhexyl) phthalate (DEHP)	204-211-0	117-81-7	2014/12/17; 2008/10/28	Equivalent level of concern having probable serious effects to the environment (Article 57 f); Toxic for reproduction (article 57c)
2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	223-346-6	3846-71-7	2014/12/17	PBT (Article 57 d); vPvB (Article 57 e)
2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	239-622-4	15571-58-1	2014/12/17	Toxic for reproduction (Article 57 c)
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)	-	-	2014/12/17	Toxic for reproduction (Article 57 c)
2-(2H-benzotriazol-2-yl)-4,6-	247-	25973-	2014/12/17	PBT (Article 57 d);

ditertpentylphenol (UV-328)	384-8	55-1		vPvB (Article 57 e)
Cadmium fluoride	232-222-0	7790-79-6	2014/12/17	Carcinogenic (Article 57 a); Mutagenic (Article 57 b); Toxic for reproduction (Article 57 c); Equivalent level of concern having probable serious effects to human health (Article 57 f)
Cadmium sulphate	233-331-6	10124-36-4,31119-53-6	2014/12/17	Carcinogenic (Article 57 a); Mutagenic (Article 57 b); Toxic for reproduction (Article 57 c); Equivalent level of concern having probable serious effects to human health (Article 57 f)
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	271-093-5	68515-50-4	2014/06/16	Toxic for reproduction (Article 57 c)
Sodium perborate; perboric acid, sodium salt	239-172-9; 234-390-0	-	2014/06/16	Toxic for reproduction (Article 57 c)
Sodium peroxometaborate	231-556-4	7632-04-4	2014/06/16	Toxic for reproduction (Article 57 c)
Cadmium chloride	233-296-7	10108-64-2	2014/06/16	Carcinogenic (Article 57a); Mutagenic (Article 57b); Toxic for reproduction (Article 57c); Equivalent level of concern having probable serious effects to human health (Article 57 f)
Cadmium sulphide	215-147-8	1306-23-6	2013/12/16	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f)
Trixylyl phosphate	246-677-8	25155-23-1	2013/12/16	Toxic for reproduction (Article 57 c)
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	2013/12/16	Carcinogenic (Article 57a)
Imidazolidine-2-thione; (2-imidazoline-2-thiol)	202-506-9	96-45-7	2013/12/16	Toxic for reproduction (Article 57 c)
Lead di(acetate)	206-104-4	301-04-2	2013/12/16	Toxic for reproduction (Article 57 c)
Dihexyl phthalate	201-559-5	84-75-3	2013/12/16	Toxic for reproduction (Article 57 c)
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	2013/12/16	Carcinogenic (Article 57a)
Cadmium	231-152-8	7440-43-9	2013/06/20	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f)
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	-	-	2013/06/20	Equivalent level of concern having probable serious effects to the environment (Article 57 f)

include any of the individual isomers and/or combinations thereof]				
Ammonium pentadecafluorooctanoate (APFO)	223-320-4	3825-26-1	2013/06/20	Toxic for reproduction (Article 57 c); PBT (Article 57 d)
Pentadecafluorooctanoic acid (PFOA)	206-397-9	335-67-1	2013/06/20	Toxic for reproduction (Article 57 c); PBT (Article 57 d)
Dipentyl phthalate (DPP)	205-017-9	131-18-0	2013/06/20	Toxic for reproduction (Article 57 c)
Cadmium oxide	215-146-2	1306-19-0	2013/06/20	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f)
Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] [The individual isomers [2], [3] and [4] (including their cis- and trans- stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry]	247-094-1, 243-072-0, 256-356-4, 260-566-1	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	2012/12/19	Equivalent level of concern having probable serious effects to human health (Article 57 f)
6-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8	2012/12/19	Carcinogenic (Article 57a)
Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2-dicarboxylic anhydride [3] [The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry]	201-604-9, 236-086-3, 238-009-9	85-42-7, 13149-00-3, 14166-21-3	2012/12/19	Equivalent level of concern having probable serious effects to human health (Article 57 f)
Pyrochlore, antimony lead yellow	232-382-1	8012-00-8	2012/12/19	Toxic for reproduction (Article 57 c)
Henicosafuoroundecanoic acid	218-165-4	2058-94-8	2012/12/19	vPvB (Article 57 e)
4-Aminoazobenzene	200-453-6	60-09-3	2012/12/19	Carcinogenic (Article 57a)
Silicic acid, lead salt	234-363-3	11120-22-2	2012/12/19	Toxic for reproduction (Article 57 c)
Lead titanium zirconium oxide	235-727-4	12626-81-2	2012/12/19	Toxic for reproduction (Article 57 c)
Lead monoxide (lead oxide)	215-267-0	1317-36-8	2012/12/19	Toxic for reproduction (Article 57 c)
o-Toluidine	202-429-0	95-53-4	2012/12/19	Carcinogenic (Article 57a)
3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	421-150-7	143860-04-2	2012/12/19	Toxic for reproduction (Article 57 c)
Dibutyltin dichloride (DBTC)	211-670-0	683-18-1	2012/12/19	Toxic for reproduction (Article 57 c)
Lead bis(tetrafluoroborate)	237-486-0	13814-96-5	2012/12/19	Toxic for reproduction (Article 57 c)
Lead dinitrate	233-245-9	10099-74-8	2012/12/19	Toxic for reproduction (Article 57 c)
Silicic acid (H ₂ SiO ₅), barium salt (1:1), lead-doped [with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD); the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008]	272-271-5	68784-75-8	2012/12/19	Toxic for reproduction (Article 57 c)
Trilead bis(carbonate)dihydroxide	215-	1319-46-	2012/12/19	Toxic for reproduction

	290-6	6		(Article 57 c)
4,4'-methylenedi-o-toluidine	212-658-8	838-88-0	2012/12/19	Carcinogenic (Article 57a)
Diethyl sulphate	200-589-6	64-67-5	2012/12/19	Carcinogenic (Article 57a); Mutagenic (Article 57b)
Dimethyl sulphate	201-058-1	77-78-1	2012/12/19	Carcinogenic (Article 57a)
N,N-dimethylformamide	200-679-5	68-12-2	2012/12/19	Toxic for reproduction (Article 57 c)
4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	-	-	2012/12/19	Equivalent level of concern having probable serious effects to the environment (Article 57 f)
4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	-	-	2012/12/19	Equivalent level of concern having probable serious effects to the environment (Article 57 f)
Furan	203-727-3	110-00-9	2012/12/19	Carcinogenic (Article 57a)
Lead oxide sulfate	234-853-7	12036-76-9	2012/12/19	Toxic for reproduction (Article 57 c)
Lead titanium trioxide	235-038-9	12060-00-3	2012/12/19	Toxic for reproduction (Article 57 c)
Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	214-604-9	1163-19-5	2012/12/19	PBT (Article 57 d); vPvB (Article 57 e)
Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	88-85-7	2012/12/19	Toxic for reproduction (Article 57 c)
1,2-Diethoxyethane	211-076-1	629-14-1	2012/12/19	Toxic for reproduction (Article 57 c)
N-methylacetamide	201-182-6	79-16-3	2012/12/19	Toxic for reproduction (Article 57 c)
Tetralead trioxide sulphate	235-380-9	12202-17-4	2012/12/19	Toxic for reproduction (Article 57 c)
Acetic acid, lead salt, basic	257-175-3	51404-69-4	2012/12/19	Toxic for reproduction (Article 57 c)
[Phthalato(2-)]dioxotrilead	273-688-5	69011-06-9	2012/12/19	Toxic for reproduction (Article 57 c)
Tetraethyllead	201-075-4	78-00-2	2012/12/19	Toxic for reproduction (Article 57 c)
N-pentyl-isopentylphthalate	-	776297-69-9	2012/12/19	Toxic for reproduction (Article 57 c)
Pentalead tetraoxide sulphate	235-067-7	12065-90-6	2012/12/19	Toxic for reproduction (Article 57 c)
Heptacosafuorotetradecanoic acid	206-803-4	376-06-7	2012/12/19	vPvB (Article 57 e)
Tricosafuorododecanoic acid	206-203-2	307-55-1	2012/12/19	vPvB (Article 57 e)
1-bromopropane (n-propyl bromide)	203-445-0	106-94-5	2012/12/19	Toxic for reproduction (Article 57 c)
Dioxobis(stearato)trilead	235-702-8	12578-12-0	2012/12/19	Toxic for reproduction (Article 57 c)
Pentacosafuorotridecanoic acid	276-745-2	72629-94-8	2012/12/19	vPvB (Article 57 e)
Methoxyacetic acid	210-894-6	625-45-6	2012/12/19	Toxic for reproduction (Article 57 c)
Methyloxirane (Propylene oxide)	200-879-2	75-56-9	2012/12/19	Carcinogenic (Article 57a); Mutagenic (Article 57b)
Trilead dioxide phosphonate	235-252-2	12141-20-7	2012/12/19	Toxic for reproduction (Article 57 c)

o-aminoazotoluene	202-591-2	97-56-3	2012/12/19	Carcinogenic (Article 57a)	
4-methyl-m-phenylenediamine (toluene-2,4-diamine)	202-453-1	95-80-7	2012/12/19	Carcinogenic (Article 57a)	
Diisopentylphthalate	210-088-4	605-50-5	2012/12/19	Toxic for reproduction (Article 57 c)	
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	84777-06-0	2012/12/19	Toxic for reproduction (Article 57 c)	
Biphenyl-4-ylamine	202-177-1	92-67-1	2012/12/19	Carcinogenic (Article 57a)	
Fatty acids, C16-18, lead salts	292-966-7	91031-62-8	2012/12/19	Toxic for reproduction (Article 57 c)	
Orange lead (lead tetroxide)	215-235-6	1314-41-6	2012/12/19	Toxic for reproduction (Article 57 c)	
4,4'-oxydianiline and its salts	202-977-0	101-80-4	2012/12/19	Carcinogenic (Article 57a); Mutagenic (Article 57b)	
Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	204-650-8	123-77-3	2012/12/19	Equivalent level of concern having probable serious effects to human health (Article 57 f)	
Sulfurous acid, lead salt, dibasic	263-467-1	62229-08-7	2012/12/19	Toxic for reproduction (Article 57 c)	
Lead cyanamidate	244-073-9	20837-86-9	2012/12/19	Toxic for reproduction (Article 57 c)	
α,α -Bis[4-(dimethylamino)phenyl]-4(henylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	22-851-8	6786-83-8	2012/06/18	Carcinogenic (Article 57a)	
[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	28-953-6	548-62-9	2012/06/18	Carcinogenic (Article 57a)	
N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	202-959-2	101-61-1	2012/06/18	Carcinogenic (Article 57a)	
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	2012/06/18	Mutagenic (Article 57b)	
Diboron trioxide	215-125-8	1303-86-2	2012/06/18	Toxic for reproduction (Article 57 c)	
1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-	112-9-2	2012/06/18	Toxic for reproduction (Article 57 c)	
Formamide	200-842-0	75-12-7	2012/06/18	Toxic for reproduction (Article 57 c)	
4,4'-bis(dimethylamino)-4'-(methylamino)trityl alcohol [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	209-218-2	561-41-1	2012/06/18	Carcinogenic (Article 57a)	
Lead(II) bis(methanesulfonate)	401-750-5	1757-76-2	2012/06/18	Toxic for reproduction (Article 57 c)	
1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDE)	203-794-9	10-71-4	2012/06/18	Toxic for reproduction (Article 57 c)	
[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or	219-943-6	2580-56-5	2012/6/18	Carcinogenic (Article 57a)	

Michler's base (EC No. 202-959-2)]				
1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	219-514-3	2451-62-9	2012/06/18	Mutagenic (Article 57b)
4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	202-027-5	90-94-8	2012/06/18	Carcinogenic (Article 57a)
Phenolphthalein	201-004-7	77-09-8	2011/12/19	Carcinogenic (article 57 a)
N,N-dimethylacetamide	204-826-4	127-19-5	2011/12/19	Toxic for reproduction (article 57 c)
4-(1,1,3,3-tetramethylbutyl)phenol	205-426-2	140-66-9	2011/12/19	Equivalent level of concern having probable serious effects to the environment (article 57 f)
Lead diazide, Lead azide	236-542-1	13424-46-9	2011/12/19	Toxic for reproduction (article 57 c),
Lead dipicrate	229-335-2	6477-64-1	2011/12/19	Toxic for reproduction (article 57 c)
1,2-dichloroethane	203-458-1	107-06-2	2011/12/19	Carcinogenic (article 57 a)
Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 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 three following conditions: a) oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm) c) alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less or equal to 18% by weight	-	-	2011/12/19	Carcinogenic (article 57 a)
Calcium arsenate	231-904-5	7778-44-1	2011/12/19	Carcinogenic (article 57 a)
Dichromium tris(chromate)	246-356-2	24613-89-6	2011/12/19	Carcinogenic (article 57 a)
2-Methoxyaniline; o-Anisidine	201-963-1	90-04-0	2011/12/19	Carcinogenic (article 57 a)
Pentazinc chromate octahydroxide	256-418-0	49663-84-5	2011/12/19	Carcinogenic (article 57 a)
Arsenic acid	231-901-9	7778-39-4	2011/12/19	Carcinogenic (article 57 a)
Potassium hydroxyoctaoxodizincatedichromate	234-329-8	11103-86-9	2011/12/19	Carcinogenic (article 57 a)
Formaldehyde, oligomeric reaction products with aniline	500-036-1	25214-70-4	2011/12/19	Carcinogenic (article 57 a)
Lead styphnate	239-290-0	15245-44-0	2011/12/19	Toxic for reproduction (article 57 c)
Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8	2011/12/19	Toxic for reproduction (article 57 c)

Trilead diarsenate	222-979-5	3687-31-8	2011/12/19	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
Bis(2-methoxyethyl) ether	203-924-4	111-96-6	2011/12/19	Toxic for reproduction (article 57 c)
2,2'-dichloro-4,4'-methylenedianiline	202-918-9	101-14-4	2011/12/19	Carcinogenic (article 57 a)
Zirconia Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 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 three following conditions: a) oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm). c) alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less or equal to 18% by weight	-	-	2011/12/19	Carcinogenic (article 57 a)
Cobalt dichloride	231-589-4	7646-79-9	2011/06/20 - 2008/10/28	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	276-158-1	71888-89-6	2011/06/20	Toxic for reproduction (article 57c)
Strontium chromate	232-142-6	7789-06-2	2011/06/20	Carcinogenic (article 57a)
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	271-084-6	68515-42-4	2011/06/20	Toxic for reproduction (article 57c)
1-Methyl-2-pyrrolidone	212-828-1	872-50-4	2011/06/20	Toxic for reproduction (article 57c)
1,2,3-Trichloropropane	202-486-1	96-18-4	2011/06/20	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
2-Ethoxyethyl acetate	203-839-2	111-15-9	2011/06/20	Toxic for reproduction (article 57c)
Hydrazine	206-114-9	302-01-2, 7803-57-8	2011/06/20	Carcinogenic (article 57a)
Cobalt(II) diacetate	200-755-8	71-48-7	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
2-Ethoxyethanol	203-804-1	110-80-5	2010/12/15	Toxic for reproduction (article 57c)
Cobalt(II) sulphate	233-334-2	10124-43-3	2010/12/15	Carcinogenic and toxic for reproduction

				(articles 57 a and 57 c)
Acids generated from chromium trioxide and their oligomers. Names of the acids and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid.	231-801-5, 236-881-5	7738-94-5, 13530-68-2	2010/12/15	Carcinogenic (article 57a)
2-Methoxyethanol	203-713-7	109-86-4	2010/12/15	Toxic for reproduction (article 57c)
Chromium trioxide	215-607-8	1333-82-0	2010/12/15	Carcinogenic and mutagenic (articles 57 a and 57 b)
Cobalt(II) carbonate	208-169-4	513-79-1	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
Cobalt(II) dinitrate	233-402-1	10141-05-6	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
Trichloroethylene	201-167-4	79-01-6	2010/06/18	Carcinogenic (article 57 a)
Potassium dichromate	231-906-6	7778-50-9	2010/06/18	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)
Tetraboron disodium heptaoxide, hydrate	235-541-3	12267-73-1	2010/06/18	Toxic for reproduction (article 57 c)
Boric acid	233-139-2, 234-343-4	10043-35-3, 11113-50-1	2010/06/18	Toxic for reproduction (article 57 c)
Ammonium dichromate	232-143-1	7789-09-5	2010/06/18	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)
Sodium chromate	231-889-5	7775-11-3	2010/06/18	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)
Disodium tetraborate, anhydrous	215-540-4	1303-96-4, 1330-43-4, 12179-04-3	2010/06/18	Toxic for reproduction (article 57 c)
Potassium chromate	232-140-5	7789-00-6	2010/06/18	Carcinogenic and mutagenic (articles 57 a and 57 b).
Acrylamide	201-173-7	79-06-1	2010/03/30	Carcinogenic and mutagenic (articles 57 a

				and 57 b)
Lead sulfochromate yellow (C.I. Pigment Yellow 34)	215-693-7	1344-37-2	2010/01/13	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	235-759-9	12656-85-8	2010/01/13	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
2,4-Dinitrotoluene	204-450-0	121-14-2	2010/01/13	Carcinogenic (article 57a)
Anthracene oil	292-602-7	90640-80-5	2010/01/13	Carcinogenic1, PBT and vPvB (articles 57a, 57d and 57e)
Anthracene oil, anthracene paste, anthracene fraction	295-275-9	91995-15-2	2010/01/13	Carcinogenic2, mutagenic3, PBT and vPvB (articles 57a, 57b, 57d and 57e)
Anthracene oil, anthracene-low	292-604-8	90640-82-7	2010/01/13	Carcinogenic2, mutagenic3, PBT and vPvB (articles 57a, 57b, 57d and 57e)
Diisobutyl phthalate	201-553-2	84-69-5	2010/01/13	Toxic for reproduction (article 57c)
Tris(2-chloroethyl)phosphate	204-118-5	115-96-8	2010/01/13	Toxic for reproduction (article 57c)
Lead chromate	231-846-0	7758-97-6	2010/01/13	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
Anthracene oil, anthracene paste	292-603-2	90640-81-6	2010/01/13	Carcinogenic2, mutagenic3, PBT and vPvB (articles 57a, 57b, 57d and 57e)
Pitch, coal tar, high temp.	266-028-2	65996-93-2	2010/01/13	Carcinogenic, PBT and vPvB (articles 57a, 57d and 57e)
Anthracene oil, anthracene paste, distn. lights	295-278-5	91995-17-4	2010/01/13	Carcinogenic2, mutagenic3, PBT and vPvB (articles 57a, 57b, 57d and 57e)
Lead hydrogen arsenate	232-064-2	7784-40-9	2008/10/28	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
Benzyl butyl phthalate (BBP)	201-622-7	85-68-7	2008/10/28	Toxic for reproduction

				(article 57c)
Bis (2-ethylhexyl)phthalate (DEHP)	204-211-0	117-81-7	2008/10/28	Toxic for reproduction (article 57c)
Bis(tributyltin)oxide (TBTO)	200-268-0	56-35-9	2008/10/28	PBT (article 57d)
5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	201-329-4	81-15-2	2008/10/28	vPvB (article 57e)
Diarsenic trioxide	215-481-4	1327-53-3	2008/10/28	Carcinogenic (article 57a)
Triethyl arsenate	427-700-2	15606-95-8	2008/10/28	Carcinogenic (article 57a)
Diarsenic pentaoxide	215-116-9	1303-28-2	2008/10/28	Carcinogenic (article 57a)
Sodium dichromate	234-190-3	7789-12-0, 10588-01-9	2008/10/28	Carcinogenic, mutagenic and toxic for reproduction (articles 57a, 57b and 57c)
Dibutyl phthalate (DBP)	201-557-4	84-74-2	2008/10/28	Toxic for reproduction (article 57c)
4,4'- Diaminodiphenylmethane (MDA)	202-974-4	101-77-9	2008/10/28	Carcinogenic (article 57a)
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	287-476-5	85535-84-8	2008/10/28	PBT and vPvB (articles 57 d and 57 e)
Anthracene	204-371-1	120-12-7	2008/10/28	PBT (article 57d)
Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane	247-148-4 and 221-695-9	25637-99-4, 3194-55-6 (134237-50-6) (134237-51-7) (134237-52-8)	2008/10/28	PBT (article 57d)



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