RoHS Lead Free and REACH Compliance Declaration

11/1/2016

Dear Customer,

By means of this letter, we confirm to you we are well aware of the obligations deriving from the EC Regulation 1907/2006 (called "**REACH**"). Thus, we inform you that **Challenge Electronics** has duly analyzed the impact that this Regulation may have on **Challenge Electronics** both in its role as a Supplier and as a Customer. Therefore, **this document certifies that, to the best of our knowledge, Challenge Electronics product line listed below does not contain any elements of the 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and Substances of Very High Concern (SVHC), and European Union Directive 2011/65/EU (RoHS Directive) of the European Parliament. With one exception of Product Line which Contain Piezoelectric is also known as Lead Zirconate Titanate (PZT) Ceramics.**

1) **According to the REACH terminology, Challenge Electronics acknowledge being Producers, Importers and Marketer of the Product Line Articles (shown below), which do not contain Substances of Very High Concern (SVHC's) to be intentionally released.**
2) **The Challenge Electronics Product Line Articles manufactured under the Lead Free Program and complies with European Union Directive 2011/65/EU (RoHS Directive) of the European Parliament**
3) **Challenge Electronics hereby declares, to the best of our knowledge and based on our China Manufacturers and Fabricators information, that, all Challenge Electronics Product Line Articles (shown below), are chemically safe, and should not harm any human, animals, or the environment.**
4) **In addition, of the Council of 8 June 2011 and all subsequent amendments, on the restriction of the use of certain hazardous substances in electrical and electronics equipment (RoHS Directive) in accordance with the definitions set forth in the directives and its exemptions.**
5) **It should be noted that SVHC items are not banned from inclusion, but are Reportable per current REACH regulations**
   a) **With the exception of The Piezoelectric-Ceramic-Disc article that CONTAINS more than 0.1% (w/w) of REACH Candidate List SVHC Lead-Zirconium-Titanium-Oxide (CAS 12626-81-2), which is a key ingredient of the Piezoelectric-Ceramic-Disc in the Alarm operation.** See also the RoHS Compliance ANNEX III of the Directive Applications exempted from the restriction in Article 4(1)
   b) **Some SMD and Dip type Capacitors CONTAINS one of the following Lead Oxides published in the ECHA SVHC Candidate List at or greater than 0.1% of total weight: Lead monoxide (CAS 1317-36-8), Lead titanium zirconium oxide (CAS 12626-81-2)**
6) **In all cases, the lead substance is chemically combined in Capacitors and presents no hazard to humans or the environment under normal handling and use. In addition, Challenge Electronics complies with the restrictions stated in Annex XVII of REACH.**
7) **In Challenge Electronics role as Supplier, we have taken the necessary steps towards our China Manufacturing partners in order to get a written confirmation about their knowledge of the Regulation and their analysis of the impact on their company.**

Challenge Electronics Product Line List

Product Line	REACH Complaint	Exception for
Electromagnetic Sound Transducers	YES	
Electromagnetic Buzzers	YES	
Mechanical Buzzers	YES	
Piezoelectric Alarms	Yes with Exception	Piezoelectric is also known as Lead Zirconate Titanate (PZT) Ceramics
Piezoelectric Buzzers	Yes with Exception	Piezoelectric is also known as Lead Zirconate Titanate (PZT) Ceramics
Piezoelectric Sound Transducers	Yes with Exception	Piezoelectric is also known as Lead Zirconate Titanate (PZT) Ceramics
Piezoelectric Sound Elements	Yes with Exception	Piezoelectric is also known as Lead Zirconate Titanate (PZT) Ceramics
Microphones (Excluding Piezoelectric Microphones)	YES	
Piezoelectric Microphones	Yes with Exception	Piezoelectric is also known as Lead Zirconate Titanate (PZT) Ceramics
Speakers (Excluding Piezoelectric Speakers)	YES	
Piezoelectric Speakers	Yes with Exception	Piezoelectric is also known as Lead Zirconate Titanate (PZT) Ceramics
Headphone Sets	YES	
Ultrasonic Sensors (Transmitters and Receivers)	Yes with Exception	Piezoelectric is also known as Lead Zirconate Titanate (PZT) Ceramics
Battery Accessories	YES	

RoHS COMPLIANCE DECLARATION

Challenge Electronics certifies the product line listed in page # 1 as lead-free, and are in compliance with EU Directive 2011/65/EU, with respect to the following substances:

EU RoHS compliant is defined as meeting the following requirements:

Restricted Substance	Maximum Threshold Limit	Product Results
Lead (Pb) / Lead Compounds	≤1,000 ppm	**≤ 10,000 ppm** (1)(2)
Mercury (Hg) / Mercury Compounds	≤1,000 ppm	**In compliance**
Cadmium (Cd) / Cadmium Compounds	≤ 100 ppm	**In compliance**
Hexavalent Chromium (Cr VI)	≤1,000 ppm	**In compliance**
Poly Brominated Diphenyl Ethers (PBDE)	≤1,000 ppm	**In compliance**
Bis (2-Ethylhexyl) Phthalate (DEHP)	≤1,000 ppm	**In compliance**
Butyl Benzyl Phthalate (BBP)	≤1,000 ppm	**In compliance**
Dibutyl Phthalate (DBP)	≤1,000 ppm	**In compliance**

(1) In compliance for all Challenge Electronics Product Line List in page # 2 with the Exception of Product Line which Contain Piezoelectric is also known as Lead Zirconate Titanate (PZT) Ceramics which are exempted.

(2) European Union Directive 2011/65/EU (RoHS Directive) of the European Parliament. And of the Council of 8 June 2011 and all subsequent amendments, The ANNEX III of the Directive Applications exempted from the restriction in Article 4(1): 7(c)-I, Electrical and electronic components containing Lead in ceramic matrix compound Piezoelectric is also known as Lead Zirconate Titanate (PZT) ceramics. Lead content, homogeneous material compound is between 58% and 68% by weight depending on the proportion of Zirconium (Zr) and Titanium (Ti)

The ANNEX III of the Directive Applications exempted from the restriction in Article 4(1):

- **6(c)-- Copper alloy** containing up to 4% Lead by weight
- **7(a)-- Lead in high melting temperature** type solders (i.e. Lead- based alloys containing 85 % by weight or more Lead)
- **7(c)-I--** Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. **Piezoelectronic devices**, or in a glass or ceramic matrix compound.
  Piezoelectric is also known as Lead Zirconate Titanate (PZT) ceramics. Piezoelectric Ceramic disc, (PZT), Lead as high covalent compound in the ceramic matrix to achieve good ferroelectric properties in a wide temperature range. The best-known performances can be reached with PZT ceramics, which are a mixture of PbTiO3 and PbZrO3. The Lead content, homogeneous material compound is between 58% and 68% by weight depending on the proportion of Zirconium (Zr) and Titanium (Ti).
- **30--** Cadmium alloys as electrical/mechanical solder joints to electrical conductors located directly on the voice-coil in transducers used in high-powered loudspeakers with sound pressure levels of 100 dB (A) and more

IMDS Information for Piezoelectric

Automotive Industry Interpretation Guide for ELV Annex II (2016/774/EU) with IMDS Information added by the IMDS Steering Committee

- **Interpretation Guide for ELV Annex II (2016/774/EC) Version 3.0**
- **Definition/interpretation of -Exemption (10a)**

10(a). Electrical and electronic components, which contain lead in a glass or ceramic, in a glass or ceramic matrix compound, in a glass-ceramic material, or in a glass-ceramic matrix compound. This exemption does not cover the use of lead in:

- glass in bulbs and glaze of spark plugs,
- dielectric ceramic materials of components listed under 10(b), 10(c) and 10(d)

DUE DATE: none

IMDS APPLICATION CODE:

10(a). Electrical and electronic components, which contain lead in a glass or ceramic, in a glass or ceramic matrix compound, in a glass-ceramic material, or in a glass-ceramic matrix compound. This exemption does not cover the use of lead in:

- glass in bulbs and glaze of spark plugs,
- dielectric ceramic materials of components

Listed under 10(b), 10(c) and 10(d).

This exemption is related to electrical/ electronic applications in general, which are not covered by 10b -d). Exemptions 10b-d subsume specific applications of lead in glass and ceramic of electric and electronic components.

- To better understand what is meant here and what is in scope, the single elements of this exemption are defined separately.
- For definitions on electrical and Electronic Components, please see guide section for entry 8a.

2) Examples for components covered by 10 a)

a) Piezoceramics

Piezoceramics are characterized through their ability to transform mechanical energy in electrical energy and reciprocal. They fulfil technical functions as actuators, sensors, generators and motors. They are used for instance in Actuators for diesel and gasoline injection valves, knock sensors, resonator and filter, actuators, bending actuators for pneumatic valves, tire Pressure Sensors, ceramic sensors (like ABS, air bag, pressure, car navigation sensors), **Piezoelectric Alarms, Piezoelectric buzzers, Piezoelectric Sound Transducers, Ultrasonic Sensor and Transmitter**. The lead content in the Piezoceramics ceramics is around 50 to 70% by weight, depending on the content of dopants, required functional properties and on the proportion of Zirconium (Zr) and Titanium (Ti).

- The statements in this letter regarding RoHS Compliance and lead content do not extend to, or apply to any product subjected to unintended contamination, misuse, neglect, accident, improper installation, or to use in violation of instructions furnished by **Challenge Electronics**
- **No Ozone Depleting Substance (ODS),** covered by the Montreal Protocol, are used in the manufacturing process of **Challenge Electronics** Product Line

The above statements fulfill the communication requirements stated in REACH, Article 33. All enquiries related to RoHS, REACH and SVHCs could be sent to our REACH Coordinator, Ely Zofan, by e-mail ezofan@challelec.com

Sincerely,

Authorized signatures for **Challenge Electronics**:

Name:	**Ely S. Zofan**	Position:	**Director of Engineering and Quality**
Signature:	Ely Zofan	Date:	**11/1/2016**

The information contained in this letter is being provided for informational purposes only and to clarify certain information concerning **Challenge Electronics** products. Nothing provided in this letter is:

(i) a representation, warranty or agreement to indemnification by **Challenge Electronics**

(ii) a statement which may form the basis of reliance by **Challenge Electronics**

a modification of any of the terms and conditions of sale agreed to in writing between **Challenge Electronics** and its customers with respect to any **Challenge Electronics** products, whether previously sold or to be sold in the future

Revisions to SVHC Candidate List, which have been reviewed in preparation of this statement:

Regulation (EC) 440/2008 of 30 May 2008	Regulation (EC) 987/2008 of 8 October 2008	Regulation (EC) 134/2009 of 16 February 2009
Regulation (EC) 552/2009 of 22 June 2009	Regulation (EC) 761/2009 of 23 July 2009	Regulation (EU) 276/2010 of 31 March 2010
Regulation (EU) 453/2010 of 20 May 2010	Regulation (EU) 1152/2010 of 8 December 2010	Regulation (EU) 143/2011 of 17 February 2011
Regulation (EU) 207/2011 of 2 March 2011	Regulation (EU) 252/2011 of 15 March 2011	Regulation (EU) 253/2011 of 15 March 2011
Regulation (EU) 366/2011 of 14 April 2011	Regulation (EU) 494/2011 of 20 May 2011	Regulation (EU) 109/2012 of 9 February 2012
Regulation (EU) 125/2012 of 14 February 2012	Regulation (EU) 412/2012 of 15 May 2012	Regulation (EU) 640/2012 of 6 July 2012
Regulation (EU) 835/2012 of 18 September 2012	Regulation (EU) 836/2012 of 18 September 2012	Regulation (EU) 847/2012 of 19 September 2012
Regulation (EU) 848/2012 of 19 September 2012	Regulation (EU) 126/2013 of 13 February 2013	Regulation (EU) 254/2013 of 20 march 2013
Regulation (EU) 348/2013 of 17 April 2013	Regulation (EU) 1272/2013 of 6 December 2013	Regulation (EU) 260/2014 of 24 January 2014
Regulation (EU) 301/2014 of 25 March 2014	Regulation (EU) 317/2014 of 27 March 2014	Regulation (EU) 474/2014 of 8 May 2014
Regulation (EU) 900/2014 of 15 July 2014	Regulation (EU) 895/2014 of 14 August 2014	Regulation (EU) 2015/282 of 20 February 2015
Regulation (EU) 2015/326 of 2 March 2015	Regulation (EU) 2015/628 of 22 April 2015	Regulation (EU) 2015/830 of 28 May 2015
Regulation (EU) 2015/1494 of 4 September 2015	Regulation (EU) 2016/266 of 7 December 2015	Regulation (EU) 2016/9 of 5 January 2016
Regulation (EU) 2016/26 of 13 January 2016	Regulation (EU) 2016/217 of 16 February 2016	Regulation (EU) 2016/863 of 31 May 2016

REACH SVHC List in Excel Table, Total Number: 169 Substances (Updated on 20 June 2016)

ECHA Source: http://echa.europa.eu/candidate-list-table

More Info: http://www.chemsafetypro.com

	Name	EC Number	CAS Number	Date of inclusion
1	Benzo[def]chrysene	200-028-5	50-32-8	20/06/2016
2	Nitrobenzene	202-716-0	98-95-3	12/17/2015
3	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	223-383-8	3864-99-1	12/17/2015
4	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	253-037-1	36437-37-3	12/17/2015
5	1,3-propanesultone	214-317-9	1120-71-4	12/17/2015
6	Perfluorononan-1-oic-acid and its sodium and ammonium salts	206-801-3	375-95-1, 21049-39-8, 4149-60-4	12/17/2015
7	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	6/15/2015
8	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]			6/15/2015
9	Bis (2-ethylhexyl)phthalate (DEHP)	204-211-0	117-81-7	2014/12/17; 2008/10/28
10	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	247-384-8	25973-55-1	12/17/2014
11	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	223-346-6	3846-71-7	12/17/2014
12	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	239-622-4	15571-58-1	12/17/2014
13	Cadmium fluoride	232-222-0	7790-79-6	12/17/2014
14	Cadmium sulphate	233-331-6	10124-36-4, 31119-53-6	12/17/2014
15	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)			12/17/2014
16	1,2-Benzenedicarboxylic acid, dihexylester, branched and linear	271-093-5	68515-50-4	6/16/2014
17	Cadmium chloride	233-296-7	10108-64-2	6/16/2014
18	Sodium perborate,perboric acid, sodium salt	239-172-9, 234-390-0		6/16/2014
19	Sodium peroxometaborate	231-556-4	7632-4-4,	6/16/2014
20	Cadmium sulphide	215-147-8	1306-23-6	12/16/2013
21	Dihexyl phthalate	201-559-5	84-75-3	12/16/2013
22	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	12/16/2013
23	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	12/16/2013
24	Imidazolidine-2-thione (2-imidazoline-2-thiol)	202-506-9	96-45-7	12/16/2013
25	Lead di(acetate)	206-104-4	301-04-2	12/16/2013
26	Trixylyl phosphate	246-677-8	25155-23-1	12/16/2013
27	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]			6/20/2013
28	Ammonium pentadecafluorooctanoate (APFO)	223-320-4	3825-26-1	6/20/2013
29	Cadmium	231-152-8	7440-43-9	6/20/2013
30	Cadmium oxide	215-146-2	1306-19-0	6/20/2013
31	Dipentyl phthalate (DPP)	205-017-9	131-18-0	6/20/2013
32	Pentadecafluorooctanoic acid (PFOA)	206-397-9	335-67-1	6/20/2013
33	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	84777-06-0	12/19/2012
34	1,2-Diethoxyethane	211-076-1	629-14-1	12/19/2012
35	1-bromopropane (n-propyl bromide)	203-445-0	106-94-5	12/19/2012
36	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	421-150-7	143860-04-2	12/19/2012
37	4,4'-methylenedi-o-toluidine	212-658-8	838-88-0	12/19/2012
38	4,4'-oxydianiline and its salts	202-977-0	101-80-4	12/19/2012
39	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]			12/19/2012
40	4-Aminoazobenzene	200-453-6	60-09-3	12/19/2012
41	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	202-453-1	95-80-7	12/19/2012
42	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]			12/19/2012
43	6-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8	12/19/2012
44	[Phthalato(2-)]dioxotrilead	273-688-5	69011-06-9	12/19/2012
45	Acetic acid, lead salt, basic	257-175-3	51404-69-4	12/19/2012
46	Biphenyl-4-ylamine	202-177-1	92-67-1	12/19/2012
47	Bis(pentabromophenyl) ether (decabromodiphenyl ether) (DecaBDE)	214-604-9	1163-19-5	12/19/2012
48	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	12/19/2012
49	Diazene-1,2-dicarboxamide (C,C`-azodi(formamide)) (ADCA)	204-650-8	123-77-3	12/19/2012
50	Dibutyltin dichloride (DBTC)	211-670-0	683-18-1	12/19/2012
51	Diethyl sulphate	200-589-6	64-67-5	12/19/2012
52	Diisopentylphthalate	210-088-4	605-50-5	12/19/2012
53	Dimethyl sulphate	201-058-1	77-78-1	12/19/2012
54	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	88-85-7	12/19/2012

55	Dioxobis(stearato)trilead	235-702-8	12578-12-0	12/19/2012
56	Fatty acids, C16-18, lead salts	292-966-7	91031-62-8	12/19/2012
57	Furan	203-727-3	110-00-9	12/19/2012
58	Henicosafluoroundecanoic acid	218-165-4	2058-94-8	12/19/2012
59	Heptacosafluorotetradecanoic acid	206-803-4	376-06-7	12/19/2012
60	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	12/19/2012
61	Lead bis(tetrafluoroborate)	237-486-0	13814-96-5	12/19/2012
62	Lead cyanamidate	244-073-9	20837-86-9	12/19/2012
63	Lead dinitrate	233-245-9	10099-74-8	12/19/2012
64	Lead monoxide (lead oxide)	215-267-0	1317-36-8	12/19/2012
65	Lead oxide sulfate	234-853-7	12036-76-9	12/19/2012
66	Lead titanium trioxide	235-038-9	12060-00-3	12/19/2012
67	Lead titanium zirconium oxide	235-727-4	12626-81-2	12/19/2012
68	Methoxyacetic acid	210-894-6	625-45-6	12/19/2012
69	Methyloxirane (Propylene oxide)	200-879-2	75-56-9	12/19/2012
70	N,N-dimethylformamide	200-679-5	68-12-2	12/19/2012
71	N-methylacetamide	201-182-6	79-16-3	12/19/2012
72	N-pentyl-isopentylphthalate		776297-69-9	12/19/2012
73	o-aminoazotoluene	202-591-2	97-56-3	12/19/2012
74	o-Toluidine	202-429-0	95-53-4	12/19/2012
75	Orange lead (lead tetroxide)	215-235-6	1314-41-6	12/19/2012
76	Pentacosafluorotridecanoic acid	276-745-2	72629-94-8	12/19/2012
77	Pentalead tetraoxide sulphate	235-067-7	12065-90-6	12/19/2012
78	Pyrochlore, antimony lead yellow	232-382-1	8012-00-8	12/19/2012
79	Silicic acid (H₂Si₂O₅), 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	12/19/2012
80	Silicic acid, lead salt	234-363-3	11120-22-2	12/19/2012
81	Sulfurous acid, lead salt, dibasic	263-467-1	62229-08-7	12/19/2012
82	Tetraethyllead	201-075-4	78-00-2	12/19/2012
83	Tetralead trioxide sulphate	235-380-9	12202-17-4	12/19/2012
84	Tricosafluorododecanoic acid	206-203-2	307-55-1	12/19/2012
85	Trilead bis(carbonate) dihydroxide	215-290-6	1319-46-6	12/19/2012
86	Trilead dioxide phosphonate	235-252-2	12141-20-7	12/19/2012
87	1,2-bis(2-methoxyethoxy)ethane (TEGDME,triglyme)	203-977-3	112-49-2	6/18/2012
88	1,2-dimethoxyethane,ethylene glycol dimethyl ether (EGDME)	203-794-9	110-71-4	6/18/2012
89	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	219-514-3	2451-62-9	6/18/2012
90	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	6/18/2012
91	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	6/18/2012
92	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	202-027-5	90-94-8	6/18/2012
93	[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	6/18/2012
94	[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	6/18/2012
95	Diboron trioxide	215-125-8	1303-86-2	6/18/2012
96	Formamide	200-842-0	75-12-7	6/18/2012
97	Lead(II) bis(methanesulfonate)	401-750-5	17570-76-2	6/18/2012
98	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	202-959-2	101-61-1	6/18/2012
99	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	6/18/2012
100	1,2-Dichloroethane	203-458-1	107-06-2	12/19/2011
101	2,2'-dichloro-4,4'-methylenedianiline	202-918-9	101-14-4	12/19/2011
102	2-Methoxyaniline,o-Anisidine	201-963-1	90-04-0	12/19/2011
103	4-(1,1,3,3-tetramethylbutyl)phenol	205-426-2	140-66-9	12/19/2011
104	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 (Na2O+K2O+CaO+MgO+BaO) content less or equal to 18% by weight			12/19/2011
105	Arsenic acid	231-901-9	7778-39-4	12/19/2011
106	Bis(2-methoxyethyl) ether	203-924-4	111-96-6	12/19/2011
107	Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8	12/19/2011
108	Calcium arsenate	231-904-5	7778-44-1	12/19/2011
109	Dichromium tris(chromate)	246-356-2	24613-89-6	12/19/2011
110	Formaldehyde, oligomeric reaction products with aniline	500-036-1	25214-70-4	12/19/2011
111	Lead diazide, Lead azide	236-542-1	13424-46-9	12/19/2011
112	Lead dipicrate	229-335-2	6477-64-1	12/19/2011
113	Lead styphnate	239-290-0	15245-44-0	12/19/2011
114	N,N-dimethylacetamide	204-826-4	127-19-5	12/19/2011

115	Pentazinc chromate octahydroxide	256-418-0	49663-84-5	12/19/2011
116	Phenolphthalein	201-004-7	77-09-8	12/19/2011
117	Potassium hydroxyoctaoxodizincatedichromate	234-329-8	11103-86-9	12/19/2011
118	Trilead diarsenate	222-979-5	3687-31-8	12/19/2011
119	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 micrometers (µm). c) alkaline oxide and alkali earth oxide (Na2O+K2O+CaO+MgO+BaO) content less or equal to 18% by weight			12/19/2011
120	Cobalt dichloride	231-589-4	7646-79-9	2011/06/20, 2008/10/28
121	1,2,3-trichloropropane	202-486-1	96-18-4	6/20/2011
122	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	276-158-1	71888-89-6	6/20/2011
123	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	271-084-6	68515-42-4	6/20/2011
124	1-Methyl-2-pyrrolidone (NMP)	212-828-1	872-50-4	6/20/2011
125	2-Ethoxyethyl acetate	203-839-2	111-15-9	6/20/2011
126	Hydrazine	206-114-9	302-01-2, 7803-57-8	6/20/2011
127	Strontium chromate	232-142-6	7789-6-2,	6/20/2011
128	2-Ethoxyethanol	203-804-1	110-80-5	12/15/2010
129	2-Methoxyethanol	203-713-7	109-86-4	12/15/2010
130	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	12/15/2010
131	Chromium trioxide	215-607-8	1333-82-0	12/15/2010
132	Cobalt(II) carbonate	208-169-4	513-79-1	12/15/2010
133	Cobalt(II) diacetate	200-755-8	71-48-7	12/15/2010
134	Cobalt(II) dinitrate	233-402-1	10141-05-6	12/15/2010
135	Cobalt(II) sulphate	233-334-2	10124-43-3	12/15/2010
136	Ammonium dichromate	232-143-1	7789-9-5,	6/18/2010
137	Boric acid	233-139-2, 234-343-4	10043-35-3, 11113-50-1	6/18/2010
138	Disodium tetraborate, anhydrous	215-540-4	1303-96-4, 1330-43-4, 12179-04-3	6/18/2010
139	Potassium chromate	232-140-5	7789-00-6	6/18/2010
140	Potassium dichromate	231-906-6	7778-50-9	6/18/2010
141	Sodium chromate	231-889-5	7775-11-3,	6/18/2010
142	Tetraboron disodium heptaoxide, hydrate	235-541-3	12267-73-1	6/18/2010
143	Trichloroethylene	201-167-4	79-01-6	6/18/2010
144	Acrylamide	201-173-7	79-06-1	3/30/2010
145	2,4-Dinitrotoluene	204-450-0	121-14-2	1/13/2010
146	Anthracene oil	292-602-7	90640-80-5	1/13/2010
147	Anthracene oil, anthracene paste	292-603-2	90640-81-6	1/13/2010
148	Anthracene oil, anthracene paste, anthracene fraction	295-275-9	91995-15-2	1/13/2010
149	Anthracene oil, anthracene paste, distn. lights	295-278-5	91995-17-4	1/13/2010
150	Anthracene oil, anthracene-low	292-604-8	90640-82-7	1/13/2010
151	Diisobutyl phthalate	201-553-2	84-69-5	1/13/2010
152	Lead chromate	231-846-0	7758-97-6	1/13/2010
153	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	235-759-9	12656-85-8	1/13/2010
154	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	215-693-7	1344-37-2	1/13/2010
155	Pitch, coal tar, high temp.	266-028-2	65996-93-2	1/13/2010
156	Tris(2-chloroethyl)phosphate	204-118-5	115-96-8	1/13/2010
157	4,4'- Diaminodiphenylmethane (MDA)	202-974-4	101-77-9	10/28/2008
158	5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)	201-329-4	81-15-2	10/28/2008
159	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	287-476-5	85535-84-8	10/28/2008
160	Anthracene	204-371-1	120-12-7	10/28/2008
161	Benzyl butyl phthalate (BBP)	201-622-7	85-68-7	10/28/2008
162	Bis(tributyltin) oxide (TBTO)	200-268-0	56-35-9	10/28/2008
163	Diarsenic pentaoxide	215-116-9	1303-28-2	10/28/2008
164	Diarsenic trioxide	215-481-4	1327-53-3	10/28/2008
165	Dibutyl phthalate (DBP)	201-557-4	84-74-2	10/28/2008
166	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane	247-148-4, 221-695-9	25637-99-4, 3194-55-6, 134237-50-6, 134237-51-7, 134237-52-8	10/28/2008
167	Lead hydrogen arsenate	232-064-2	7784-40-9	10/28/2008
168	Sodium dichromate	234-190-3	7789-12-0, 10588-01-9	10/28/2008
169	Triethyl arsenate	427-700-2	15606-95-8	10/28/2008