



REACH CERTIFICATE  
OF COMPLIANCE



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P/N: All M-QFN Series


**REACH SVHC** as of 15 June 2015

This is to certify that the above-mentioned product(s) do not contain any of the 163 REACH Substances of Very High Concern (SVHC), as specified in the list according to ECHA (European Chemical Agency).

Ref: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

**EC number, CAS number:** the EC number includes both anhydrous and hydrated forms of a substance and consequently the entries cover both these forms. The CAS number included may be for the anhydrous form only, and therefore the CAS number shown does not always describe the entry accurately

Declaration by:

Signed: 

Martin Hart, President

Date: 22 February 2016

## REACH REGULATION - Substances of Very High Concern List

Substance Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number	#
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)	<a href="#">ED/67/2008</a>	1
Anthracene	204-371-1	120-12-7	2008/10/28	PBT (article 57d)	<a href="#">ED/67/2008</a>	2
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)	<a href="#">ED/67/2008</a>	3
4,4'- Diaminodiphenylmethane (MDA)	202-974-4	101-77-9	2008/10/28	Carcinogenic (article 57a)	<a href="#">ED/67/2008</a>	4
Dibutyl phthalate (DBP)	201-557-4	84-74-2	2008/10/28	Toxic for reproduction (article 57c)	<a href="#">ED/67/2008</a>	5
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)	<a href="#">ED/67/2008</a>	6
Diarsenic pentaoxide	215-116-9	1303-28-2	2008/10/28	Carcinogenic (article 57a)	<a href="#">ED/67/2008</a>	7
Triethyl arsenate	427-700-2	15606-95-8	2008/10/28	Carcinogenic (article 57a)	<a href="#">ED/67/2008</a>	8
Diarsenic trioxide	215-481-4	1327-53-3	2008/10/28	Carcinogenic (article 57a)	<a href="#">ED/67/2008</a>	9
5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	201-329-4	81-15-2	2008/10/28	vPvB (article 57e)	<a href="#">ED/67/2008</a>	10
Bis(tributyltin)oxide (TBTO)	200-268-0	56-35-9	2008/10/28	PBT (article 57d)	<a href="#">ED/67/2008</a>	11
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)	<a href="#">ED/108/2014</a> <a href="#">ED/67/2008</a>	12
Benzyl butyl phthalate (BBP)	201-622-7	85-68-7	2008/10/28	Toxic for reproduction (article 57c)	<a href="#">ED/67/2008</a>	13
Lead hydrogen arsenate	232-064-2	7784-40-9	2008/10/28	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	<a href="#">ED/67/2008</a>	14
Anthracene oil, anthracene paste, distn. lights	295-278-5	91995-17-4	2010/01/13	Carcinogenic <sup>2</sup> , mutagenic <sup>3</sup> , PBT and vPvB (articles 57a, 57b, 57d and 57e)	<a href="#">ED/68/2009</a>	15
Pitch, coal tar, high temp.	266-028-2	65996-93-2	2010/01/13	Carcinogenic, PBT and vPvB (articles 57a, 57d and 57e)	<a href="#">ED/68/2009</a>	16
Anthracene oil, anthracene paste	292-603-2	90640-81-6	2010/01/13	Carcinogenic <sup>2</sup> , mutagenic <sup>3</sup> , PBT and vPvB (articles 57a, 57b, 57d and 57e)	<a href="#">ED/68/2009</a>	17
Lead chromate	231-846-0	7758-97-6	2010/01/13	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	<a href="#">ED/68/2009</a>	18
Tris(2-chloroethyl)phosphate	204-118-5	115-96-8	2010/01/13	Toxic for reproduction (article 57c)	<a href="#">ED/68/2009</a>	19
Diisobutyl phthalate	201-553-2	84-69-5	2010/01/13	Toxic for reproduction (article 57c)	<a href="#">ED/68/2009</a>	20
Anthracene oil, anthracene-low	292-604-8	90640-82-7	2010/01/13	Carcinogenic <sup>2</sup> , mutagenic <sup>3</sup> , PBT and vPvB (articles 57a, 57b, 57d and 57e)	<a href="#">ED/68/2009</a>	21
Anthracene oil, anthracene paste, anthracene fraction	295-275-9	91995-15-2	2010/01/13	Carcinogenic <sup>2</sup> , mutagenic <sup>3</sup> , PBT and vPvB (articles 57a, 57b, 57d and 57e)	<a href="#">ED/68/2009</a>	22
Anthracene oil	292-602-7	90640-80-5	2010/01/13	Carcinogenic <sup>1</sup> , PBT and vPvB (articles 57a, 57d and 57e)	<a href="#">ED/68/2009</a>	23
2,4-Dinitrotoluene	204-450-0	121-14-2	2010/01/13	Carcinogenic (article 57a)	<a href="#">ED/68/2009</a>	24
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)	<a href="#">ED/68/2009</a>	25
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)	<a href="#">ED/68/2009</a>	26
Acrylamide	201-173-7	79-06-1	2010/03/30	Carcinogenic and mutagenic (articles 57 a and 57 b)	<a href="#">ED/68/2009</a>	27
Potassium chromate	232-140-5	7789-00-6	2010/06/18	Carcinogenic and mutagenic (articles 57 a and 57 b).	<a href="#">ED/30/2010</a>	28

## REACH REGULATION - Substances of Very High Concern List

Substance Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number	#
Disodium tetraborate, anhydrous	215-540-4	1303-96-4, 1330-43-4, 12179-04-3	2010/06/18	Toxic for reproduction (article 57 c)	<a href="#">ED/30/2010</a>	29
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)	<a href="#">ED/30/2010</a>	30
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)	<a href="#">ED/30/2010</a>	31
Boric acid	233-139-2, 234-343-4	10043-35-3, 11113-50-1	2010/06/18	Toxic for reproduction (article 57 c)	<a href="#">ED/30/2010</a>	32
Tetraboron disodium heptaoxide, hydrate	235-541-3	12267-73-1	2010/06/18	Toxic for reproduction (article 57 c)	<a href="#">ED/30/2010</a>	33
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)	<a href="#">ED/30/2010</a>	34
Trichloroethylene	201-167-4	79-01-6	2010/06/18	Carcinogenic (article 57 a)	<a href="#">ED/30/2010</a>	35
Cobalt(II) dinitrate	233-402-1	10141-05-6	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	<a href="#">ED/95/2010</a>	36
Cobalt(II) carbonate	208-169-4	513-79-1	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	<a href="#">ED/95/2010</a>	37
Chromium trioxide	215-607-8	1333-82-0	2010/12/15	Carcinogenic and mutagenic (articles 57 a and 57 b)	<a href="#">ED/95/2010</a>	38
2-Methoxyethanol	203-713-7	109-86-4	2010/12/15	Toxic for reproduction (article 57c)	<a href="#">ED/95/2010</a>	39
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)	<a href="#">ED/95/2010</a>	40
Cobalt(II) sulphate	233-334-2	10124-43-3	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	<a href="#">ED/95/2010</a>	41
2-Ethoxyethanol	203-804-1	110-80-5	2010/12/15	Toxic for reproduction (article 57c)	<a href="#">ED/95/2010</a>	42
Cobalt(II) diacetate	200-755-8	71-48-7	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	<a href="#">ED/95/2010</a>	43
Hydrazine	206-114-9	302-01-2, 7803-57-8	2011/06/20	Carcinogenic (article 57a)	<a href="#">ED/31/2011</a>	44
2-Ethoxyethyl acetate	203-839-2	111-15-9	2011/06/20	Toxic for reproduction (article 57c)	<a href="#">ED/31/2011</a>	45
1,2,3-Trichloropropane	202-486-1	96-18-4	2011/06/20	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	<a href="#">ED/31/2011</a>	46
1-Methyl-2-pyrrolidone	212-828-1	872-50-4	2011/06/20	Toxic for reproduction (article 57c)	<a href="#">ED/31/2011</a>	47
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)	<a href="#">ED/31/2011</a>	48
Strontium chromate	232-142-6	7789-06-2	2011/06/20	Carcinogenic (article 57a)	<a href="#">ED/31/2011</a>	49
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)	<a href="#">ED/31/2011</a>	50
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)	<a href="#">ED/31/2011</a> / <a href="#">ED/67/2008</a>	51
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	-	-	2011/12/19	Carcinogenic (article 57 a)	<a href="#">ED/77/2011</a> / <a href="#">ED/95/2012</a>	52

Substance Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number	#
<i>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</i>						
2,2'-dichloro-4,4'-methylenedianiline	202-918-9	101-14-4	2011/12/19	Carcinogenic (article 57 a)	<a href="#">ED/77/2011</a>	53
Bis(2-methoxyethyl) ether	203-924-4	111-96-6	2011/12/19	Toxic for reproduction (article 57 c)	<a href="#">ED/77/2011</a>	54
Trilead diarsenate	222-979-5	3687-31-8	2011/12/19	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	<a href="#">ED/77/2011</a>	55
Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8	2011/12/19	Toxic for reproduction (article 57 c)	<a href="#">ED/77/2011</a>	56
Lead styphnate	239-290-0	15245-44-0	2011/12/19	Toxic for reproduction (article 57 c)	<a href="#">ED/77/2011</a>	57
Formaldehyde, oligomeric reaction products with aniline	500-036-1	25214-70-4	2011/12/19	Carcinogenic (article 57 a)	<a href="#">ED/77/2011</a>	58
Potassium hydroxyoctaoxidizincatedichromate	234-329-8	11103-86-9	2011/12/19	Carcinogenic (article 57 a)	<a href="#">ED/77/2011</a>	59
Arsenic acid	231-901-9	7778-39-4	2011/12/19	Carcinogenic (article 57 a)	<a href="#">ED/77/2011</a>	60
Pentazinc chromate octahydroxide	256-418-0	49663-84-5	2011/12/19	Carcinogenic (article 57 a)	<a href="#">ED/77/2011</a>	61
2-Methoxyaniline; o-Anisidine	201-963-1	90-04-0	2011/12/19	Carcinogenic (article 57 a)	<a href="#">ED/77/2011</a>	62
Dichromium tris(chromate)	246-356-2	24613-89-6	2011/12/19	Carcinogenic (article 57 a)	<a href="#">ED/77/2011</a>	63
Calcium arsenate	231-904-5	7778-44-1	2011/12/19	Carcinogenic (article 57 a)	<a href="#">ED/77/2011</a>	64
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	-	-	2011/12/19	Carcinogenic (article 57 a)	<a href="#">ED/77/2011</a> / <a href="#">ED/95/2012</a>	65
1,2-dichloroethane	203-458-1	107-06-2	2011/12/19	Carcinogenic (article 57 a)	<a href="#">ED/77/2011</a>	66
Lead dipicrate	229-335-2	6477-64-1	2011/12/19	Toxic for reproduction (article 57 c)	<a href="#">ED/77/2011</a>	67
Lead diazide, Lead azide	236-542-1	13424-46-9	2011/12/19	Toxic for reproduction (article 57 c),	<a href="#">ED/77/2011</a>	68
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)	<a href="#">ED/77/2011</a>	69
N,N-dimethylacetamide	204-826-4	127-19-5	2011/12/19	Toxic for reproduction (article 57 c)	<a href="#">ED/77/2011</a>	70
Phenolphthalein	201-004-7	77-09-8	2011/12/19	Carcinogenic (article 57 a)	<a href="#">ED/77/2011</a>	71
4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	202-027-5	90-94-8	2012/06/18	Carcinogenic (Article 57a)	<a href="#">ED/87/2012</a>	72

## REACH REGULATION - Substances of Very High Concern List

Substance Name	EC Number	CAS Number	Date of Inclusion	Reason for inclusion	Decision number	#
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)	<a href="#">ED/87/2012</a>	73
[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	2012/06/18	Carcinogenic (Article 57a)	<a href="#">ED/87/2012</a>	74
1,2-dimethoxyethane: ethylene glycol dimethyl ether (EGDME)	203-794-9	110-71-4	2012/06/18	Toxic for reproduction (Article 57 c)	<a href="#">ED/87/2012</a>	75
Lead(II) bis(methanesulfonate)	401-750-5	17570-76-2	2012/06/18	Toxic for reproduction (Article 57 c)	<a href="#">ED/87/2012</a>	76
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	2012/06/18	Carcinogenic (Article 57a)	<a href="#">ED/87/2012</a>	77
Formamide	200-842-0	75-12-7	2012/06/18	Toxic for reproduction (Article 57 c)	<a href="#">ED/87/2012</a>	78
1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3	112-49-2	2012/06/18	Toxic for reproduction (Article 57 c)	<a href="#">ED/87/2012</a>	79
Diboron trioxide	215-125-8	1303-86-2	2012/06/18	Toxic for reproduction (Article 57 c)	<a href="#">ED/87/2012</a>	80
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)	<a href="#">ED/87/2012</a>	81
N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	202-959-2	101-61-1	2012/06/18	Carcinogenic (Article 57a)	<a href="#">ED/87/2012</a>	82
[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	2012/06/18	Carcinogenic (Article 57a)	<a href="#">ED/87/2012</a>	83
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	2012/06/18	Carcinogenic (Article 57a)	<a href="#">ED/87/2012</a>	84
Lead cyanamidate	244-073-9	20837-86-9	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	85
Sulfurous acid, lead salt, dibasic	263-467-1	62229-08-7	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	86
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)	<a href="#">ED/169/2012</a>	87
4,4'-oxydianiline and its salts	202-977-0	101-80-4	2012/12/19	Carcinogenic (Article 57a); Mutagenic (Article 57b)	<a href="#">ED/169/2012</a>	88
Orange lead (lead tetroxide)	215-235-6	1314-41-6	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	89
Fatty acids, C16-18, lead salts	292-966-7	91031-62-8	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	90
Biphenyl-4-ylamine	202-177-1	92-67-1	2012/12/19	Carcinogenic (Article 57a)	<a href="#">ED/169/2012</a>	91
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	84777-06-0	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	92
Diisopentylphthalate	210-088-4	605-50-5	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	93
4-methyl-m-phenylenediamine (toluene-2,4-diamine)	202-453-1	95-80-7	2012/12/19	Carcinogenic (Article 57a)	<a href="#">ED/169/2012</a>	94
o-aminoazotoluene	202-591-2	97-56-3	2012/12/19	Carcinogenic (Article 57a)	<a href="#">ED/169/2012</a>	95
Trilead dioxide phosphonate	235-252-2	12141-20-7	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	96

## REACH REGULATION - Substances of Very High Concern List

Substance Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number	#
Methyloxirane (Propylene oxide)	200-879-2	75-56-9	2012/12/19	Carcinogenic (Article 57a); Mutagenic (Article 57b)	<a href="#">ED/169/2012</a>	97
Methoxyacetic acid	210-894-6	625-45-6	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	98
Pentacosafuorotridecanoic acid	276-745-2	72629-94-8	2012/12/19	vPvB (Article 57 e)	<a href="#">ED/169/2012</a>	99
Dioxobis(stearato)trilead	235-702-8	12578-12-0	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	100
1-bromopropane (n-propyl bromide)	203-445-0	106-94-5	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	101
Tricosafuorododecanoic acid	206-203-2	307-55-1	2012/12/19	vPvB (Article 57 e)	<a href="#">ED/169/2012</a>	102
Heptacosafuorotetradecanoic acid	206-803-4	376-06-7	2012/12/19	vPvB (Article 57 e)	<a href="#">ED/169/2012</a>	103
Pentalead tetraoxide sulphate	235-067-7	12065-90-6	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	104
N-pentyl-isopentylphthalate	-	776297-69-9	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	105
Tetraethyllead	201-075-4	78-00-2	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	106
[Phthalato(2-)]dioxotrilead	273-688-5	69011-06-9	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	107
Acetic acid, lead salt, basic	257-175-3	51404-69-4	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	108
Tetralead trioxide sulphate	235-380-9	12202-17-4	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	119
N-methylacetamide	201-182-6	79-16-3	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	110
1,2-Diethoxyethane	211-076-1	629-14-1	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	11
Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	88-85-7	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	112
Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	214-604-9	1163-19-5	2012/12/19	PBT (Article 57 d); vPvB (Article 57 e)	<a href="#">ED/169/2012</a>	113
Lead titanium trioxide	235-038-9	12060-00-3	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	114
Lead oxide sulfate	234-853-7	12036-76-9	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	115
Furan	203-727-3	110-00-9	2012/12/19	Carcinogenic (Article 57a)	<a href="#">ED/169/2012</a>	116
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)	<a href="#">ED/169/2012</a>	117
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)	<a href="#">ED/169/2012</a>	118
N,N-dimethylformamide	200-679-5	68-12-2	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	119
Dimethyl sulphate	201-058-1	77-78-1	2012/12/19	Carcinogenic (Article 57a)	<a href="#">ED/169/2012</a>	120
Diethyl sulphate	200-589-6	64-67-5	2012/12/19	Carcinogenic (Article 57a); Mutagenic (Article 57b)	<a href="#">ED/169/2012</a>	121
4,4'-methylenedi-o-toluidine	212-658-8	838-88-0	2012/12/19	Carcinogenic (Article 57a)	<a href="#">ED/169/2012</a>	122
Trilead bis(carbonate)dihydroxide	215-290-6	1319-46-6	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	123
Silicic acid (H <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> ), barium salt (1:1), lead-doped	272-271-5	68784-75-8	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	124

## REACH REGULATION - Substances of Very High Concern List

Substance Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number	#
<i>[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]</i>						
Lead dintrate	233-245-9	10099-74-8	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	125
Lead bis(tetrafluoroborate)	237-486-0	13814-96-5	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	126
Dibutyltin dichloride (DBTC)	211-670-0	683-18-1	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	127
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)	<a href="#">ED/169/2012</a>	128
o-Toluidine	202-429-0	95-53-4	2012/12/19	Carcinogenic (Article 57a)	<a href="#">ED/169/2012</a>	129
Lead monoxide (lead oxide)	215-267-0	1317-36-8	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	130
Lead titanium zirconium oxide	235-727-4	12626-81-2	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	131
Silicic acid, lead salt	234-363-3	11120-22-2	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	132
4-Aminoazobenzene	200-453-6	60-09-3	2012/12/19	Carcinogenic (Article 57a)	<a href="#">ED/169/2012</a>	133
Henicosafluoroundecanoic acid	218-165-4	2058-94-8	2012/12/19	vPvB (Article 57 e)	<a href="#">ED/169/2012</a>	134
Pyrochlore, antimony lead yellow	232-382-1	8012-00-8	2012/12/19	Toxic for reproduction (Article 57 c)	<a href="#">ED/169/2012</a>	135
Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2-dicarboxylic anhydride [3] <i>[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]</i>	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)	<a href="#">ED/169/2012</a>	136
6-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8	2012/12/19	Carcinogenic (Article 57a)	<a href="#">ED/169/2012</a>	137
Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] <i>[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]</i>	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)	<a href="#">ED/169/2012</a>	138
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)	<a href="#">ED/69/2013</a>	139
Dipentyl phthalate (DPP)	205-017-9	131-18-0	2013/06/20	Toxic for reproduction (Article 57 c)	<a href="#">ED/69/2013</a>	140
Pentadecafluorooctanoic acid (PFOA)	206-397-9	335-67-1	2013/06/20	Toxic for reproduction (Article 57 c); PBT (Article 57 d)	<a href="#">ED/69/2013</a>	141
Ammonium pentadecafluorooctanoate (APFO)	223-320-4	3825-26-1	2013/06/20	Toxic for reproduction (Article 57 c); PBT (Article 57 d)	<a href="#">ED/69/2013</a>	142
4-Nonylphenol, branched and linear, ethoxylated <i>[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]</i>	-	-	2013/06/20	Equivalent level of concern having probable serious effects to the environment (Article 57 f)	<a href="#">ED/69/2013</a>	143

Substance Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number	#
<i>substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof</i>						
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)	<a href="#">ED/69/2013</a>	144
Disodium 3,3'-[[[1,1'-biphenyl]-4,4'-diyl]bis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	209-358-4	573-58-0	2013/12/16	Carcinogenic (Article 57a)	<a href="#">ED/121/2013</a>	145
Dihexyl phthalate	201-559-5	84-75-3	2013/12/16	Toxic for reproduction (Article 57 c)	<a href="#">ED/121/2013</a>	146
Lead di(acetate)	206-104-4	301-04-2	2013/12/16	Toxic for reproduction (Article 57 c)	<a href="#">ED/121/2013</a>	147
Imidazolidine-2-thione; (2-imidazoline-2-thiol)	202-506-9	96-45-7	2013/12/16	Toxic for reproduction (Article 57 c)	<a href="#">ED/121/2013</a>	148
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)	<a href="#">ED/121/2013</a>	149
Trixylyl phosphate	246-677-8	25155-23-1	2013/12/16	Toxic for reproduction (Article 57 c)	<a href="#">ED/121/2013</a>	150
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)	<a href="#">ED/121/2013</a>	151
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)	<a href="#">ED/49/2014</a>	152
Sodium peroxometaborate	231-556-4	7632-04-4	2014/06/16	Toxic for reproduction (Article 57 c)	<a href="#">ED/49/2014</a>	153
Sodium perborate; perboric acid, sodium salt	239-172-9; 234-390-0	-	2014/06/16	Toxic for reproduction (Article 57 c)	<a href="#">ED/49/2014</a>	154
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	271-093-5	68515-50-4	2014/06/16	Toxic for reproduction (Article 57 c)	<a href="#">ED/49/2014</a>	155
Cadmium sulphate	233-331-6	10124-36-4, 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)	<a href="#">ED/108/2014</a>	156
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)	<a href="#">ED/108/2014</a>	157
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	247-384-8	25973-55-1	2014/12/17	PBT (Article 57 d); vPvB (Article 57 e)	<a href="#">ED/108/2014</a>	158
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)	<a href="#">ED/108/2014</a>	159
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)	<a href="#">ED/108/2014</a>	160
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)	<a href="#">ED/108/2014</a>	161



## REACH REGULATION - Substances of Very High Concern List

Substance Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number	#
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)	<a href="#">ED/39/2015</a>	162
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)	<a href="#">ED/39/2015</a>	163
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 57c) PBT (Article 57 c)	<a href="#">ED/79/2015</a>	164
Nitrobenzene	202-716-0	98-95-3	2015/12/17	Toxic for reproduction (Article 57c)	<a href="#">ED/79/2015</a>	165
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	253-037-1	36437-37-3	2015/12/17	Toxic for reproduction (Article 57c)	<a href="#">ED/79/2015</a>	166
2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	223-383-8	3864-99-1	2015/12/17	Toxic for reproduction (Article 57c)	<a href="#">ED/79/2015</a>	167
1,3-propanesultone	214-317-9	1120-71-4	2015/12/17	Carcinogenic (Article 57 a)	<a href="#">ED/79/2015</a>	168