

REACH Certificate of Compliance

ILSI America LLC/ILSI-MMD Inc. REACH Statement

REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) is a European Union Commission (EUC) Regulation on chemicals and their safe use (EC 1907/2006). REACH entered into force on June 1, 2007 and will be phased in until 2018.

ILSI America LLC/ILSI-MMD Inc. supports the aim of REACH in improving the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances.

ILSI America LLC/ILSI-MMD Inc. will meet all REACH requirements, where applicable, and is committed to provide our customers with information concerning the material content of ILSI products in accordance with any relevant REACH requirements.

Suppliers of articles must provide recipients with information on Substances of Very High Concern (SVHC) if those are present above a concentration limit of 0.1 % weight on an article level. This list of substances will be published in 2009. It is anticipated that substances used in electronic products will be registered by raw material manufacturers within the supply chain.

ILSI America LLC/ILSI-MMD Inc. continues to work with its suppliers to ensure that all SVHC are notified to the European Chemicals Agency, if necessary, to comply with this REACH requirement.

Candidate List

The European Chemicals Agency (ECHA) published on 28th of October 2008 the first list of substances of very high concern (SVHC) and amended it by 27th of June 2018. SVHCs are chemicals considered hazardous. Since that time any concentrations of above 0.1% article weight of the SVHC will have to be reported to down-stream users at least by naming the SVHC.

Substance Declaration Worksheet :

	Chemical	EC number	CAS number	>0.1%?
1	Anthracene	204-371-1	120-12-7	No
2	4,4'-Diaminodiphenylmethane, also 4,4'-Methylenedianiline	202-974-4	101-77-9	No
3	Dibutyl Phthalate, also n-Dibutyl Phthalate	201-557-4	84-74-2	No
4	Cobalt Dichloride	231-589-4	7646-79-9	No
5	Diarsenic Pentaoxide, also Arsenic Pentoxide	215-116-9	1303-28-2	No
6	Diarsenic Trioxide, also Arsenic Trioxide	215-481-4	1327-53-3	No
7	Sodium Dichromate	234-190-3	10588-01-9, 7789-12-0	No
8	5-tert-butyl-2,4,6-trinitro-m-xylene, also Musk Xylene	201-329-4	81-15-2	No
9	Bis(2-ethylhexyl)phthalate, also Dioctyl Phthalate	204-211-0	117-81-7	No
10	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)	No
11	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	287-476-5	85535-84-8	No
12	Bis(tributyltin) Oxide	200-268-0	56-35-9	No
13	Lead Hydrogen Arsenate	232-064-2	7784-40-9	No
14	Benzyl Butyl Phthalate	201-622-7	85-68-7	No
15	Triethyl Arsenate	427-700-2	15606-95-8	No
16	2,4-Dinitrotoluene	204-450-0	121-14-2	No
17	Aluminosilicate Refractory Ceramic Fibers <i>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</i>	Al2O3, SiO2	various	No
18	Anthracene oil	292-602-7	90640-80-5	No
19	Anthracene oil, Anthracene paste	292-603-2	90640-81-6	No
20	Anthracene oil, Anthracene paste, Anthracene fraction	295-275-9	91995-15-2	No
21	Anthracene oil, Anthracene paste, Anthracene distn. lights	295-278-5	91995-17-4	No
22	Anthracene oil, Anthracene-low	292-604-8	90640-82-7	No
23	Diisobutyl Phthalate	201-553-2	84-69-5	No
24	Lead Chromate	231-846-0	7758-97-6	No
25	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	235-759-9	12656-85-8	No
26	Lead Sulfochromate Yellow (C.I. Pigment Yellow 34)	215-693-7	1344-37-2	No
27	Pitch, Coal Tar, high temperature	266-028-2	65996-93-2	No
28	Tris (2-chloroethyl) phosphate	204-118-5	115-96-8	No

29	Zirconia Aluminosilicate Refractory Ceramic Fibers <i>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 (Na₂O+K₂O+CaO+MgO+BaO) content less or equal to 18% by weight</i>	Al ₂ O ₃ , SiO ₂ , ZrO ₂	various	No
30	Trichloroethylene	201-167-4	79-01-6	No
31	Boric acid	233-139-2 / 234-343-4	10043-35-3 / 11113-50-1	No
32	Disodium tetraborate, anhydrous	215-540-4	1330-43-4 / 12179-04-3 / 1303-96-4	No
33	Tetraboron disodium heptaoxide, hydrate	235-541-3	12267-73-1	No
34	Sodium chromate	231-889-5	7775-11-3	No
35	Potassium chromate	232-140-5	7789-00-6	No
36	Ammonium dichromate	232-143-1	7789-09-5	No
37	Potassium dichromate	231-906-6	7778-50-9	No
38	2-Ethoxyethanol	203-804-1	110-80-5	No
39	2-Methoxyethanol	203-713-7	109-86-4	No
40	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	No
41	Chromium trioxide	215-607-8	1333-82-0	No
42	Cobalt(II) carbonate	208-169-4	513-79-1	No
43	Cobalt(II) diacetate	200-755-8	71-48-7	No
44	Cobalt(II) dinitrate	233-402-1	10141-05-6	No
45	Cobalt(II) sulphate	233-334-2	10124-43-3	No
46	2-Ethoxyethyl acetate	203-839-2	111-15-9	No
47	Strontium chromate	232-142-6	7789-06-2	No
48	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	271-084-6	68515-42-4	No
49	Hydrazine	206-114-9	302-01-2 / 7803-57-8	No
50	1-Methyl-2-pyrrolidone	212-828-1	872-50-4	No
51	1,2,3-Trichloropropane	202-486-1	96-18-4	No
52	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	276-158-1	71888-89-6	No
53	2,2'-Dichloro-4,4'-methylenedianiline	202-918-9	101-14-4	No
54	2-Methoxyaniline; o-Anisidine	201-963-1	90-04-0	No
55	Calcium arsenate	231-904-5	7778-44-1	No
56	Trilead diarsenate	222-979-5	3687-31-8	No
57	Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8	No
58	N,N-dimethylacetamide	204-826-4	127-19-5	No
59	Lead styphnate	239-290-0	15245-44-0	No
60	Lead diazide, Lead azide	236-542-1	13424-46-9	No
61	Lead dipicrate	229-335-2	6477-64-1	No

62	Phenolphthalein	201-004-7	77-09-8	No
63	Arsenic acid	231-901-9	7778-39-4	No
64	Bis(2-methoxyethyl) ether	203-924-4	111-96-6	No
65	1,2-Dichloroethane	203-458-1	107-06-2	No
66	4-(1,1,3,3-Tetramethylbutyl)phenol; 4-tert-octyl phenol	205-426-2	140-66-9	No
67	Formaldehyde, oligomeric reaction products with aniline (technical MDA)	500-036-1	25214-70-4	No
68	Pentazinc chromate octahydroxide	256-418-0	49663-84-5	No
69	Potassium hydroxyoctaoxodizincatedichromate	234-329-8	11103-86-9	No
70	Dichromium tris(chromate)	246-356-2	24613-89-6	No
71	Acrylamide	201-173-7	79-06-1	No
72	[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)]	208-953-6	548-62-9	No
73	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	No
74	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3	112-49-2	No
75	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	No
76	Lead(II) bis(methanesulfonate)	401-750-5	17570-76-2	No
77	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	203-794-9	110-71-4	No
78	Diboron trioxide	215-125-8	1303-86-2	No
79	α,α -Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	229-851-8	6786-83-0	No
80	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	219-514-3	2451-62-9	No
81	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	202-027-5	90-94-8	No
82	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	202-959-2	101-61-1	No
83	[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 Michler's base (EC No. 202-959-2)]	219-943-6	2580-56-5	No
84	Formamide	200-842-0	75-12-7	No
85	Lead cyanamidate	244-073-9	20837-86-9	No
86	Sulfurous acid, lead salt, dibasic	263-467-1	62229-08-7	No
87	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	204-650-8	123-77-3	No

88	Fatty acids, C16-18, lead salts	292-966-7	91031-62-8	No
89	Diisopentylphthalate	210-088-4	605-50-5	No
90	Biphenyl-4-ylamine	202-177-1	92-67-1	No
91	Orange lead (lead tetroxide)	215-235-6	1314-41-6	No
92	4,4'-oxydianiline and its salts	202-977-0	101-80-4	No
93	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	84777-06-0	No
94	o-aminoazotoluene	202-591-2	97-56-3	No
95	Trilead dioxide phosphonate	235-252-2	12141-20-7	No
96	Methyloxirane (Propylene oxide)	200-879-2	75-56-9	No
97	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	202-453-1	95-80-7	No
98	Methoxyacetic acid	210-894-6	625-45-6	No
99	1-bromopropane (n-propyl bromide)	203-445-0	106-94-5	No
100	Heptacosafuorotetradecanoic acid	206-803-4	376-06-7	No
101	Tricosafuorododecanoic acid	206-203-2	307-55-1	No
102	Pentacosafuorotridecanoic acid	276-745-2	72629-94-8	No
103	Pentalead tetraoxide sulphate	235-067-7	12065-90-6	No
104	Tetraethyllead	201-075-4	78-00-2	No
105	Dioxobis(stearato)trilead	235-702-8	12578-12-0	No
106	N-pentyl-isopentylphthalate	-	776297-69-9	No
107	Tetralead trioxide sulphate	235-380-9	12202-17-4	No
108	1,2-Diethoxyethane	211-076-1	629-14-1	No
109	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	88-85-7	No
110	N-methylacetamide	201-182-6	79-16-3	No
111	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	214-604-9	1163-19-5	No
112	[Phthalato(2-)]dioxotrilead	273-688-5	69011-06-9	No
113	Acetic acid, lead salt, basic	257-175-3	51404-69-4	No
114	Lead titanium trioxide	235-038-9	12060-00-3	No

115	Lead oxide sulfate	234-853-7	12036-76-9	No
116	Dimethyl sulphate	201-058-1	77-78-1	No
117	Diethyl sulphate	200-589-6	64-67-5	No
118	4,4'-methylenedi-o-toluidine	212-658-8	838-88-0	No
119	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]	-	-	No
120	4-(1,1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]			No
121	N,N-dimethylformamide	200-679-5	68-12-2	No
122	Furan	203-727-3	110-00-9	No
123	Trilead bis(carbonate)dihydroxide	215-290-6	1319-46-6	No
124	Silicic acid (H ₂ Si ₂ O 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	No
125	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	421-150-7	143860-04-2	No
126	o-Toluidine	202-429-0	95-53-4	No
127	Lead monoxide (lead oxide)	215-267-0	1317-36-8	No
128	Lead titanium zirconium oxide	235-727-4	12626-81-2	No
129	4-Aminoazobenzene	200-453-6	60-09-3	No
130	Silicic acid, lead salt	234-363-3	11120-22-2	No
131	Lead dinitrate	233-245-9	10099-74-8	No
132	Lead bis(tetrafluoroborate)	237-486-0	13814-96-5	No
133	Dibutyltin dichloride (DBTC)	211-670-0	683-18-1	No
134	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	No

135	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	No
136	Henicosfluoroundecanoic acid	218-165-4	2058-94-8	No
137	6-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8	No
138	Pyrochlore, antimony lead yellow	232-382-1	8012-00-8	No
139	Cadmium oxide	215-146-2	1306-19-0	No
140	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 substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof</i>]			No
141	Dipentyl phthalate (DPP)	205-017-9	131-18-0	No
142	Pentadecafluorooctanoic acid (PFOA)	206-397-9	335-67-1	No
143	Ammonium pentadecafluorooctanoate (APFO)	223-320-4	3825-26-1	No
144	Cadmium	231-152-8	7440-43-9	No
145	Lead di(acetate)	206-104-4	301-04-2	No
146	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	No
147	Trixylyl phosphate	246-677-8	25155-23-1	No
148	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	202-506-9	96-45-7	No
149	Dihexyl phthalate	201-559-5	84-75-3	No
150	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	No
151	Cadmium sulphide	215-147-8	1306-23-6	No
152	Cadmium chloride	233-296-7	10108-64-2	No
153	Sodium peroxometaborate	231-556-4	7632-04-4	No
154	Sodium perborate; perboric acid, sodium salt	239-172-9; 234-390-0	-	No
155	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	271-093-5	68515-50-4	No
156	Cadmium sulphate	233-331-6	10124-36-4, 31119-53-6	No
157	Cadmium fluoride	232-222-0	7790-79-6	No

158	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	247-384-8	25973-55-1	No
159	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	239-622-4	15571-58-1	No
-	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)	-	-	No
160	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	223-346-6	3846-71-7	No
161	Bis(2-ethylhexyl) phthalate (DEHP)	204-211-0	117-81-7	No
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]	-	-	No
163	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	No
164	Perfluorononan-1-oic-acid and its sodium and ammonium salts	206-801-3	375-95-1, 21049-39-8, 4149-60-4	No
165	Nitrobenzene	202-716-0	98-95-3	No
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	253-037-1	36437-37-3	No
167	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	223-383-8	3864-99-1	No
168	1,3-propanesultone	214-317-9	1120-71-4	No
169	Benzo[def]chrysene	200-028-5	50-32-8	No
170	p-(1,1-dimethylpropyl)phenol	201-280-9	80-46-6	No
171	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts Decanoic acid, nonadecafluoro-, sodium salt EC no.: - CAS no.: 3830-45-3 Ammonium nonadecafluorodecanoate EC no.: 221-470-5 CAS no.: 3108-42-7 Nonadecafluorodecanoic acid EC no.: 206-400-3 CAS no.: 335-76-2	-	-	No
172	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	-	-	No
173	4,4'-isopropylidenediphenol Bisphenol A; BPA	201-245-8	80-05-7	No
174	Perfluorohexane-1-sulphonic acid and its salts PFHxS	-	-	No

175	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) with ≥0.1% w/w 4-heptylphenol, branched and linear (4-HPbl)	-	-	No
176	Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus" TM) covering any of its individual anti- and syn-isomers or any combination thereof	-	-	No
177	Chrysene	205-923-4	218-01-9, 1719-03-5	No
178	Cadmium nitrate	233-710-6	10022-68-1, 10325-94-7	No
179	Cadmium hydroxide	244-168-5	21041-95-2	No
180	Cadmium carbonate	208-168-9	513-78-0	No
181	Benz[a]anthracene	200-280-6	56-55-3, 1718-53-2	No
182	Terphenyl, Hydrogenated	262-967-7	61788-32-7	No
183	Octamethylcyclotetrasiloxane	209-136-7	556-67-2	No
184	Lead	231-100-4	7439-92-1	No
185	Ethylenediamine	203-468-6	107-15-3	No
186	Dodecamethylcyclohexasiloxane	208-762-8	540-97-6	No
187	Disodium Octaborate	234-541-0	12008-41-2	No
188	Dicyclohexyl Phthalate	201-545-9	84-61-7	No
189	Decamethylcyclopentasiloxane	208-764-9	541-02-6	No
190	Benzo[ghi]perylene	205-883-8	191-24-2	No
191	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride	209-008-0	552-30-7	No

ILSI America LLC/ILSI-MMD Inc. QC Man. (Signed)	<i>Randy Mendoza</i>	Date	07/24/18
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