

REACH Information from Elektrisola

Dear customer,

REACH (**R**egistration, **E**valuation and **A**uthorization of **C**hemicals) in Europe asks for registration of chemical substances in Europe after December 1, 2008. Enamelled wire is not required to be listed, as it is considered as an "article", not as a chemical substance.

ECHA (**E**uropean **C**hemicals **A**gency) has proposed enclosed list of chemicals, which should not be contained in articles of above 0.1 % (w/w) content. Hereby Elektrisola declares that our enamelled wire products fully comply with the regulation of REACH with respect to the Substances of Very High Concern (SVHC) as published by ECHA until today (<http://echa.europa.eu/candidated-list-table>). For the individual chemical please see enclosed list.

All suppliers to European Elektrisola factories are in correspondence with REACH, so no problem of supply should occur.

Please contact us should you have any questions, or if we can be of further



Jake Cheng Zhenhui
Quality Manager
Elektrisola Hangzhou Co., Ltd

phone: +86 571 8852 0788
fax: +86 571 8852 0780
email: jake.cheng@elektrisola.cn

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Enclosure

List of Chemicals

**Enclosure to REACH Information from Elektrisola:
SVHC candidate list as of 15th January 2018**

1. 1-bromopropane (n-propyl bromide)
2. 1,2,3-trichloropropane
3. 1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H) trione(TGIC)
4. 1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β -TGIC)
5. 1,2-benzenedicarboxylic acid, di-C6-8-branched alkylesters, C7-rich
6. 1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with $\geq 0.3\%$ of dihexyl phthalate (EC No. 201-559-5)
7. 1,2-benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters
8. 1,2- Benzenedicarboxylic acid, dihexyl ester, branched and linear
9. 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear
10. 1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)
11. 1,2-dichloroethane
12. 1,2-diethoxyethane
13. 1,2-dimethoxyethane; ethylene glycol dimethylether (EGDME)
14. 1,3-propanesultone
15. 1-methyl-2-pyrrolidone
16. 1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo [12.2.1.1^{6,9}.0^{2,13}.0^{5,10}]octadeca-7,15-diene ("Dechlorane Plus"TM) [covering any of its individual anti- and syn-isomers or any combination thereof]
17. 2,2'-dichloro-4,4'-methylenedianiline
18. 2,4-dinitrotoluene
19. 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)
20. 2- benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)
21. 2-ethoxyethanol
22. 2-ethoxyethyl acetate
23. 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)
24. 2-methoxyaniline; o-Anisidine
25. 2-methoxyethanol
26. 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine

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27. 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)
28. 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)
29. 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated
[covering well-defined substances and UVCB substances, polymers and homologues]
30. 4-(1,1,3,3-tetramethylbutyl)phenol, 4-tert-octyl phenol
31. [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)]
32. 4,4'-bis(dimethylamino)benzophenone (Michler's ketone)
33. 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)]
34. 4,4'-diaminodiphenylmethane (MDA)
35. 4,4'-isopropylidenediphenol (bisphenol A; BPA)
36. 4,4'-methylenedi-*o*-toluidine
37. 4,4'-oxydianiline and its salts
38. [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)]
39. 4-aminoazobenzene
40. 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]
41. 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]
42. 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]
43. 4-methyl-*m*-phenylenediamine (toluene-2,4-diamine)
44. 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]

45. 5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)
46. 6-methoxy-*m*-toluidine (p-cresidine)
47. Acetic acid, lead salt, basic
48. Acrylamide
49. Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)
50. Aluminosilicate Refractory Ceramic Fibres
(Oxides of aluminium and silicone are present within variable concentration ranges)
51. Ammonium dichromate
52. Ammonium pentadecafluorooctanoate (APFO)
53. Anthracene
54. Anthracene oil
55. Anthracene oil, anthracene paste
56. Anthracene oil, anthracene paste, anthracene fraction
57. Anthracene oil, anthracene paste, distn. lights
58. Anthracene oil, anthracene-low
59. Arsenic acid
60. Benz[a]anthracene
61. Benzo[def]chrysene (Benzo[a]pyrene)
62. Benzyl butyl phthalate (BBP)
63. Biphenyl-4-ylamine
64. Bis (2-ethylhexyl)phthalate (DEHP)
65. Bis(2-methoxyethyl) phthalate
66. Bis(2-methoxyethyl) ether
67. Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)
68. Bis(tributyltin)oxide (TBTO)
69. Boric acid
70. Calcium arsenate
71. Cadmium
72. Cadmium carbonate
73. Cadmium chloride
74. Cadmium fluoride
75. Cadmium hydroxide
76. Cadmium nitrate
77. Cadmium Oxide
78. Cadmium sulphate
79. Cadmium sulphide
80. Chromic acid, oligomers of chromic acid and dichromic acid
81. Chormium trioxide

82. Chrysene
83. Cobalt dichloride
84. Cobalt (II) carbonate
85. Cobalt (II) diacetate
86. Cobalt (II) dinitrate
87. Cobalt (II) sulphate
88. 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].
89. Diarsenic pentaoxide
90. Diarsenic trioxide
91. Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))
92. Diboron trioxide
93. Dibutyl phthalate (DBP)
94. Dibutyltin dichloride (DBTC)
95. Dichromium tris(chromate)
96. Diethyl sulphate
97. Dihexyl phthalate
98. Diisobutyl phthalate
99. Diisopentylphthalate (DIPP)
100. Dimethyl sulphate
101. Dinoseb (6-sec-butyl-2,4-dinitrophenol)
102. Dioxobis(stearato)trilead
103. Dipentyl phthalate (DPP)
104. Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)
105. 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)
106. Disodium tetraborate, anhydrous
107. Fatty acids, C16-18, lead salts
108. Furan
109. Henicosafuoroundecanoic acid
110. Heptacosafuorotetradecanoic acid
111. Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified:

- Alpha-hexabromocyclododecane
- Beta-hexabromocyclododecane
- Gamma-hexabromocyclododecane
- 112. 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]
- 113. Imidazolidine-2-thione (2-imidazoline-2-thiol)
- 114. Formaldehyde, oligomeric reaction products with aniline (technical MDA)
- 115. Formamide
- 116. Hydrazine
- 117. Lead(II) bis(methanesulfonate)
- 118. Lead bis(tetrafluoroborate)
- 119. Lead chromate
- 120. Lead chromate molybdate sulphate red (C.I. Pigment Red 104)
- 121. Lead cyanamidate
- 122. Lead diazide, Lead azide
- 123. Lead di (acetate)
- 124. Lead dinitrate
- 125. Lead dipicrate
- 126. Lead hydrogen arsenate
- 127. Lead monoxide (Lead oxide)
- 128. Lead oxide sulfate
- 129. Lead styphnate
- 130. Lead sulfochromate yellow (C.I. Pigment Yellow 34)
- 131. Lead titanium trioxide
- 132. Lead titanium zirconium oxide
- 133. Methoxyacetic acid
- 134. Methyloxirane (Propylene oxide)
- 135. Nitrobenzene
- 136. Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts
- 137. N-methylacetamide
- 138. N-pentyl-isopentylphthalate
- 139. N,N-dimethylacetamide
- 140. N,N-dimethylformamide
- 141. N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)

142. *o*-aminoazotoluene [(4-*o*-tolylazo-*o*-toluidine)]
143. *o*-toluidine
144. Orange lead (Lead tetroxide)
145. *p*-(1,1-dimethylpropyl)phenol
146. Pentacosafuorotridecanoic acid
147. Pentadecafluorooctanoic acid (PFOA)
148. Pentalead tetraoxide sulphate
149. Pentazinc chromate octahydroxide
150. Perfluorohexane-1-sulphonic acid and its salts
151. Perfluorononan-1-*oic*-acid and its sodium and ammonium salts
152. Phenolphthalein
153. Pitch, coal tar, high temp.
154. Potassium chromate
155. Potassium dichromate
156. Potassium hydroxyoctaoxodizincatedichromate
157. Pyrochlore, antimony lead yellow
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)
159. 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]
160. 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]
161. Silicic acid, lead salt
162. Sodium chromate
163. Sodium dichromate
164. Sodium perborate; perboric acid, sodium salt
165. Sodium peroxometaborate
166. Strontium chromate
167. Sulfurous acid, lead salt, dibasic
168. Tetraboron disodium heptaoxide, hydrate
169. Tetraethyllead
170. Tetralead trioxide sulphate

171. Trichloroethylene
172. Tricosafuorododecanoic acid
173. Triethyl arsenate
174. Tris(2-chloroethyl)phosphate
175. Trilead bis(carbonate)dihydroxide
176. Trilead diarsenate
177. Trilead dioxide phosphonate
178. Trixylyl phosphate
179. Zirconia Aluminosilicate Refractory Ceramic Fibres
(Oxides of aluminium, silicon and zirconium are present within variable concentration ranges)
180. [Phthalato(2-)]dioxotrilead
181. 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)]