

## REACH Information from Elektrisola

Dear customer,

REACH (Registration, Evaluation and Authorization of Chemicals) 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 (European Chemicals Agency) 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 (<https://echa.europa.eu/candidate-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 assistance.



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**Enclosure**  
List of Chemicals

## Enclosure to REACH Information from Elektrisola: SVHC candidate list as of 27<sup>th</sup> June 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 ( $\beta$ -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<sup>6,9</sup>.0<sup>2,13</sup>.0<sup>5,10</sup>]octadeca-7,15-diene ("Dechlorane Plus"<sup>TM</sup>) [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
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. Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride) (TMA)
62. Benzo[def]chrysene (Benzo[a]pyrene)
63. Benzo[ghi]perylene
64. Benzyl butyl phthalate (BBP)
65. Biphenyl-4-ylamine
66. Bis (2-ethylhexyl)phthalate (DEHP)

67. Bis(2-methoxyethyl) phthalate
68. Bis(2-methoxyethyl) ether
69. Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)
70. Bis(tributyltin)oxide (TBTO)
71. Boric acid
72. Calcium arsenate
73. Cadmium
74. Cadmium carbonate
75. Cadmium chloride
76. Cadmium fluoride
77. Cadmium hydroxide
78. Cadmium nitrate
79. Cadmium oxide
80. Cadmium sulphate
81. Cadmium sulphide
82. Chromic acid, oligomers of chromic acid and dichromic acid
83. Chromium trioxide
84. Chrysene
85. Cobalt dichloride
86. Cobalt (II) carbonate
87. Cobalt (II) diacetate
88. Cobalt (II) dinitrate
89. Cobalt (II) sulphate
90. 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]*
91. Decamethylcyclopentasiloxane (D5)
92. Diarsenic pentaoxide
93. Diarsenic trioxide

94. Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))
95. Diboron trioxide
96. Dibutyl phthalate (DBP)
97. Dibutyltin dichloride (DBTC)
98. Dichromium tris(chromate)
99. Dicyclohexyl phthalate (DCHP)
100. Diethyl sulphate
101. Dihexyl phthalate
102. Diisobutyl phthalate
103. Diisopentylphthalate (DIPP)
104. Dimethyl sulphate
105. Dinoseb (6-sec-butyl-2,4-dinitrophenol)
106. Dioxobis(stearato)trilead
107. Dipentyl phthalate (DPP)
108. Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)
109. 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)
110. Disodium octaborate
111. Disodium tetraborate, anhydrous
112. Dodecamethylcyclohexasiloxane (D6)
113. Ethylenediamine (EDA)
114. Fatty acids, C16-18, lead salts
115. Furan
116. Henicosaflluoroundecanoic acid
117. Heptacosaflluorotetradecanoic acid
118. Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified:  
Alpha-hexabromocyclododecane  
Beta-hexabromocyclododecane  
Gamma-hexabromocyclododecane
119. 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]*

120. Imidazolidine-2-thione (2-imidazoline-2-thiol)
121. Formaldehyde, oligomeric reaction products with aniline (technical MDA)
122. Formamide
123. Hydrazine
124. Lead
125. Lead(II) bis(methanesulfonate)
126. Lead bis(tetrafluoroborate)
127. Lead chromate
128. Lead chromate molybdate sulphate red (C.I. Pigment Red 104)
129. Lead cyanidate
130. Lead diazide, Lead azide
131. Lead di(acetate)
132. Lead dinitrate
133. Lead dipicrate
134. Lead hydrogen arsenate
135. Lead monoxide (Lead oxide)
136. Lead oxide sulfate
137. Lead styphnate
138. Lead sulfochromate yellow (C.I. Pigment Yellow 34)
139. Lead titanium trioxide
140. Lead titanium zirconium oxide
141. Methoxyacetic acid
142. Methyloxirane (Propylene oxide)
143. Nitrobenzene
144. Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts
145. N-methylacetamide

146. N-pentyl-isopentylphthalate
147. N,N-dimethylacetamide
148. N,N-dimethylformamide
149. N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)
150. o-aminoazotoluene [(4-o-tolylazo-o-toluidine)]
151. o-toluidine
152. Octamethylcyclotetrasiloxane (D4)
153. Orange lead (Lead tetroxide)
154. p-(1,1-dimethylpropyl)phenol
155. Pentacosafuorotridecanoic acid
156. Pentadecafluorooctanoic acid (PFOA)
157. Pentalead tetraoxide sulphate
158. Pentazinc chromate octahydroxide
159. Perfluorohexane-1-sulphonic acid and its salts
160. Perfluorononan-1-oic-acid and its sodium and ammonium salts
161. Phenolphthalein
162. Pitch, coal tar, high temp.
163. Potassium chromate
164. Potassium dichromate
165. Potassium hydroxyoctaoxodizincatedichromate
166. Pyrochlore, antimony lead yellow
167. 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)
168. Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) [with  $\geq 0.1\%$  w/w 4-heptylphenol, branched and linear
169. Silicic acid ( $\text{H}_2\text{Si}_2\text{O}_5$ ), 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]*

170. Silicic acid, lead salt
171. Sodium chromate
172. Sodium dichromate
173. Sodium perborate; perboric acid, sodium salt
174. Sodium peroxometaborate
175. Strontium chromate
176. Sulfurous acid, lead salt, dibasic
177. Terphenyl hydrogenated
178. Tetraboron disodium heptaoxide, hydrate
179. Tetraethyllead
180. Tetralead trioxide sulphate
181. Trichloroethylene
182. Tricosafuorododecanoic acid
183. Triethyl arsenate
184. Tris(2-chloroethyl)phosphate
185. Trilead bis(carbonate)dihydroxide
186. Trilead diarsenate
187. Trilead dioxide phosphonate
188. Trixylyl phosphate
189. Zirconia Aluminosilicate Refractory Ceramic Fibres  
(Oxides of aluminium, silicon and zirconium are present within variable concentration ranges)
190. [Phthalato(2-)]dioxotrilead
191.  $\alpha,\alpha$ -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)]*