Declaration of EU REACH Compliance

Compliance Certificate for Vicor Products and Packaging

Vicor certifies that to the best of its knowledge Vicor Products and Packaging Materials meet Regulation (EC) 1907/2006 of the European Union's Registration, Evaluation, Authorization (and Restriction) of Chemicals (also known as the "REACH Regulation").

Vicor has no registration obligations under Article 7, as Vicor produces only articles and none of these articles have an intended release of any substances/mixtures.

Vicor has reviewed the Candidate List of 247 SVHCs, presented below:

Substance Name	CAS Number
1. Anthracene	120-12-7
2. 4,4'-Diaminodiphenylmethane (MDA)	101-77-9
3. Dibutyl phthalate (DBP)	84-74-2
4. Anthracene oil	90640-80-5
5. Cobalt dichloride	7646-79-9
6. Benzyl butyl phthalate (BBP)	85-68-7
7. Diarsenic pentaoxide	1303-28-2
8. Diarsenic trioxide	1327-53-3
9. Sodium dichromate	7789-12-0 10588-01-9
10. 5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)	81-15-2
11. Anthracene oil, anthracene paste, distn. lights	91995-17-4
12. Hexabromocyclododecane (HBCDD) and all major diasterisomers identified	25637-99-4 3194-55-6 134237-50-8 134237-51-7 134237-52-8
13. Bis(tributyltin) oxide (TBTO)	56-35-9
14. Lead hydrogen arsenate	7784-40-9
15. Triethyl arsenate	15606-95-8
16. Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8
17. Anthracene oil, anthracene paste, anthracene fraction	91995-15-2
18. Anthracene oil, anthracene-low	90640-82-7
19. Anthracene oil, anthracene paste	90640-81-6
20. Pitch, coal tar, high temp.	65996-93-2
21. Aluminosilicate Refractory Ceramic Fibres	
22. Zirconia Aluminosilicate Refractory Ceramic Fibres	
23. 2,4-Dinitrotoluene	121-14-2

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Substance Name	CAS Number
24. Diisobutyl phthalate	84-69-5
25. Lead chromate	7758-97-6
26. Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	12656-85-8
27. Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2
28. Tris(2-chloroethyl) phosphate	115-96-8
29. Trichloroethylene	79-01-6
30. Boric acid	10043-35-3 11113-50-1
31. Disodium tetraborate, anhydrous	1303-96-4 1330-43-4 12179-04-3
32. Tetraboron disodium heptaoxide, hydrate	12267-73-1
33. Sodium chromate	7775-11-3
34. Potassium chromate	7789-00-6
35. Ammonium dichromate	7789-09-5
36. Potassium dichromate	7778-50-9
37. Acrylamide	79-06-1
38. 2-Ethoxyethanol	110-80-5
39. 2-Methoxyethanol	109-86-4
40. Cobalt (II) diacetate	71-48-7
41. Cobalt (II) carbonate	513-79-1
42. Cobalt (II) dinitrate	10141-05-6
43. Cobalt (II) sulphate	10124-43-3
44. Chromium trioxide	1333-82-0
45. Acids generated from chromium trioxide and their oligomers	7738-94-5 13530-68-2
46. Cyclohexane-1,2-dicarboxylic anhydride all possible combinations of the cis- and trans-isomers	13149-00-3 85-42-7 14166-21-3
47. 2-Ethoxyethyl acetate	111-15-9
48. Strontium chromate	7789-06-7
49. 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4
50. Hydrazine	302-01-2 7803-57-8
51. 1-Methyl-2-pyrrolidone (NMP)	872-50-4
52. 1,2,3-Trichloropropane	96-18-4
53. 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6

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Substance Name	CAS Number
54. Lead styphnate	15245-44-0
55. Lead diazide, Lead azide	13424-46-9
56. Lead dipicrate	6477-64-1
57. Phenolphthalein	77-09-8
58. 2,2'-Dichloro-4,4'-methylenedianiline	101-14-4
59. N,N-dimethylacetamide	127-19-5
60. Trilead diarsenate	3687-31-8
61. Calcium arsenate	7778-44-1
62. Arsenic acid	7778-39-4
63. Bis(2-methoxyethyl) ether	111-96-6
64. 1,2-Dichloroethane	107-06-2
65. 4-(1,1,3,3-Tetramethylbutyl) phenol	140-66-9
66. 2-Methoxyaniline; o-Anisidine	90-04-0
67. Bis(2-methoxyethyl) phthalate	117-82-8
68. Formaldehyde, oligomeric reaction products with aniline	25214-70-4
69. 1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4
70. [4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	2580-56-5
71. Pentazinc chromate octahydroxide	49663-84-5
72. Potassium hydroxyoctaoxodizincatedichromate	11103-86-9
73. Dichromium tris(chromate)	24613-89-6
74. a,a-Bis[4-(dimethylamino)phenyl]-4-(phenylamino) naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0
75. N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1
76. 1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	59653-74-6
77. 1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2
78. 4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1
79. Lead(II) bis(methanesulfonate)	17570-76-2
80. Formamide	75-12-7
81. [4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9
82. 1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	2451-62-9
83. Bis(pentabromophenyl) ether (decabromodiphenyl ether) (DecaBDE)	1163-19-5
84. Pentacosafluorotridecanoic acid	72629-94-8
85. Tricosafluorododecanoic acid	307-55-1
86. Henicosafluoroundecanoic acid	2058-94-8
87. Heptacosafluorotetradecanoic acid	376-06-7

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	Substance Name	CAS Number
88.	4-(1,1,3,3-tetramethylbutyl) phenol, ethoxylated covering well-defined substances and UVCB substances, polymers and homologues	
89.	4-Nonylphenol, branched and linear, ethoxylated substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently UCVB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof	
90.	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) (ADCA)	123-77-3
91.	Methoxyacetic acid	625-45-6
92.	4,4'-sulphonyldiphenol	80-09-1
93.	1,2-Benzenedicarboxylic acid, dipentyl ester, branched and linear	84777-06-0
94.	Diisopentylphthalate (DIPP)	605-50-5
95.	n-pentyl-isopentyl phthalate	776297-69-9
96.	1,2-Diethoxyethane	629-14-1
97.	N,N-dimethylformamide	68-12-2
98.	Dibutyltin dichloride (DBTC)	683-18-1
99.	Acetic acid, lead salt, basic	51404-69-4
100.	Trilead bis(carbonate)dihydroxide	1319-46-6
101.	Lead oxide sulfate	12036-76-9
102.	[Phthalato(2-)]dioxotrilead	69011-06-9
103.	Dioxobis(stearato)trilead	12578-12-0
104.	Fatty acids, C16-18, lead salts	91031-62-8
105.	Lead bis(tetrafluoroborate)	13814-96-5
106.	Lead cyanamidate	20837-86-9
107.	Lead dinitrate	10099-74-8
108.	Lead monoxide (lead oxide)	1317-36-8
109.	Orange lead (lead tetroxide)	1314-41-6
110.	Lead titanium trioxide	12060-00-3
111.	Lead titanium zirconium oxide	12626-81-2
112.	Pentalead tetraoxide sulphate	12065-90-6
113.	Pyrochlore, antimony lead yellow	8012-00-8
114.	Silicic acid (H2SI205), barium salt (1:1), lead-doped	68784-75-8
115.	Silicic acid, lead salt	11120-22-2
116.	Sulfurous acid, lead salt, dibasic	62229-08-7
117.	Tetraethyllead	78-00-2
118.	Tetralead trioxide sulphate	12202-17-4
119.	Trilead dioxide phosphonate	12141-20-7
120.	Furan	110-00-9

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Substance Name	CAS Number
121. Methyloxirane (Propylene oxide)	75-56-9
122. Diethyl sulphate	64-67-5
123. Dimethyl sulphate	77-78-1
124. 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2
125. Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7
126. 4,4′-methylenedi-o-toluidine	838-88-0
127. 4,4′-oxydianiline and its salts	
128. 4-Aminoazobenzene	60-09-3
129. 4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7
130. 6-methoxy-m-toluidine (p-cresidine)	120-71-8
131. Biphenyl-4-ylamine	92-67-1
132. o-aminoazotoluene	97-56-3
133. o-Toluidine	95-53-4
134. N-methylacetamide	79-16-3
135. 1-bromopropane (n-propyl bromide)	106-94-5
136. Cadmium	7440-43-9
137. Cadmium oxide	1306-19-0
138. Ammonium pentadecafluorooctanoate (APFO)	3825-26-1
139. Pentadecafluorooctanoic acid (PFOA)	335-67-1
140. Dipentyl phthalate (DPP)	131-18-0
141. 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 UCVB- and well-defined substances which include any of the individual isomers or a combination thereof	
142. Cadmium sulphide	1306-23-6
143. 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)	1937-37-7
144. Dihexyl phthalate	84-75-3
145. Imidazolidine-2-thione (2-Imadazoline-2-thiol)	96-45-7
146. Trixylyl phosphate	25155-23-1
147. Disodium 3,3′-[[1,1′-biphenyl]-4,4′-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0
148. Lead di(acetate)	301-04-2
149. Cadmium chloride	10108-64-2
150. 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4
151. Sodium peroxometaborate	7632-04-4
152. Sodium perborate; perboric acid, sodium salt	
153. Bis(2-ethyl(hexyl)phthalate) (DEHP)	117-81-7

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Substance Name		CAS Number
154.	Cadmium fluoride	7790-79-6
155.	Cadmium sulphate	10124-36-4 31119-53-6
156.	1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters	68515-51-5
157.	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	
158.	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7
159.	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1
160.	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1
161.	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)	
162.	Nitrobenzene	98-95-3
163.	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1
164.	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-sec-butyl)phenol (UV-350)	36437-37-3
165.	1,3-propanesultone	1120-71-4
166.	Perfluorononan-1-oic-acid and its sodium and ammonium salts	375-95-1 21049-39-8 4149-60-4
167.	Benzo[def]chrysene(Benzo[a]pyrene)	50-32-8
168.	4,4′-Isopropylidenediphenol Bisphenol A; BPA	80-05-7
169.	4-Heptylphenol, branched and linear	
170.	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts; Nonadecafluorodecanoic acid CAS 335-76-2 Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts; Ammonium nonadecafluorodecanate CAS 3108-42-7 Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts; Sodium nonadecafluorodecanate CAS 3830-45-3	
171.	p-(1,1-dimethylpropyl)phenol	80-46-6
172.	Perfluorohexane-1-sulphonic acid and its salts	
173.	Cadmium carbonate	513-78-0
174.	Cadmium nitrate	10325-94-7
175.	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP)	
176.	Benz[a]anthracene	56-55-3 1718-53-2
177.	Cadmium hydroxide	21041-95-2

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Substance Name		CAS Number
178.	Chrysene	218-01-9 1719-03-5
179.	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10] octadeca-7,15-diene ("Dechlorane Plus") covering any of its individual anti- and syn-isomers or any combination thereof	
180.	Decamethylcyclopentasiloxane	541-02-6
181.	Dodecamethylcyclohexasiloxane	540-97-6
182.	Disodium octaborate	12008-41-2
183.	Benzo(ghi)perylene	191-24-2
184.	Terphenyl, hydrogenated	61788-32-7
185.	Ethylenediamine	107-15-3
186.	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride rimellitic anhydride; TMA	552-30-7
187.	Dicyclohexyl phthalate DCHP	84-61-7
188.	(+-)-1,7,7-trimethyl-3-[(methylphenol)methtlene)bicyclo[2.2.1]heptan-2-one covering any of the individual isomers and/or combinations thereof (4-MBC)	
189.	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6
190.	Benzo[k]fluoranthene	207-08-9
191.	Fluoranthene	206-44-0
192.	Phenanthrene	85-01-8
193.	Pyrene	129-00-0
194.	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides covering any of their individual isomers and combinations thereof	
195.	2-methoxyethyl acetate	110-49-6
196.	4-tert-butylphenol	98-54-4
197.	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)	
198.	Bumetrizole (UV-326)	3896-11-5
199.	Diisohexyl phthalate	71850-09-4
200.	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1
201.	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5
202.	Perfluorobutane sulfonic acid (PFBS) and its salts	
203.	Butyl 4-hydroxybenzoate	94-26-8
204.	2-methylimidazole	693-98-1
205.	1-vinylimidazole	1072-63-5
206.	Dibutylbis(pentane-2,4-dionato-O,O')tin	22673-19-4
207.	Octamethylcyclotetrasiloxane	556-67-2
208.	bis(2-(2-methoxyethoxy)ethyl) ether	143-24-8

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	Substance Name	CAS Number
209.	Dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety	
210.	2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers	
211.	Orthoboric acid, sodium salt	
212.	2,2-bis(bromomethyl)propane1,3-diol (BMP)	3296-90-0
	2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA)	
	2,3-dibromo-1-propanol (2,3-DBPA)	96-13-9
213.	Glutaral	111-30-8
214.	Medium-chain chlorinated paraffins (MCCP) UVCB substances consisting of more than or equal to 80% linear chloroalkanes with carbon chain lengths within the range from C14 to C17	
215.	Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/or combinations thereof (PDDP)	
216.	1,4-dioxane	123-91-1
217.	4,4’-(1-methylpropylidene)bisphenol	77-40-7
218.	tris(2-methoxyethoxy)vinylsilane	1067-53-4
219.	S-(tricyclo(5.2.1.0'2,6)deca-3-en-8(or 9)-yl O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate	255881-94-8
220.	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	119-47-1
221.	1,7,7-trimethyl-3- (phenylmethylene)bicyclo[2.2.1]heptan-2-one	15087-24-8
222.	N-(hydroxymethyl)acrylamide	924-42-5
223.	Reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine	
224.	Perfluoroheptanoic acid and its salts	
225.	Isobutyl 4-hydroxybenzoate	4247-02-3
226.	bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof	
227.	Barium diboron tetraoxide	13701-59-2
228.	Hexahydromethylphathalic anhydride, including cis- and trans- stereo isomeric forms and all possible combinations of the isomers	25550-51-0 19438-60-9 48122-14-1 57110-29-9
229.	4,4’-bis(dimethylamino)benzophenone (Michler’s ketone)	90-94-8
230.	1,1'-[ethane-1,2-diylbisoxy]bis[2,4,6-tribromobenzene]	37853-59-1
231.	2,4,6-tri-tert-butylphenol	732-26-3
232.	2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)	3147-75-9
233.	2-(dimethylamino)-2-[(4-methylphenyl)methyl]-1-[4-(morpholin-4-yl)phenyl]butan-1-one	119344-86-4
234.	Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol	
235.	Bis(α,α-dimethylbenzyl) peroxide	80-43-4
236.	Triphenyl Phosphate	115-86-6
237.	Reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	192268-65-8

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Substance Name	CAS Number
238. Perfluamine	338-83-0
239. Octamethyltrisiloxane	107-51-7
240. O,O,O-triphenyl phosphorothioate	597-82-0
241. 6-[(C10-C13)-alkyl-(branched, unsaturated)-2,5-dioxopyrrolidin-1-yl]hexanoic acid	2156592-54-8
242. 1,1,1,3,5,5,5-heptamethyl-3-[(trimethylsilyl)oxy]trisiloxane	17928-28-8
243. Decamethyltetrasiloxane	141-62-8
244. Tetra(sodium/potassium) 7-[(E)-{2-acetamido-4-[(E)-(4-{[4-chloro-6-({2-[(4-fluoro-6-{[4-(vinylsulfonyl) phenyl]amino}-1,3,5-triazine-2-yl)amino]propyl}amino)-1,3,5-triazine-2-yl]amino}-5-sulfonato-1-naphthyl) diazenyl]-5-methoxyphenyl}diazenyl]-1,3,6-naphthalenetrisulfonate; Reactive Brown 51	
245. 1,1'-(ethane-1,2 diyl) bis[pentabromobenzene] (DBDPE)	84852-53-9
246. n-hexane	110-54-3
247. 4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]diphenol and its salts	1478-61-1 75768-65-9 126049-00-1 921213-47-0 577705-90-9

Vicor has no notification obligations under Article 33, concerning these SVHCs, as none are present in Vicor products and packaging, or are present below the 0.1% wt./wt. concentration limit.

SVHC Lead (CAS 7439-92-1) is present in virtually all Vicor products above the 0.1% wt./wt. concentration limit.

SVHC Diboron Trioxide (CAS 1303-86-2) is present in virtually all Vicor products above the 0.1% wt./wt. concentration limit.

SVHC Melamine (CAS 108-78-1) is present in virtually all Vicor ChiP™ products above the 0.1% wt./wt. concentration limit.

SVHC 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol (CAS 79-94-7) is present in virtually all Vicor Brick legacy products above the 0.1% wt./wt. concentration limit.

SVHC Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (CAS 75980-60-8) is present in all Vicor products above the 0.1% wt,/wt. concentration limit.

SVHC Bis(4-chlorophenyl) sulphone (CAS 80-07-9) is present in all Vicor products above the 0.1% wt,/wt. concentration limit.

The specific products involved and the associated concentrations can be determined by contacting Vicor Quality Assurance.

Vicor products and packaging contain none of the banned substances listed in EU REACH Annex XVII.

In addition, Vicor requires that its parts and material suppliers provide full material disclosure on their products as part of the ongoing material declaration effort.

Edward C. Fink, Jr.
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