TEST REPORT

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Test Report No. : 6135536.50QS
Project no. : 6135536

Client	:	Hangzhou Tianye Packaging Technology Co., Ltd Room 509,Building 2, No.26 Wuzhou Road, Donghu Street, Linping District, Hangzhou City 311100, Zhejiang Province, China
Date sample received	:	2022.06.30 / 2022.07.13
Product	:	Plastic tube, PET bottle, HDPE bottle
Product description	:	Please refer to next page(s).
Test Requested	:	European Commission Regulation 1907/2006 (REACH Act)
Test Method	:	In-house method with reference to EPA: 8270D, 3052, 3050B, 6010C, 3550C, 8321B, EN14362, DIN EN ISO 17353, IEC 62321, ISO 14389, AfPS GS 2019:01 and EN 14582.
Result	:	Please refer to next page(s).
Conclusion	:	None of the analysed REACH-SVHC-substances (see table on page 3 – 10) were found in a concentration above 0.1 % in the incorporated articles; therefore the threshold values according to Regulation 1907/2006 article 33 (effective candidate list June 10th, 2022) for these REACH-SVHC-substances are not exceeded.
Testing Period	:	2022.06.30—2022.07.22

Signed for and on behalf of
DEKRA Testing and Certification (Shanghai) Ltd

Wu Jialei（吴嘉雷）
Project Manager

Sheng Jinghuan(盛景焕)
Test Engineer

Picture of the product

Summary and assessment:

The here tested SVHC-substances do not exceed the threshold values according to the SVHC-list of Article 59 (June 10th, 2022), Regulation 1907/2006 (REACH).

Tested Articles	Tested Plan	Summary
001	II	All tested SVHC < 0.1%
002	II	All tested SVHC < 0.1%
003	II	All tested SVHC < 0.1%
004	II	All tested SVHC < 0.1%
005	II	All tested SVHC < 0.1%

Above results apply for single articles within the product (including all articles, which were analyzed in mixed samples).

Test Plan II

No.	Name of the compound	CAS	Report Limit
1	2,4-Dinitrotoluene	121-14-2	0.1%
2	2-Ethoxyethanol	110-80-5	0.1%
3	2-Methoxyethanol	109-86-4	0.1%
4	4,4'- Diaminodiphenylmethane (MDA)	101-77-9	0.1%
5	Musk xylene	81-15-2	n.a.
6	Acrylamide	79-06-1	0.1%
7	Alkanes, C 10 – C 13, chloro-	85535-84-8	0.1%
8	Aluminosilicate refractory ceramic fibres [(a)]	-	n.a.
9	Ammonium dichromate	7789-09-5	0.1%
10	Anthracene	120-12-7	0.1%
11	Anthracene oil	90640-80-5	0.1%[1)]
12	Anthracene oil, anthracene paste	90640-81-6	0.1%[1)]
13	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	0.1%[1)]
14	Anthracene oil, anthracene paste, distn.lights	91995-17-4	0.1%[1)]
15	Anthracene oil, anthracene-low	90640-82-7	0.1%[1)]
16	Benzyl butyl phthalate (BBP)	85-68-7	0.1%
17	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	0.1%
18	Bis(tributyltin)oxide (TBTO)	56-35-9	0.1%
19	Boric acid	10043-35-3 11113-50-1	0.1%
20	Chromic and Dichromic acid, oligomers of chromic and dichromic acid	7738-94-5 13530-68-2	0.1%
21	Chromium trioxide	1333-82-0	0.1%
22	Cobalt dichloride	7646-79-9	0.1%
23	Cobalt carbonate	513-79-1	0.1%
24	Cobalt diacetate	71-48-7	0.1%
25	Cobalt dinitrate	10141-05-6	0.1%
26	Cobalt sulphate	10124-43-3	0.1%
27	Diarsenic pentaoxide	1303-28-2	0.1%
28	Diarsenic trioxide	1327-53-3	0.1%
29	Dibutyl phthalate (DBP)	84-74-2	0.1%
30	Diisobutyl phthalate (DiBP)	84-69-5	0.1%
31	Disodium tetraborate, anhydrous	1330-43-4	0.1%
	pentahydrate	12179-04-3	0.1%
	decahydrate	1303-96-4	0.1%
32	Hexabromocyclododecane (HBCDD)	25637-99-4 (*)	0.1%
33	Lead chromate	7758-97-6	0.1%
34	Lead chromate molybdate sulphate red	12656-85-8	0.1%
35	Lead hydrogene arsenate	7784-40-9	0.1%
36	Lead sulphochromate yellow	1344-37-2	0.1%
37	Pitch, coal tar, high temp.	-	n.a.
38	Potassium chromate	7789-00-6	0.1%
39	Potassium dichromate	7778-50-9	0.1%

40	Sodium chromate	7775-11-3	0.1%
41	Sodium dichromate	7789-12-0 / 10588-01-9	0.1%
42	Tetraboron disodium heptaoxide, hydrate	12267-73-1	0.1% 2)
43	Trichlorethylene	79-01-6	0.1%
44	Triethyl arsenate	15606-95-8	0.1%
45	Tris(2-chlorethyl)phosphate (TCEP)	115-96-8	0.1%
46	Zirconia Aluminosilicate refractory ceramic fibres (b)	-	n.a.
47	2-Ethoxyethyl acetate	111-15-9	0.1%
48	1,2,3-Trichloropropane	96-18-4	0.1%
49	1-Methyl-2-pyrrolidone	872-50-4	0.1%
50	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	0.1%
51	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	0.1%
52	Strontium chromate		0.1%
53	Hydrazine	7803-57-8/ 302-01-2	n.a.
54	Lead styphnate	15245-44-0	0.1%
55	Lead diazide, Lead azide	13424-46-9	0.1%
56	Lead dipicrate	6477-64-1	0.1%
57	Phenolphthalein	77-09-8	n.a.
58	2,2'-Dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	0.1%
59	N,N-dimethylacetamide (DMAC)	127-19-5	0.1%
60	Trilead diarsenate	3687-31-8	0.1%
61	Calcium arsenate	7778-44-1	0.1%
62	Arsenic acid	7778-39-4	0.1%
63	Bis(2-methoxyethyl) ether (Diglyme)	111-96-6	0.1%
64	1,2-Dichloroethane	107-06-2	0.1%
65	4-(1,1,3,3-Tetramethylbutyl)phenol; 4-tert-octyl phenol (Octylphenol)	140-66-9	0.1%
66	2-Methoxyaniline; o-Anisidine (Anisidine)	90-04-0	0.1%
67	Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	0.1%
68	Formaldehyde, oligomeric reaction products with aniline (technical MDA)	25214-70-4	0.1%
69	Pentazinc chromate octahydroxide	49663-84-5	0.1%
70	Potassium hydroxyoctaoxodizincatedichromate	11103-86-9	0.1%
71	Dichromium tris(chromate)	24613-89-6	0.1%
72	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	0.1%
73	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	0.1%
74	4,4'-bis(dimethylamino)-4"-(methylamino)trityl alcohol	561-41-1	n.a.3)
75	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	0.1%
76	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9	n.a.3)
77	[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	n.a.3)
78	Diboron trioxide	1303-86-2	0.1%
79	Formamide	75-12-7	0.1%
80	Lead(II) bis(methanesulfonate)	17570-76-2	0.1%

81	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	0.1%
82	TGIC (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)	2451-62-9	n.a.
83	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	n.a.[3)]
84	β-TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)	59653-74-6	n.a.
85	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	1163-19-5	0.1%
86	Pentacosafluorotridecanoic acid	72629-94-8	n.a.
87	Tricosafluorododecanoic acid	307-55-1	n.a.
88	Henicosafluoroundecanoic acid	2058-94-8	n.a.
89	Heptacosafluorotetradecanoic acid	376-06-7	n.a.
90	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	n.a
91	Cyclohexane-1,2-dicarboxylic anhydride [1] cis-cyclohexane-1,2-dicarboxylic anhydride [2] trans-cyclohexane-1,2-dicarboxylic anhydride [3] (c)	85-42-7, 13149-00-3, 14166-21-3	0.1%
92	Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] (d)	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	0.1%
93	4-Nonylphenol, branched and linear (e)	-	0.1%
94	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated (f)	-	0.1%
95	Methoxyacetic acid	625-45-6	n.a.
96	N,N-dimethylformamide	68-12-2	0.1%
97	Dibutyltin dichloride (DBTC)	683-18-1	0.1%
98	Lead monoxide (Lead oxide)	1317-36-8	0.1%
99	Orange lead (Lead tetroxide)	1314-41-6	0.1%
100	Lead bis(tetrafluoroborate)	13814-96-5	0.1%
101	Trilead bis(carbonate)dihydroxide	1319-46-6	0.1%
102	Lead titanium trioxide	12060-00-3	0.1%
103	Lead titanium zirconium oxide	12626-81-2	0.1%
104	Silicic acid, lead salt	11120-22-2	0.1%
105	Silicic acid ($H_2Si_2O_5$), barium salt (1:1), lead-doped (g)	68784-75-8	0.1%
106	1-bromopropane (n-propyl bromide)	106-94-5	0.1%
107	Methyloxirane (Propylene oxide)	75-56-9	n.a.
108	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	0.1%
109	Diisopentylphthalate (DIPP)	605-50-5	0.1%
110	N-pentyl-isopentylphthalate	776297-69-9	0.1%
111	1,2-diethoxyethane	629-14-1	n.a.
112	Acetic acid, lead salt, basic	51404-69-4	0.1%
113	Lead oxide sulfate	12036-76-9	0.1%
114	[Phthalato(2-)]dioxotrilead	69011-06-9	0.1%
115	Dioxobis(stearato)trilead	12578-12-0	0.1%
116	Fatty acids, C16-18, lead salts	91031-62-8	0.1%
117	Lead cynamidate	20837-86-9	0.1%
118	Lead dinitrate	10099-74-8	0.1%
119	Pentalead tetraoxide sulphate	12065-90-6	0.1%
120	Pyrochlore, antimony lead yellow	8012-00-8	0.1%

121	Sulfurous acid, lead salt, dibasic	62229-08-7	0.1%
122	Tetraethyllead	78-00-2	0.1%
123	Tetralead trioxide sulphate	12202-17-4	0.1%
124	Trilead dioxide phosphonate	12141-20-7	0.1%
125	Furan	110-00-9	n.a.
126	Diethyl sulphate	64-67-5	n.a.
127	Dimethyl sulphate	77-78-1	n.a.
128	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	n.a.
129	Dinoseb (6-*sec*-butyl-2,4-dinitrophenol)	88-85-7	n.a.
130	4,4'-methylenedi-*o*-toluidine	838-88-0	0.1%
131	4,4'-oxydianiline and its salts	101-80-4	0.1%
132	4-aminoazobenzene	60-09-3	n.a.
133	4-methyl-*m*-phenylenediamine (toluene-2,4-diamine)	95-80-7	0.1%
134	6-methoxy-*m*-toluidine (p-cresidine)	120-71-8	n.a.
135	Biphenyl-4-ylamine	92-67-1	n.a.
136	o-aminoazotoluene [(4-*o*-tolylazo-*o*-toluidine])	97-56-3	n.a.
137	o-toluidine	95-53-4	n.a.
138	N-methylacetamide	79-16-3	n.a.
139	Pentadecafluorooctanoic acid (PFOA)	335-67-1	n.a.
140	Cadmium oxide	1306-19-0	0.1%
141	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	n.a.
142	Cadmium	7440-43-9	0.1%
143	4-Nonylphenol, branched and linear, ethoxylated h)	--	0.1%
144	Dipentyl phthalate (DPP)	131-18-0	0.1%
145	Cadmium sulphide	1306-23-6	0.1%
146	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	n.a.
147	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	n.a.
148	Di-n-hexyl phthalate (DnHP)	84-75-3	0.1%
149	Imidazolidine-2-thione (2-imidazoline-2-thiol)	96-45-7	n.a.
150	Lead di(acetate)	301-04-2	0.1%
151	Trixylyl phosphate	25155-23-1	0.1%
152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	0.1%
153	Cadmium chloride	10108-64-2	0.1%
154	Sodium perborate; perboric acid, sodium salt	15120-21-5 11138-47-9 10332-33-9 13517-20-9 10486-00-7 37244-98-7 90568-23-3 125022-34-6	0.1%
155	Sodium peroxometaborate	7632-04-4 12040-72-1 10332-33-9 13517-20-9 10486-00-7	0.1%

		37244-98-7	
156	Cadmium fluoride	7790-79-6	0.1%
157	Cadmium sulphate	10124-36-4; 31119-53-6	0.1%
158	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	0.1%
159	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	0.1%
160	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	0.1%
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)	-	n.a.
162	1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2- Benzenedicarboxylicacid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate	68515-51-5 68648-93-1	0.1%
163	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] i)	-	n.a.
164	1,3-propanesultone	1120-71-4	0.1%
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	0.1%
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	0.1%
167	Nitrobenzene	98-95-3	0.1%
168	Perfluorononan-1-oic-acid and its sodium and ammonium salts	375-95-1 21049-39-8 4149-60-4	n.a.
169	Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	0.1%
170	p-(1,1-dimethylpropyl)phenol	80-46-6	0.1%
171	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	335-76-2 3830-45-3 3108-42-7	n.a.
172	4-Heptylphenol, branched and linear (j)	-	0.1%
173	4,4'-isopropylidenediphenol	80-05-7	0.1%
174	Perfluorohexane-1-sulphonic acid and its salts	-	n.a.
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)	-	0.1%
176	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	-	0.1%
177	Chrysene	218-01-9, 1719-03-5	0.1%
178	Cadmium nitrate	10022-68-1, 10325-94-7	0.1%
179	Cadmium hydroxide	21041-95-2	0.1%
180	Cadmium carbonate	513-78-0	0.1%
181	Benz[a]anthracene	56-55-3, 1718-53-2	0.1%

182	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride; TMA)	552-30-7	0.1%
183	Benzo[ghi]perylene	191-24-2	0.1%
184	Decamethylcyclopentasiloxane (D5)	541-02-6	0.1%
185	Dicyclohexyl phthalate (DCHP)	84-61-7	0.1%
186	Disodium octaborate	12008-41-2	0.1%
187	Dodecamethylcyclohexasiloxane (D6)	540-97-6	0.1%
188	Ethylenediamine (EDA)	107-15-3	0.1%
189	Lead	7439-92-1	0.1%
190	Octamethylcyclotetrasiloxane (D4)	556-67-2	0.1%
191	Terphenyl, hydrogenated	61788-32-7	n.a.
192	Pyrene	129-00-0; 1718-52-1	0.1%
193	Phenanthrene	85-01-8	0.1%
194	Fluoranthene	206-44-0; 93951-69-0	0.1%
195	Benzo[k]fluoranthene	207-08-9	0.1%
196	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	0.1%
197	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one (3-benzylidene camphor)	15087-24-8	0.1%
198	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP**)**	-	0.1%
199	4-tert-butylphenol	98-54-4	0.1%
200	2-methoxyethyl acetate	110-49-6	0.1%
201	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid (FRD-903), its salts and its acyl halides	-	0.1%
202	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	0.1%
203	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	0.1%
204	Diisohexyl phthalate	71850-09-4	0.1%
205	Perfluorobutane sulfonic acid (PFBS) and its salts	-	n.a
206	1-vinylimidazole	1072-63-5	n.a
207	2-methylimidazole	693-98-1	n.a
208	Dibutylbis(pentane-2,4-dionato-O,O')tin	22673-19-4	n.a
209	Butyl 4-hydroxybenzoate (Butylparaben)	94-26-8	n.a
210	Bis(2-(2-methoxyethoxy)ethyl)ether	143-24-8	0.1%
211	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	-	0.1%
212	1,4-dioxane	123-91-1	0.1%
213	2,2-bis(bromomethyl)propane-1,3-diol (BMP); 2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA); 2,3-dibromo-1-propanol (2,3-DBPA)	-	0.1%
214	2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers	-	0.1%
215	4,4'-(1-methylpropylidene)bisphenol	77-40-7	0.1%
216	Glutaral	111-30-8	0.1%
217	Medium-chain chlorinated paraffins (MCCP)	-	0.1%
218	Orthoboric acid, sodium salt	-	0.1%

219	Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)	-	0.1%
220	(±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one covering any of the individual isomers and/or combinations thereof (4-MBC)	-	0.1%
221	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol (DBMC)	119-47-1	0.1%
222	tris(2-methoxyethoxy)vinylsilane	1067-53-4	0.1%
223	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	n.a.
224	N-(hydroxymethyl)acrylamide	924-42-5	0.1%

(n.a.: not analyzed; the test was not carried out because concerning the material it could be accepted that this SVHC-compound is not present)

a. oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges; fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm); alkaline oxide and alkali earth oxide (Na2O+K2O+CaO+MgO+BaO) content less or equal to 18% by weight.
b. oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges; fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm);alkaline oxide and alkali earth oxide (Na2O+K2O+CaO+MgO+BaO) content less or equal to 18% by weight.
c. [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].
d. [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]
e. [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]
f. [covering well-defined substances and UVCB substances, polymers and homologues]
g. [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]
h. 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. [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]
j. [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]

(*) 25637-99-4, 3194-55-6 and all major diastereoisomers 134237-50-6, 134237-51-7, 134237-52-8

[1] analysed as Anthracene, Phenanthrene, Fluoranthene, Pyrene and Fluorene.
[2] value is depending on the number of hydration water in the substance; in the anhydrous form the amount has the smallest value and is increasing with the number of hydration water
[3] if the concentration of the impurities Michler's ketone or Michler's base is equal to or higher than 0.1%

Current ECHA Candidate List of substances of very high concern for Authorisation:
https://echa.europa.eu/candidate-list-table

Test Method lists

Parameter	Unit	MDL	Test method
REACH-SVHC-Substances Group 1 (Elements of inorganic and organic compounds)			
Arsenic	mg/kg	20	EN ISO 11885
Lead	mg/kg	20	EN ISO 11885
Cobalt	mg/kg	20	EN ISO 11885
Chromium	mg/kg	20	EN ISO 11885
Boron	mg/kg	20	EN ISO 11885
Tin	mg/kg	20	EN ISO 11885
Cadmium	mg/kg	20	EN ISO 11885
Chromium VI	mg/kg	20	IEC 62321
REACH-SVHC-Substances Group 2 (organic compounds)			
Diisobutyl phthalate (DiBP)	mg/kg	100	ISO 14389
Dibutyl phthalate (DBP)	mg/kg	100	ISO 14389
Bis(2-methoxyethyl)phthalate (DMEP)	mg/kg	100	ISO 14389
Diisopentylphthalat (DIPP)	mg/kg	100	ISO 14389
N-pentyl-Isopentylphthalat (PIPP)	mg/kg	100	ISO 14389
Benzyl butyl phthalate (BBP)	mg/kg	100	ISO 14389
Bis(2-ethylhexyl) phthalate (DEHP)	mg/kg	100	ISO 14389
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkylesters (DHNUP)	mg/kg	100	ISO 14389
Diisoheptyl phthalate (DIHP)	mg/kg	100	ISO 14389
1,2-Benzendicarboxylic acid, dipentylester, branched and linear	mg/kg	100	ISO 14389
Dipentyl phthalate (DPP)	mg/kg	100	ISO 14389
Di-n-hexyl phthalate (DnHP)	mg/kg	100	ISO 14389
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	mg/kg	100	ISO 14389
1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2- Benzenedicarboxylicacid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate	mg/kg	200	ISO 14389
Dicyclohexyl phthalate (DCHP)	mg/kg	100	ISO 14389
Diisohexyl phthalate	mg/kg	100	ISO 14389
Acrylamide	mg/kg	100	Inhouse method / GC-MS
2,4-Dinitrotoluene	mg/kg	100	Inhouse method / GC-MS
Bis(tributyltin)oxide (TBTO)	mg/kg	100	Inhouse method / GC-MS

Cyclohexane-1,2-dicarboxylic anhydride (HHPA)	mg/kg	100	Inhouse method / GC-MS
O-Anisidine	mg/kg	100	Inhouse method / GC-MS
Tris(2-chlorethyl)phosphate (TCEP)	mg/kg	100	Inhouse method / GC-MS
Hexahydromethylphthalic anhydride (MHHPA)	mg/kg	100	Inhouse method / GC-MS
4,4´-Diaminodiphenylmethane (MDA)	mg/kg	100	Inhouse method / GC-MS
technical MDA	mg/kg	100	Inhouse method / GC-MS
4-Nonylphenol, branched and linear	mg/kg	100	Inhouse method / GC-MS
4-Tert-Octylphenol	mg/kg	100	Inhouse method / GC-MS
p-(1,1-dimethylpropyl)phenol	mg/kg	100	Inhouse method / GC-MS
4-Heptylphenol	mg/kg	100	Inhouse method / GC-MS
4,4'-isopropylidenediphenol	mg/kg	100	Inhouse method / GC-MS
2,2-bis(4'-hydroxyphenyl)-4-methylpentane	mg/kg	100	Inhouse method / GC-MS
4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	mg/kg	100	Inhouse method / GC-MS
4,4'-methylenedi-o-toluidine (MBOT)	mg/kg	100	Inhouse method / GC-MS
4,4'-oxidianiline and its salts	mg/kg	100	Inhouse method / GC-MS
tetramethymethylenedianiline (Michlers base)	mg/kg	100	Inhouse method / GC-MS
4,4 dimethylaminobenzophenon (Michlers Ketone)	mg/kg	100	Inhouse method / GC-MS
Hexabromocyclododecane (HBCDD)	mg/kg	100	Inhouse method / GC-MS
4-methyl-m-phenylenediamine	mg/kg	100	Inhouse method / GC-MS
N-(hydroxymethyl)acrylamide	mg/kg	100	Inhouse method / GC-MS
Acenaphthylene	mg/kg	100	AfPS GS 2014.01 / GC-MS
Anthracene	mg/kg	100	AfPS GS 2014.01 / GC-MS
4,4'-Methylen-Bis-(2-Chlor-aniline)	mg/kg	100	Inhouse method / GC-MS
Phenanthrene	mg/kg	100	AfPS GS 2014.01 / GC-MS
Fluoranthene	mg/kg	100	AfPS GS 2014.01 / GC-MS
Pyrene	mg/kg	100	AfPS GS 2014.01 / GC-MS
Fluorene	mg/kg	100	AfPS GS 2014.01 / GC-MS
Carbazole	mg/kg	100	Inhouse method / GC-MS
Acenaphthene	mg/kg	100	AfPS GS 2014.01 / GC-MS
Benzo[def]chrysene (Benzo[a]pyrene)	mg/kg	100	AfPS GS 2014.01 / GC-MS
Benz[a]anthracene	mg/kg	100	AfPS GS 2014.01 / GC-MS
Chrysene	mg/kg	100	AfPS GS 2014.01 / GC-MS
Benzo[k]fluoranthene	mg/kg	100	AfPS GS 2014.01 / GC-MS
Dibutyltin dichloride (DBTC)	mg/kg	100	DIN ISO 23161
Trixylyl phosphate	mg/kg	100	Inhouse method / GC-MS
2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	mg/kg	100	Inhouse method / GC-MS
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	mg/kg	100	Inhouse method / GC-MS

2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	mg/kg	100	Inhouse method / GC-MS
1,3-propanesultone	mg/kg	100	Inhouse method / GC-MS
2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl) phenol (UV-327)	mg/kg	100	Inhouse method / GC-MS
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	mg/kg	100	Inhouse method / GC-MS
Bis(pentylbromophenyl)ether	mg/kg	100	IEC 62321
Benzo[ghi]perylene	mg/kg	100	AfPS GS 2014.01 / GC-MS
Trimellitic anhydride; TMA	mg/kg	100	Inhouse method / GC-MS
Terphenyl, hydrogenated	mg/kg	100	Inhouse method / GC-MS
Benzylidene Camphor	mg/kg	100	Inhouse method / GC-MS
Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP**)**	mg/kg	100	Inhouse method / GC-MS
4-tert-butylphenol	mg/kg	100	Inhouse method / GC-MS
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone 119313-12-1	mg/kg	100	Inhouse method / GC-MS
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one 71868-10-5	mg/kg	100	Inhouse method / GC-MS
1,2-Dichloroethane	mg/kg	200	Inhouse method / GC-MS
2-Methoxyethanol	mg/kg	200	Inhouse method / GC-MS
Trichoroethylene	mg/kg	200	Inhouse method / GC-MS
1,2-dimethoxyethane (EGDME)	mg/kg	200	Inhouse method / GC-MS
2-Ethoxyethanol	mg/kg	200	Inhouse method / GC-MS
Formamide	mg/kg	200	Inhouse method / GC-MS
N,N-Dimethylacetamide (DMAC)	mg/kg	200	Inhouse method / GC-MS
Ethoxyethylacetate	mg/kg	200	Inhouse method / GC-MS
1,2,3-Trichloropropane	mg/kg	200	Inhouse method / GC-MS
Bis(2-methoxyethyl)ether (Diglyme	mg/kg	200	Inhouse method / GC-MS
1-Methyl-2-2pyrrolidone	mg/kg	200	Inhouse method / GC-MS
1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	mg/kg	200	Inhouse method / GC-MS
1-Bromopropane	mg/kg	200	Inhouse method / GC-MS
2-methoxyethyl acetate	mg/kg	100	Inhouse method / GC-MS
Ethylenediamine (EDA)	mg/kg	200	Inhouse method / GC-MS
Alkanes, C10-13. chloro (Short chained chlorinated Paraffins)	mg/kg	100	Inhouse method / GC-ECD
Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene	mg/kg	100	Inhouse method / GC-MS
Bis(2-(2-methoxyethoxy)ethyl)ether	mg/kg	100	Inhouse method / GC-MS
1,4-dioxane	mg/kg	100	Inhouse method / GC-MS
2,3-dibromo-1-propanol (2,3-DBPA)	mg/kg	100	Inhouse method / GC-MS

2-(4-tert-butylbenzyl)propionaldehyde	mg/kg	100	Inhouse method / GC-MS
4,4'-(1-methylpropylidene)bisphenol	mg/kg	100	Inhouse method / GC-MS
glutaral	mg/kg	100	Inhouse method / GC-MS
Medium-chain chlorinated paraffins (MCCP)	mg/kg	100	Inhouse method / GC-MS
Phenol, 4-dodecyl, branched	mg/kg	100	Inhouse method / GC-MS
4-MBC	mg/kg	100	Inhouse method / GC-MS
6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol (DBMC)	mg/kg	100	Inhouse method / GC-MS
tris(2-methoxyethoxy)vinylsilane	mg/kg	100	Inhouse method / GC-MS
REACH-SVHC-Substances Group 3 (Colours)			
4-Aminoazobenzene	mg/kg	100	Inhouse method / GC-MS
6-methoxy-m-toluidine	mg/kg	100	Inhouse method / GC-MS
Biphenyl-4-ylamine	mg/kg	100	Inhouse method / GC-MS
o-aminoazotoluene	mg/kg	100	Inhouse method / GC-MS
o-Toluidine	mg/kg	100	Inhouse method / GC-MS
Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	mg/kg	100	DIN 54231 *)
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)	mg/kg	100	DIN 54231 *)
4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	mg/kg	100	
[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	mg/kg	100	DIN 54231 *)
[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	mg/kg	100	DIN 54231 *)
α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	mg/kg	100	DIN 54231 *)
*) Analysis were caried out at a partner laboratory			
REACH-SVHC-Substances Group 4 (Solvents)			
Methoxyacetic acid	mg/kg	100	QMA 2001.1500 / GC-MS
Diethoxyethane	mg/kg	100	QMA 2001.1500 / GC-MS
N,N'-Dimethylformamide	mg/kg	100	QMA 2001.1495 / GC-MS
Methyloxirane	mg/kg	100	QMA 2001.1495 / GC-MS
REACH-SVHC-Substances Group 5 (Fluorcarboxylic acids)			

Fluor	mg/kg	100	EN14582
Pentacosafluorotridecanoic acid	mg/kg	100	LC-MS/MS *)
Tricosafluorododecanoic acid	mg/kg	100	LC-MS/MS *)
Henicosafluoroundecanoic acid	mg/kg	100	LC-MS/MS *)
Heptacosafluorotetradecanoic acid	mg/kg	100	LC-MS/MS *)
Pentadecafluorooctanoic acid (PFOA)	mg/kg	100	LC-MS/MS *)
Ammonium pentadecafluorooctanoate (APFO)	mg/kg	100	LC-MS/MS *)
Perfluorononan-1-oic-acid and its sodium and ammonium salts	mg/kg	100	LC-MS/MS *)
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid (FRD-903), its salts and its acyl halides	mg/kg	100	LC-MS/MS *)
*) Analysis were caried out at a partner laboratory			
REACH-SVHC-Substances Group 6 (Educts)			
TGIC (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)	mg/kg	100	QMA 2001.1495 / GC-MS
β-TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)	mg/kg	100	QMA 2001.1495 / GC-MS
Imidazolidine-2-thione	mg/kg	400	GC-MS
REACH-SVHC-Substances Group 7 (special Substances)			
Phenolphthalein	mg/kg	100	Inhouse method / GC-MS
Hydrazine	mg/kg	100	Inhouse method / GC-MS
Musk Xylenes	mg/kg	100	Inhouse method / GC-MS
Aluminosilicate Refractory Ceramic Fibres	mg/kg	1000	Inhouse method / ISO 11885
Zirconia Aluminosilicate, Refractory Ceramic Fibres	mg/kg	1000	Inhouse method / ISO 11885
Pitch, coal tar, high temp.	mg/kg	100	AfPS GS 2014.01 / GC-MS
Furan	mg/kg	100	Inhouse method / GC-MS
3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	mg/kg	100	Inhouse method / GC-MS
Diethyl sulphate	mg/kg	100	Inhouse method / GC-MS
Dimethyl sulphate	mg/kg	100	Inhouse method / GC-MS
N-Methylacetamide	mg/kg	100	Inhouse method / GC-MS
Dinoseb	mg/kg	100	Inhouse method / GC-MS
Diazene-1,2-dicarboxamide	mg/kg	100	Inhouse method / GC-MS
Nitrobenzene	mg/kg	100	Inhouse method / GC-MS

Comments on test results:

According to the judgement of the European Court of Justice of the European Union regarding SVHC in articles (Case C-106/14) of September 10th, 2015, the threshold value of 0.1% is related to each incorporated article as component of a product.

- As the content of **Boron** is below 60 mg/kg, none of the SVHC-compounds containing Boron (Boric acid, Disodium tetraborate anhydrous, Disodium tetraborate pentahydrate, Disodium tetraborate decahydrate Diborontrioxide, Sodium perborate, Sodium peroxometaborate or Disodium octaborate, Orthoboric acid, sodium salt) could be present in a concentration above 0.1% in the article.

- As the content of **Tin** is below 120 mg/kg, or none of the tinorganic compounds could be analysed, the SVHC-compounds containing Tin (Bis(tributyltin)oxide, Dibutyltin dichloride, 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE) and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoat (MOTE), Bis(2-(2-methoxyethoxy)ethyl)ether, 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) could not be present in a concentration above 0.1% in the article.

- As the content of **Fluor** is below 600 mg/kg, none of the SVHC-compounds Pentacosafluorotridecanoic acid, Tricosafluorododecanoic acid, Henicosafluoroundecanoic acid, Heptacosafluorotetradecanoic acid, Pentadecafluorooctanoic acid (PFOA) or Ammonium pentadecafluorooctanoate (APFO) could be present in a concentration above 0.1% in the article.

- As the content of **Chlorine** is below 650 mg/kg, Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene (“Dechlorane Plus”™) could not be present in a concentration above 0.1% in the article.

- As the content of **Arsenic** is below 150 mg/kg, none of the SVHC-compounds containing Arsenic (Triethyl arsenate, Diarsenic pentoxide, Diarsenic trioxide, Lead hydrogene arsenate, Trilead diarsenate, Calcium arsenate, Arsenic acid) could be present in a concentration above 0.1% in the article.

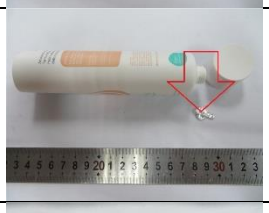
- As the content of **Lead** is below 250 mg/kg, none of the SVHC-compounds containing Lead (Lead chromate, Lead chromate molybdate sulphate red and Lead sulphochromate yellow, Lead diazide, Lead azide, Lead dipicrate, Trilead diarsenate, Lead styphnate, Lead(II) bis(methanesulfonate), Lead bis(tetrafluoroborate), Lead cyanamidate, Lead dinitrate, Lead oxide (lead monoxide), Lead tetroxide (orange lead), Lead titanium trioxide, Lead Titanium Zirconium Oxide, Pentalead tetraoxide sulphate, Pyrochlore, antimony lead yellow, Silicic acid, barium salt, lead-doped, Silicic acid, lead salt, Sulfurous acid, lead salt, dibasic, Tetraethyllead, Tetralead trioxide sulphate, Trilead dioxide phosphonate or Lead di(acetate)) could be present in a concentration above 0.1% in the article.

- As the content of **Hexavalent Chromium** is below 80 mg/kg, none of the SVHC-Substances containing Chromate (Chromic and Dichromic acid and oligomers, Lead chromate, Chromic trioxide, Ammonium dichromate, Sodium dichromate, Sodium chromate, Potassium chromate, Potassium dichromate and Strontium chromate, Pentazinc chromate octahydroxide, Potassium hydroxyoctaoxodizincatedichromate, Dichromium tris(chromate)) could be present in a concentration above 0.1% (above 1000 mg/kg) in the article.

- As the content of **Cobalt** is below 300 mg/kg none of the SVHC-compounds containing Cobalt (Cobalt dichloride, Cobalt(II) carbonate, Cobalt(II) diacetate, Cobalt(II) dinitrate, Cobalt(II) sulphate) could be present in a concentration above 0.1% in the article.

- As the content of **Cadmium** is below 450 mg/kg, none of the SVHC-compounds containing Cadmium (Cadmium, Cadmium oxide, Cadmium sulphide, Cadmium chloride, Cadmium sulphate, Cadmium fluoride, Cadmium carbonate, Cadmium hydroxide and Cadmium nitrate) could be present in a concentration above 0.1% in the article.

- As the amount (sum) of **Anthracene, Phenanthrene, Fluoranthene, Pyrene und Fluorene** is below 100 mg/kg, none of the PAH-containing REACH-SVHC-Substances (Anthracene oil; Anthracene oil, anthracene paste; Anthracene oil, anthracene paste, anthracene fraction; Anthracene oil, anthracene paste, distn.lights; Anthracene oil, anthracene-low) can be present in the article in a concentration above 0.1 %.

Sample No.	Description	Photo
001	white plastic with color printing	
002	white plastic	
003	silvery plastic	
004	beige plastic	
005	brown plastic	

---End of Report---