This report cancels and supersedes the report No. VNHL1905007894HG dated May 21, 2019 issued by SGS Vietnam.

PIMA COMPANY LIMITED

BINH TIEN 2 HAMLET, DUC HOA HA COMMUNE, DUC HOA DISTRICT, LONG AN PROVINCE, VIET NAM

The following sample was submitted and identified on behalf of the client as below:

SGS Job No.		VNHL1905007894HG-01
Sample Description	:	"PIMA (PVC) FOAM BOARD TAM NHUA PIMA"
Color	:	WHITE
Characteristic	:	300X300X19 MM
Date of Production	:	03/01/2019
Manufacturer	:	CONG TY TRACH NHIEM HUU HAN PIMA
Country of Origin	:	VIETNAM
Country of Destination	:	EU, NORTH AMERICA, SOUTH EAST ASIA
Sample Receiving Date	:	MAY 13, 2019
Final confirmed Date	:	MAY 13, 2019
Testing Period	:	MAY 13, 2019 TO MAY 21, 2019
Test Requested	:	PLEASE REFER TO THE RESULT SUMMARY.
Test Results	:	PLEASE REFER TO NEXT PAGE(S).

Result Summary :

Test Requested	Conclusion
RoHS Directive 2011/65/EU Annex II [amended by Directive (EU) 2015/863] (Cadmium, Lead, Mercury, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) and Phthalates such as Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP))	Pass/ See result
As requested by client, SVHC screening is performed according to: One hundred and ninety-seven (197) substances in the candidate list of substances of very high concern (SVHC) for authorization published by European chemicals agency (ECHA) on and before Jan 15, 2019 regarding regulation (EC) No 1907/2006 concerning the REACH.	Pass See remark
According to the specified scope and analytical techniques, concentrations of tested SVHC are ≤ 0.1% (w/w) in the submitted sample.	

Signed for and on behalf of
SGS Vietnam LTD

Thay mặt công ty
SGS Vietnam Ltd

Wong Cho Wing
Hardline and E&E Lab Manager

Test results:

Sample Description: 1. WHITE PLASTIC

RoHS Directive 2011/65/EU Annex II [amended by Directive (EU) 2015/863**]**

Test Item(s):	Unit	Test Method	Results 1	MDL	Limit
Cadmium(Cd)	mg/kg	With reference to IEC 62321-5:2013 (Determination of Cd by ICP-OES)	ND	2	100
Lead (Pb)	mg/kg	With reference to IEC 62321-5:2013 (Determination of Pb by ICP-OES)	ND	2	1000
Mercury (Hg)	mg/kg	With reference to IEC 62321-4:2013 (Determination of Hg by ICP-OES)	ND	2	1000
Hexavalent Chromium (CrVI)	mg/kg	With reference to IEC 62321-7-2:2017 (Determination of CrVI by UV-VIS)	ND	8	1000
Sum of PBBs	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBB by GC-MS)	ND	-	1000
Monobromobiphenyl	mg/kg		ND	5	-
Dibromobiphenyl	mg/kg		ND	5	-
Tribromobiphenyl	mg/kg		ND	5	-
Tetrabromobiphenyl	mg/kg		ND	5	-
Hexabromobiphenyl	mg/kg		ND	5	-
Pentabromobiphenyl	mg/kg		ND	5	-
Heptabromobiphenyl	mg/kg		ND	5	-
Octabromobiphenyl	mg/kg		ND	5	-
Nonabromobiphenyl	mg/kg		ND	5	-
Decabromobiphenyl	mg/kg		ND	5	-
Sum of PBDEs	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBDE by GC-MS)	ND	-	1000
Monobromodiphenyl ether	mg/kg		ND	5	-
Dibromodiphenyl ether	mg/kg		ND	5	-
Tribromodiphenyl ether	mg/kg		ND	5	-
Tetrabromodiphenyl ether	mg/kg		ND	5	-
Pentabromodiphenyl ether	mg/kg		ND	5	-
Hexabromodiphenyl ether	mg/kg		ND	5	-
Heptabromodiphenyl ether	mg/kg		ND	5	-
Octabromodiphenyl ether	mg/kg		ND	5	-
Nonabromodiphenyl ether	mg/kg		ND	5	-
Decabromodiphenyl ether	mg/kg		ND	5	-
Bis (2-ethylhexyl) phthalate (DEHP)	mg/kg	With reference to IEC 62321-8:2017 (Determination of DEHP by GC-MS)	76	50	1000
Butyl benzyl phthalate (BBP)	mg/kg	With reference to IEC 62321-8:2017 (Determination of BBP by GC-MS)	ND	50	1000
Dibutyl phthalate (DBP)	mg/kg	With reference to IEC 62321-8:2017 (Determination of DBP by GC-MS)	ND	50	1000
Diisobutyl phthalate (DIBP)	mg/kg	With reference to IEC 62321-8:2017 (Determination of DIBP by GC-MS)	ND	50	1000

Note:

1. mg/kg = ppm; 0.1wt% = 1000ppm
2. MDL = Method Detection Limit
3. ND = Not detected
4. - = not regulated
5. IEC 62321 is equivalent to EN 62321 http://www.cenelec.eu/dyn/www/f?p=104:110:721668440899381::::FSP_PROJECT,FSP_LANG_ID:20662,25.
6. The above test(s) was / were accredited ISO 17025:2005 by VILAS
   The above test(s) was / were performed by SGS VN's Chemical lab.

SVHC Screening

Remark:

1. The chemical analysis of specified SVHC is performed by means of currently available analytical techniques against the following SVHC related documents published by ECHA:

   - https://echa.europa.eu/web/guest/candidate-list-table (Candidate list)

   The lists are under evaluation by ECHA and may subject to change in the future.

2. In accordance with Regulation (EC) No 1907/2006, any EU producer or importer of articles shall notify ECHA, in accordance with paragraph 4 of Article 7, if a substance meets the criteria in Article 57 and is identified in accordance with Article 59(1) of the Regulation, if (a) the substance in the Candidate List is present in those articles in quantities totaling over one tonne per producer or importer per year; and (b) the substance in the Candidate List is present in those articles above a concentration of 0.1% weight by weight (w/w).

3. Article 33 of Regulation (EC) No 1907/2006 requires supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance in the Candidate List.

Test Method:

Sample Description: **1**. WHITE PLASTIC

Test Method:
SGS In-House method - Analyzed by ICP-OES, GC-MS, UV-VIS, HPLC-DAD, HPLC-MS and colorimetric method

Test Result (per individual component):

No.	Substance Name	CAS No./ EC No.	RL (%)	Concentration (%)
				1
	All tested SVHC	--	--	ND

Notes:

1. RL = Reporting Limit. All RL are based on homogenous material
   ND = Not detected (lower than RL), ND is denoted on the SVHC substance.
   NA^ = The submitted sample was found to contain significant amount of specific element(s) of SVHC. Upon further test verification and also information provided from client, the possibility that the element(s) content originate from SVHC is very unlikely, even though their presence cannot be excluded entirely. It may be assumed that the detected element(s) have a non-SVHC source.

2. * The test result is based on the calculation of selected element(s) / marker(s) and to the worst-case scenario. For detail information, please refer to the SGS REACH website:

   http://www.sgs.com/en/Consumer-Goods-Retail/Toys-and-Juvenile-Products/Toys/REACH/Management-of-SVHC.aspx

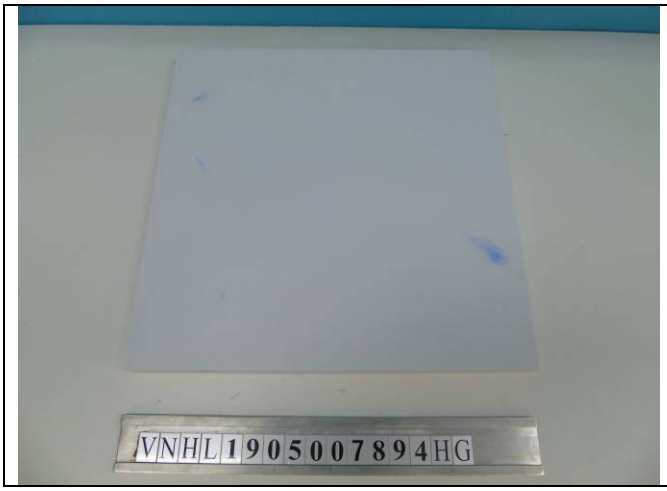
   The client is advised to review the chemical formulation to ascertain above metal substances present in the article.

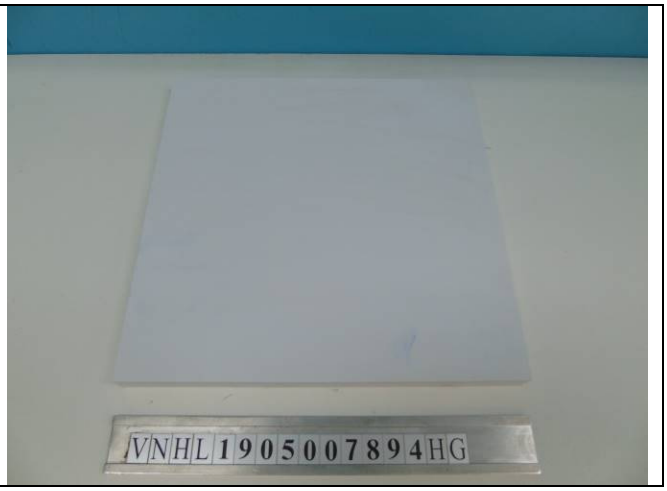
   RL = 0.001% is evaluated for element (i.e. aluminum, antimony, arsenic, barium, boron, cadmium, calcium, chromium, chromium (VI), cobalt, lead, potassium, titanium, silicon, sodium, strontium, zinc and zirconium respectively), except molybdenum RL = 0.0001%

3. The table above only shows detected SVHC, and SVHC that below RL are not reported. Please refer to Appendix for the full list of tested SVHC.

Remark: This / these test(s) was / were accredited ISO 17025:2005 by VILAS.
This / these test(s) was / were performed by SGS Vietnam's chemical lab.

PHOTO OF SUBMITTED SAMPLE FOR TESTING



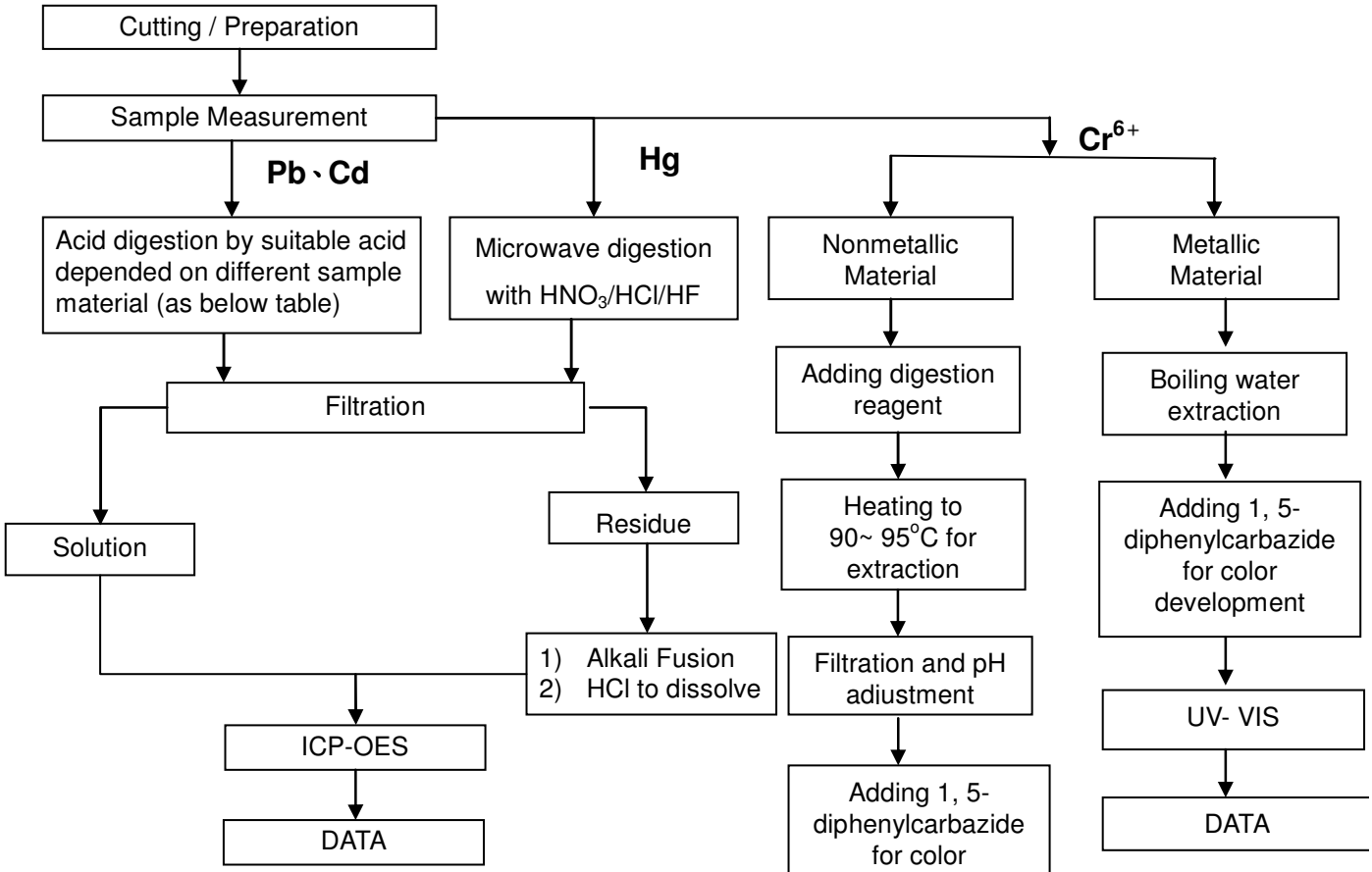


REPORT RESULTS REFER TO SUBMITTED SAMPLE (S) ONLY

***** End of Report *****

Flow Chart for RoHS: Pb/Cd/Hg/Cr^{6+} Testing

1) The samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr^{6+} test method excluded)
2) Operator: Mr. Tho
3) Section Chief: Mr. Hai

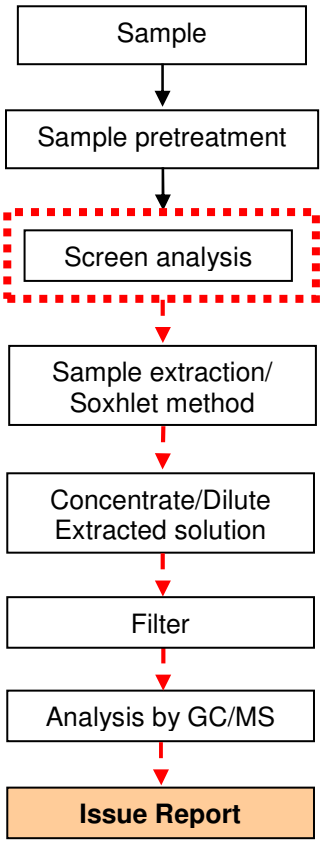


Sample Material	Digestion Acid
Steel, copper, aluminum, solder	Aqua regia, HNO_3, HCl, HF, H_2O_2
Glass	HNO_3/HF
Gold, platinum, palladium, ceramic	Aqua regia
Silver	HNO_3
Plastic	H_2SO_4, H_2O_2, HNO_3, HCl
Others	Any acid to total digestion

PBB/PBDE analytical FLOW CHART

1) Name of the person who made measurement: Mr. Quoc
2) Name of the person in charge of measurement: Mr. Hai

First testing process →
Optional screen process .....
Confirmation process - · →

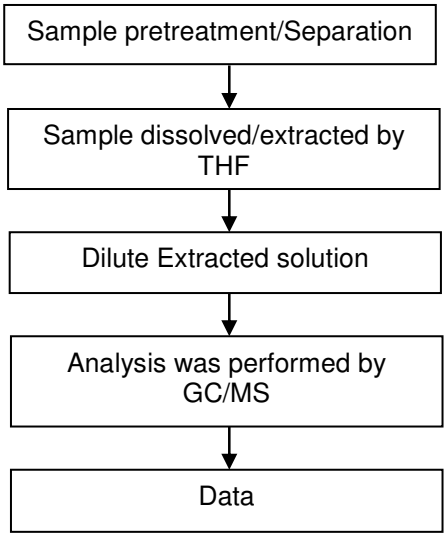


Analytical flow chart of phthalate content

1) Name of the person who made measurement: Mr. Quoc
2) Name of the person in charge of measurement: Mr. Hai

Test method: IEC 62321-8

First testing process →
Optional screen process .....
Confirmation process - ·▸



Appendix

No.	Substance Name	CAS No./ EC No.	RL (%)	No.	Substance Name	CAS No./ EC No.	RL (%)
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Oct 28, 2008							
1	4,4'-Diaminodiphenylmethane (MDA)	101-77-9/ 202-974-4	0.100	2	5-tert-butyl-2,4,6-trinitro-*m*-xylene (musk xylene)	81-15-2/ 201-329-4	0.100
3	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8/ 287-476-5	0.100	4	Anthracene	120-12-7/ 204-371-1	0.100
5	Benzyl butyl phthalate (BBP)	85-68-7/ 201-622-7	0.100	6	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7/ 204-211-0	0.100
7	Bis(tributyltin)oxide (TBTO)	56-35-9/ 200-268-0	0.100	8	Cobalt dichloride*	7646-79-9/ 231-589-4	0.010
9	Diarsenic pentaoxide*	1303-28-2/ 215-116-9	0.010	10	Diarsenic trioxide*	1327-53-3/ 215-481-4	0.010
11	Dibutyl phthalate (DBP)	84-74-2/ 201-557-4	0.100	12	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α-HBCDD, β-HBCDD, γ-HBCDD)	25637-99-4/ 247-148-4; 3194-55-6/ 221-695-9; (134237-50-6/-; 134237-51-7/-; 134237-52-8/-)	0.100
13	Lead hydrogen arsenate*	7784-40-9/ 232-064-2	0.010	14	Sodium dichromate*	7789-12-0 10588-01-9/ 234-190-3	0.010
15	Triethyl arsenate*	15606-95-8/ 427-700-2	0.010				
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Jan 13, 2010							
16	2,4-Dinitrotoluene	121-14-2/ 204-450-0	0.100	17	Anthracene oil*	90640-80-5/ 292-602-7	0.100
18	Anthracene oil, anthracene paste*	90640-81-6/ 292-603-2	0.100	19	Anthracene oil, anthracene paste, anthracene fraction*	91995-15-2/ 295-275-9	0.100
20	Anthracene oil, anthracene paste; distn. Lights*	91995-17-4/ 295-278-5	0.100	21	Anthracene oil, anthracene-low*	90640-82-7/ 292-604-8	0.100
22	Diisobutyl phthalate	84-69-5/ 201-553-2	0.100	23	Lead chromate molybdate sulfate red (C.I. Pigment Red 104)*	12656-85-8/ 235-759-9	0.010
24	Lead chromate*	7758-97-6/ 231-846-0	0.010	25	Lead sulfochromate yellow (C.I. Pigment Yellow 34)*	1344-37-2/ 215-693-7	0.010
26	Pitch, coal tar, high temp.*	65996-93-2/ 266-028-2	0.100	27	Tris(2-chloroethyl)phosphate	115-96-8/ 204-118-5	0.100
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Mar 30, 2010							
28	Acrylamide	79-06-1/ 201-173-7	0.100				
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Jun 18, 2010							

No.	Substance Name	CAS No./ EC No.	RL (%)	No.	Substance Name	CAS No./ EC No.	RL (%)
29	Ammonium dichromate*	7789-09-5/ 232-143-1	0.010	30	Boric acid*	10043-35-3/ 233-139-2; 11113-50-1/ 234-343-4	0.010
31	Disodium tetraborate, anhydrous*	1303-96-4 1330-43-4 12179-04-3/ 215-540-4	0.010	32	Potassium chromate*	7789-00-6/ 232-140-5	0.010
33	Potassium dichromate*	7778-50-9/ 231-906-6	0.010	34	Sodium chromate*	7775-11-3/ 231-889-5	0.010
35	Tetraboron disodium heptaoxide, hydrate*	12267-73-1/ 235-541-3	0.010	36	Trichloroethylene	79-01-6/ 201-167-4	0.100
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Dec 15, 2010							
37	2-Ethoxyethanol	110-80-5/ 203-804-1	0.100	38	2-Methoxyethanol	109-86-4/ 203-713-7	0.100
39	Acids generated from chromium trioxide and their oligomers: Chromic acid Dichromic acid Oligomers of chromic acid and dichromic acid*	7738-94-5/ 231-801-5; 13530-68-2/ 236-881-5	0.010	40	Chromium trioxide*	1333-82-0/ 215-607-8	0.010
41	Cobalt(II) carbonate*	513-79-1/ 208-169-4	0.010	42	Cobalt(II) diacetate*	71-48-7/ 200-755-8	0.010
43	Cobalt(II) dinitrate*	10141-05-6/ 233-402-1	0.010	44	Cobalt(II) sulphate*	10124-43-3/ 233-334-2	0.010
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Jun 20, 2011							
45	1,2,3-Trichloropropane	96-18-4/ 202-486-1	0.100	46	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6/ 276-158-1	0.100
47	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4/ 271-084-6	0.100	48	1-Methyl-2-pyrrolidone	872-50-4/ 212-828-1	0.100
49	2-Ethoxyethyl acetate	111-15-9/ 203-839-2	0.100	50	Hydrazine	7803-57-8 302-01-2/ 206-114-9	0.100
51	Strontium chromate*	7789-06-2/ 232-142-6	0.010				
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Dec 19, 2011							
52	1,2-Dichloroethane	107-06-2/ 203-458-1	0.100	53	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4/ 202-918-9	0.100
54	2-Methoxyaniline	90-04-0/ 201-963-1	0.100	55	4-tert-Octylphenol	140-66-9/ 205-426-2	0.100
56	Aluminosilicate Refractory Ceramic Fibres*	650-017-00-8 (Index no.)	0.010	57	Arsenic acid*	7778-39-4/ 231-901-9	0.010

No.	Substance Name	CAS No./ EC No.	RL (%)	No.	Substance Name	CAS No./ EC No.	RL (%)
58	Bis(2-methoxyethyl) ether	111-96-6/ 203-924-4	0.100	59	Bis(2-methoxyethyl) phthalate	117-82-8/ 204-212-6	0.100
60	Calcium arsenate*	7778-44-1/ 231-904-5	0.010	61	Dichromium tris(chromate)*	24613-89-6/ 246-356-2	0.010
62	Formaldehyde, oligomeric reaction products with aniline (technical MDA)	25214-70-4/ 500-036-1	0.100	63	Lead diazide*	13424-46-9/ 236-542-1	0.010
64	Lead dipicrate*	6477-64-1/ 229-335-2	0.010	65	Lead styphnate*	15245-44-0/ 239-290-0	0.010
66	N,N-dimethylacetamide (DMAC)	127-19-5/ 204-826-4	0.100	67	Pentazinc chromate octahydroxide*	49663-84-5/ 256-418-0	0.010
68	Phenolphthalein	77-09-8/ 201-004-7	0.100	69	Potassium hydroxyoctaoxodizincatedichromate*	11103-86-9/ 234-329-8	0.010
70	Trilead diarsenate*	3687-31-8/ 222-979-5	0.010	71	Zirconia Aluminosilicate Refractory Ceramic Fibres*	650-017-00-8 (Index no.)	0.010
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Jun 18, 2012							
72	[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/ 219-943-6	0.100	73	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9/ 208-953-6	0.100
74	1,2-bis(2-methoxyethoxy) ethane (TEGDME; triglyme)	112-49-2/ 203-977-3	0.100	75	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4/ 203-794-9	0.100
76	4,4'-bis(dimethylamino) benzophenone (Michler's Ketone)	90-94-8/ 202-027-5	0.100	77	4,4'-bis(dimethylamino)-4"-(methylamino)trityl alcohol	561-41-1/ 209-218-2	0.100
78	Diboron trioxide*	1303-86-2/ 215-125-8	0.010	79	Formamide	75-12-7/ 200-842-0	0.100
80	Lead(II) bis(methanesulfonate)*	17570-76-2/ 401-750-5	0.010	81	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1/ 202-959-2	0.100
82	TGIC (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)	2451-62-9/ 219-514-3	0.100	83	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0/ 229-851-8	0.100
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/ 423-400-0	0.100				
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Dec 19, 2012							
85	[Phthalato(2-)]dioxotrilead*	69011-06-9/ 273-688-5	0.010	86	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0/ 284-032-2	0.100
87	1,2-Diethoxyethane	629-14-1/ 211-076-1	0.100	88	1-Bromopropane	106-94-5/ 203-445-0	0.100

No.	Substance Name	CAS No./ EC No.	RL (%)	No.	Substance Name	CAS No./ EC No.	RL (%)
89	3-Ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2/ 421-150-7	0.100	90	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	-	0.100
91	4,4'-Methylenedi-*o*-toluidine	838-88-0/ 212-658-8	0.100	92	4,4'-Oxydianiline	101-80-4/ 202-977-0	0.100
93	4-Aminoazobenzene	60-09-3/ 200-453-6	0.100	94	4-Methyl-*m*-phenylenediamine	95-80-7/ 202-453-1	0.100
95	4-Nonylphenol, branched and linear	-	0.100	96	6-Methoxy-*m*-toluidine	120-71-8/ 204-419-1	0.100
97	Acetic acid, lead salt, basic*	51404-69-4/ 257-175-3	0.010	98	Biphenyl-4-ylamine	92-67-1/ 202-177-1	0.100
99	Bis(pentabromophenyl) ether (DecaBDE)	1163-19-5/ 214-604-9	0.100	100	C,C'-azodi(formamide) (ADCA)	123-77-3/ 204-650-8	0.100
101	Dibutyltin dichloride (DBT)	683-18-1/ 211-670-0	0.100	102	Diethyl sulphate	64-67-5/ 200-589-6	0.100
103	Diisopentylphthalate (DIPP)	605-50-5/ 210-088-4	0.100	104	Dimethyl sulphate	77-78-1/ 201-058-1	0.100
105	Dinoseb	88-85-7/ 201-861-7	0.100	106	Dioxobis(stearato)trilead*	12578-12-0/ 235-702-8	0.010
107	Fatty acids, C16-18, lead salts*	91031-62-8/ 292-966-7	0.010	108	Furan	110-00-9/ 203-727-3	0.100
109	Henicosafluoroundecanoic acid	2058-94-8/ 218-165-4	0.100	110	Heptacosafluorotetradecanoic acid	376-06-7/ 206-803-4	0.100
111	Hexahydro-2-benzofuran-1,3-dione, cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride	85-42-7/ 201-604-9; 13149-00-3/ 236-086-3; 14166-21-3/ 238-009-9	0.100	112	Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride	25550-51-0/ 247-094-1; 19438-60-9/ 243-072-0; 48122-14-1/ 256-356-4; 57110-29-9/ 260-566-1	0.100
113	Lead bis(tetrafluoroborate)*	13814-96-5/ 237-486-0	0.010	114	Lead cyanamidate*	20837-86-9/ 244-073-9	0.010
115	Lead dinitrate*	10099-74-8/ 233-245-9	0.010	116	Lead monoxide*	1317-36-8/ 215-267-0	0.010
117	Lead oxide sulphate*	12036-76-9/ 234-853-7	0.010	118	Lead tetroxide*	1314-41-6/ 215-235-6	0.010
119	Lead titanium trioxide*	12060-00-3/ 235-038-9	0.010	120	Lead titanium zirconium oxide*	12626-81-2/ 235-727-4	0.010
121	Methoxyacetic acid	625-45-6/ 210-894-6	0.100	122	N,N-Dimethylformamide	68-12-2/ 200-679-5	0.100
123	N-Methylacetamide	79-16-3/ 201-182-6	0.100	124	N-Pentyl-isopentylphthalate	776297-69-9 /-	0.100
125	*o*-Aminoazotoluene	97-56-3/ 202-591-2	0.100	126	*o*-Toluidine	95-53-4/ 202-429-0	0.100

No.	Substance Name	CAS No./ EC No.	RL (%)	No.	Substance Name	CAS No./ EC No.	RL (%)
127	Pentacosafluorotridecanoic acid	72629-94-8/ 276-745-2	0.100	128	Pentalead tetraoxide sulphate*	12065-90-6/ 235-067-7	0.010
129	Propylene oxide	75-56-9/ 200-879-2	0.100	130	Pyrochlore, antimony lead yellow*	8012-00-8/ 232-382-1	0.010
131	Silicic acid, barium salt, lead-doped*	68784-75-8/ 272-271-5	0.010	132	Silicic acid, lead salt*	11120-22-2/ 234-363-3	0.010
133	Sulfurous acid, lead salt, dibasic*	62229-08-7/ 263-467-1	0.010	134	Tetraethyllead*	78-00-2/ 201-075-4	0.010
135	Tetralead trioxide sulphate*	12202-17-4/ 235-380-9	0.010	136	Tricosafluorododecanoic acid	307-55-1/ 206-203-2	0.100
137	Trilead bis(carbonate)dihydroxide*	1319-46-6/ 215-290-6	0.010	138	Trilead dioxide phosphonate*	12141-20-7/ 235-252-2	0.010
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Jun 20, 2013							
139	4-Nonylphenol, branched and linear, ethoxylated	-	0.100	140	Ammoniumpentadecafluoro octanoate (APFO)	3825-26-1/ 223-320-4	0.100
141	Cadmium	7440-43-9/ 231-152-8	0.010	142	Cadmium oxide*	1306-19-0/ 215-146-2	0.010
143	Di-n-pentyl phthalate	131-18-0/ 205-017-9	0.100	144	Pentadecafluorooctanoic acid (PFOA)	335-67-1/ 206-397-9	0.100
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Dec 16, 2013							
145	Cadmium sulphide*	1306-23-6/ 215-147-8	0.010	146	Dihexyl phthalate	84-75-3/ 201-559-5	0.100
147	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0/ 209-358-4	0.100	148	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/ 217-710-3	0.100
149	Imidazolidine-2-thione; 2-imidazoline-2-thiol	96-45-7/ 202-506-9	0.100	150	Lead di(acetate)*	301-04-2/ 206-104-4	0.010
151	Trixylyl phosphate	25155-23-1/ 246-677-8	0.100				
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Jun 16, 2014							
152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4/ 271-093-5	0.100	153	Cadmium chloride*	10108-64-2/ 233-296-7	0.010
154	Sodium perborate; perboric acid, sodium salt*	- / 234-390-0; 239-172-9	0.010	155	Sodium peroxometaborate*	7632-04-4/ 231-556-4	0.010
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Dec 17, 2014							
156	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7 / 223-346-6	0.100	157	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1 / 247-384-8	0.100

No.	Substance Name	CAS No./ EC No.	RL (%)	No.	Substance Name	CAS No./ EC No.	RL (%)
158	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate; DOTE	15571-58-1 / 239-622-4	0.100	159	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)	-	0.100
160	Cadmium fluoride*	7790-79-6 / 232-222-0	0.010	161	Cadmium sulphate*	10124-36-4; 31119-53-6 / 233-331-6	0.010
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Jun15, 2015							
162	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)	68515-51-5; 68648-93-1/ 271-094-0; 272-013-1	0.100	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] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]	-	0.100
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Dec 17, 2015,							
164	1,3-propanesultone	1120-71-4 / 214-317-9	0.100	165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1 / 223-383-8	0.100
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3 / 253-037-1	0.100	167	Nitrobenzene	98-95-3 / 202-716-0	0.100
168	Perfluorononan-1-oic acid (2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluorononanoic acid and its sodium and ammonium salts	375-95-1; 21049-39-8; 4149-60-4 / 206-801-3	0.100				
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Jun 20, 2016							
169	Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8 / 200-028-5	0.100				
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Jan 12, 2017							
170	4,4'-Isopropylidenediphenol (Bisphenol A)	80-05-7 / 201-245-8	0.100	171	4-Heptylphenol, branched and linear	-	0.100
172	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salt	335-76-2; 3830-45-3; 3108-42-7/ 206-400-3; -; 221-470-5	0.100	173	p-(1,1-dimethylpropyl)phenol	80-46-6 / 201-280-9	0.100

No.	Substance Name	CAS No./ EC No.	RL (%)	No.	Substance Name	CAS No./ EC No.	RL (%)
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Jul 7, 2017							
174	Perfluorohexane-1-sulphonic acid and its salts	-	0.100				
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Jan 15, 2018							
175	Benz[a]anthracene	56-55-3; 1718-53-2/ 200-280-6	0.100	176	Cadmium carbonate*	513-78-0/ 208-168-9	0.010
177	Cadmium hydroxide*	21041-95-2/ 244-168-5	0.010	178	Cadmium nitrate*	10022-68-1; 10325-94-7/ 233-710-6	0.010
179	Chrysene	218-01-9; 1719-03-5/ 205-923-4	0.100	180	Dodecachloropentacyclo[12.2.1 .$1^{6,9}$.$0^{2,13}$.$0^{5,10}$]octadeca-7,15-diene ("Dechlorane Plus"™) [covering any of its individual anti- and syn-isomers or any combination thereof]	-	0.100
181	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]	-	0.100				
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Jun 27, 2018							
182	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (TMA)	552-30-7 / 209-008-0	0.100	183	Benzo[ghi]perylene	191-24-2 / 205-883-8	0.100
184	Decamethylcyclopentasiloxane (D5)	541-02-6 / 208-764-9	0.100	185	Dicyclohexyl phthalate (DCHP)	84-61-7 / 201-545-9	0.100
186	Disodium octaborate*	12008-41-2 / 234-541-0	0.010	187	Dodecamethylcyclohexasiloxane (D6)	540-97-6 / 208-762-8	0.100
188	Ethylenediamine (EDA)	107-15-3 / 203-468-6	0.100	189	Lead	7439-92-1 / 231-100-4	0.010
190	Octamethylcyclotetrasiloxane (D4)	556-67-2 / 209-136-7	0.100	191	Terphenyl, hydrogenated	61788-32-7 / 262-967-7	0.100
Candidate List of Substances of Very High Concern (SVHC) for authorization published on Jan 15, 2019							
192	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6 / 401-720-1	0.010	193	Benzo[k]fluoranthene	207-08-9 / 205-916-6	0.010
194	Fluoranthene	206-44-0 / 205-912-4	0.010	195	Phenanthrene	85-01-8 / 201-581-5	0.010
196	Pyrene	129-00-0 / 204-927-3	0.010	197	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1] heptan-2-one (3-benzylidene camphor)	15087-24-8 / 239-139-9	0.010