



Test Report

Applicant: Zhongshan Guangsheng Semiconductor Technology Co., Ltd.
Address: Floor 2-3, Building 2, Qifang Industrial Park, Pinghe Road,
Tongyi Industrial district, Guzhen Town, Zhongshan City, China
Manufacturer: Zhongshan Guangsheng Semiconductor Technology Co., Ltd.
Address: Floor 2-3, Building 2, Qifang Industrial Park, Pinghe Road,
Tongyi Industrial district, Guzhen Town, Zhongshan City, China

Report on the submitted sample(s) said to be:

Sample Name :	Flip Chip COB Light Source
Sample Model:	COB
Trademark:	
Sample Received Date:	Jun.30,2021
Testing Period:	Jun.30,2021~Jul.06,2021

Test Requested Please refer to the following page(s).
Test Method Please refer to the following page(s).
Test Result(s) Please refer to the following page(s).

Summary According to the analytical results, concentrations of 219 SVHC substances are less than 0.1% in the submitted sample.

Tested by : James Huang

Inspected by : Robert Chen

Approved by : Kevin Yang

Date : Jul.06,2021





Test Report

Requested:

As specified by client, to screen the 219 substances of very high concern (SVHC) under Regulation (EC) No 1907/2006 of REACH and four potential Substances are less than 0.1% (w/w) in the sample., including:

Anthracene; 4,4'-Diaminodiphenylmethane (MDA); Dibutyl phthalate (DBP); Cobalt dichloride; Diarsenic pentaoxide; Diarsenic trioxide; Sodium dichromate dehydrate; Musk-xylene;

Bis(2-ethyl(hexyl)phthalate) (DEHP); Hexabromocyclododecane (HBCDD); Short Chain Chlorinated Paraffins (SCCP); Bis(tributyltin)oxide (TBTO); Lead hydrogen arsenate; Benzyl butyl phthalate (BBP);

Triethyl Arsenate; Anthracene oil; Anthracene oil, anthracene paste, anthracene fraction;

Coal tar pitch, high temperature; Acrylamide; 2,4-Dinitrotoluene; Diisobutyl phthalate (DIBP); Lead chromate; Lead chromate molybdate sulphate red (C.I. Pigment Red 104); Lead sulfochromate

yellow (C.I. Pigment Yellow 34); Tris(2-chloroethyl)phosphate (TCEP); Anthracene oil, anthracene paste, distn. lights; Anthracene oil, anthracene-low; Anthracene oil, anthracene paste; Trichloroethylene;

Boric acid; Disodium tetraborate, anhydrous; Tetraboron disodium heptaoxide, hydrous; Sodium chromate; Potassium chromate; Ammonium dichromate; Potassium dichromate; Cobalt(II) sulphate;

Cobalt(II) dinitrate; Cobalt(II) carbonate; Cobalt(II) diacetate; 2-Methoxyethanol; 2-Ethoxyethanol; Chromium trioxide; Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid;

2-ethoxyethyl acetate; strontium chromate; 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters; Hydrazine; 1-methyl-2-pyrrolidone; 1,2,3-trichloropropane;

1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich; Dichromium tris(chromate);

Potassium hydroxyoctaoxodizincatedi-chromate; Pentazinc chromate octahydroxide; Aluminosilicate Refractory Ceramic Fibres (Al-RCF); Zirconia Aluminosilicate Refractory Ceramic Fibres (ZrAl-RCF);

Formaldehyde, oligomeric reaction products with aniline; Bis(2-methoxyethyl) phthalate;

2-Methoxyaniline o-Anisidine; (4-tert-Octylphenol); 1,2-Dichloroethane; Bis(2-methoxyethyl) ether;

Arsenic acid;

Calcium arsenate; Trilead diarsenate; N,N-dimethylacetamide; Phenolphthalein;

2,2'-dichloro-4,4'-methylenedianiline (MOCA); Lead diazide; Lead dipicrate, Lead styphnate;

1,2-bis(2-methoxyethoxy)ethane; 1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME);

Diboron trioxide; Formamide; Lead(II) bis(methanesulfonate);

TGIC(1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione); β -TGIC (1,3,5-tris[(2S and

2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione); 4,4'-bis(dimethylamino) benzophenone (Michler's ketone); N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base); C.I. Basic Violet 3;

C.I. Basic Blue 26; C.I. Solvent Blue 4; 4,4'-bis(dimethylamino)-4''-(methylamino) trityl alcohol;

Phthalato(2-)]dioxotrilead; 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear;

1,2-Diethoxyethane; 1-Bromopropane; 3-Ethyl-2-methyl-2-(3-methylbutyl)- 1,3-oxazolidine; 4-(1,1,3,3-Tetramethylbutyl)phenol, ethoxylated; 4,4'-Methylenedi-o-toluidine; 4,4'-Oxydianiline;



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4-Aminoazobenzene; 4-Methyl-m-phenylenediamine; 4-Nonylphenol, branched and linear;
6-Methoxy-m-toluidine; Acetic acid, lead salt, basic; Biphenyl-4-ylamine; Bis(pentabromophenyl) ether (DecaBDE); C,C'-azodi(formamide); Dibutyltin dichloride; Diethyl sulphate; Diisopentylphthalate (DIPP); Dimethyl sulphate; Dinoseb; Dioxobis(stearato)trilead; Fatty acids, C16-18, lead salts; Furan; Henicosfluoroundecanoic acid; Heptacosfluorotetradecanoic acid;
Hexahydro-2-benzofuran-1,3-dione, cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride; Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1- methylphthalic anhydride, Hexahydro-3- methylphthalic anhydride; Lead bis(tetrafluoroborate); Lead cyanamidate*; Lead dinitrate*; Lead monoxide*; Lead oxide sulphate*; Lead tetroxide*; Lead titanium trioxide*; Lead Titanium Zirconium Oxide;
Methoxyacetic acid; N,N-dimethylformamide; N-methylacetamide; N-pentyl-isopentylphthalate; o-Aminoazotoluene; o-Toluidine; Pentacosfluorotridecanoic acid; Pentalead tetraoxide sulphate; Propylene oxide; Pyrochlore, antimony lead yellow; Silicic acid, barium salt, lead-doped; Silicic acid, lead salt*; Sulfurous acid, lead salt, dibasic; Tetraethyllead; Tetralead trioxide sulphate;
Tricosfluorododecanoic acid; Trilead bis(carbonate)dihydroxide ; Trilead dioxide phosphonate; Cadmium; Cadmium oxide; Ammonium pentadecafluorooctanoate(APFO); Pentadecafluorootanoic acid(PFOA); Dipentyl phthalate(DPP); 4-Nonlphenol, branched and linear, ethoxylated in the submitted sample; 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,
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 isomers of [1] and [2] or any combination thereof], 1,3-propanesultone, UV-327, UV-350, Nitrobenzene, Perfluorononan-1-oic acid and its sodium and ammonium salts, Benzopyrene, 4,4'-isopropylidenediphenol(bisphenol A), Nonadecafluorodecanoic acid(PFDA) and its sodium and ammonium salts, 4-heptylphenol, branched and linear(4-HPbl), 4-tert-pentylphenol(PTAP) perfluorohexane-1-sulphonic acid its salts (PFHxS) ,Dechlorane(Includes all trans and cis isomers and combinations thereof) , Benzo (a) anthracene , Cadmium nitrate, Cadmium carbonate , Cadmium hydroxide, Chrysene , 1,3,4-thiadiazolidine-2,5-dithione, the reaction products of branched and straight chain (RP-HP) of formaldehyde and 4-heptylphenol [4-heptylphenol, Linear content $\geq 0.1\%$ w / w], Tricobalt tetroxide, Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride) , Dicyclohexyl phthalate (DCHP), Octamethylcyclotetrasiloxane, Decamethylcyclopentasiloxane, Dodecamethylcyclohexasiloxane, Lead, Disodium octaborate, Benzo[ghi]perylene, Terphenyl, hydrogenated, Ethylenediamine, 4-tert-Butylphenol, 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof) HFPO-DA, 2-methoxyethyl acetate, Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, branched and linear (4-NP) TNPP



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halides (covering any of their individual isomers and combinations thereof) HFPO-DA, 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone, 3-2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one, Diisohexyl phthalate, Perfluorobutane sulfonic acid (PFBS) and its salts, 1-vinylimidazole, 2-methylimidazole Butyl 4-hydroxybenzoate , Dibutylbis(pentane-2,4-dionato-O,O')tin, 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, 1,4-dioxane; 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); 2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers; 4,4'-(1-methylpropylidene) bisphenol (Bisphenol b); Glutaral; Medium-chain chlorinated paraffins (MCCP) [uvcb substances consisting of more than or equal to 80% linear chloroalkanes with carbon chain length within the range from C14 and C17]; Orthoboric acid, sodium salt; Phenol, alkylation products (mainly in paraposition) with C12-rich branched or linear alkyl chains from oligomerisation, covering any individual isomers and/or combinations thereof(PDDP)



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Test Result(s):

No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
1	Anthracene	204-371-1	120-12-7	PBT	N.D.
2	4,4'-Diaminodiphenylmethane	202-974-4	101-77-9	Carcinogenic	N.D.
3	Dibutyl phthalate	201-557-4	84-74-2	Toxic for reproduction	N.D.
4	Cobalt dichloride	231-589-4	7646-79-9	Toxic for reproduction	N.D.
5	Diarsenic pentaoxide	215-116-9	1303-28-2	Carcinogenic	N.D.
6	diarsenic trioxide	215-481-4	1327-53-3	Carcinogenic	N.D.
7	Sodium dichromate	234-190-3	7789-12-0 10588-01-9	CMR	N.D.
8	5-tert-butyl-2,4,6-trinitro-m-xylene(musk xylene)	201-329-4	81-15-2	vPvB	N.D.
9	Bis (2-ethylhexyl)phthalate (DEHP)	204-211-0	117-81-7	Toxic for reproduction	N.D.
10	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α -HBCDD, β -HBCDD, γ -HBCDD)	247-148-4 221-695-9	25637-99-4 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-N.D. 8)	PBT	N.D.
11	Alkanes, C10-13, chloro(Short Chain Chlorinated Paraffins)	287-476-5	85535-84-8	PBT	N.D.
12	Bis(tributyltin) oxide	200-268-0	56-35-9	PBT	N.D.
13	Lead hydrogen arsenate	232-064-2	7784-40-9	Carcinogenic ; Toxic for reproduction	N.D.
14	Benzyl butyl phthalate	201-622-7	85-68-7	Toxic for reproduction	N.D.



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No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
15	Triethyl arsenate	427-700-2	15606-95-8	Carcinogenic	N.D.
16	Anthracene oil	292-602-7	90640-80-5	PBT; vPvB	N.D.
17	Anthracene oil, anthracene paste, distn. Lights	295-278-5	91995-17-4	PBT; vPvB	N.D.
18	Anthracene oil, anthracene paste, anthracene fraction	295-275-9	91995-15-2	PBT; vPvB	N.D.
19	Anthracene oil,anthracene-low	292-604-8	90640-82-7	PBT; vPvB	N.D.
20	Anthracene oil, anthracene paste	292-603-2	90640-81-6	PBT; vPvB	N.D.
21	Diisobutyl phthalate	201-553-2	84-69-5	CMR	N.D.
22	2,4-Dinitrotoluene	204-450-0	121-14-2	CMR	N.D.
23	high temperature	266-028-2	65996-93-2	PBT; vPvB	N.D.
24	tris(2-chloroethyl)phosphate	204-118-5	115-96-8	CMR	N.D.
25	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	215-693-7	1344-37-2	CMR	N.D.
26	Lead chromate molybdate sulfate red (C.I. Pigment Red 104)	235-759-9	12656-85-8	CMR	N.D.
27	Lead chromate	231-846-0	7758-97-6	CMR	N.D.
28	acrylamide	201-173-7	79-06-1	CMR	N.D.
29	Trichloroethylene	201-167-4	79-01-6	Carcinogenic	N.D.
30	Boric acid	233-139-2 234-343-4	10043-35-3 11113-50-1	Toxic for reproduction	N.D.
31	Disodium tetraborate, anhydrous	215-540-4	1330-43-4 12179-04-3 1303-96-4	Toxic for reproduction	N.D.
32	Tetraboron disodium heptaoxide, hydrate	235-541-3	12267-73-1	Toxic for reproduction	N.D.
33	Sodium chromate	231-889-5	7775-11-3	CMR	N.D.
34	Potassium chromate	232-140-5	7789-00-6	Carcinogenic and mutagen	N.D.
35	Ammonium dichromate	232-143-1	7789-09-5	CMR	N.D.
36	Potassium dichromate	231-906-6	7778-50-9	CMR	N.D.



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No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
37	Cobalt(II) sulphate	233-334-2	10124-43-3	Carcinogenic and toxic for reproduction	N.D.
38	Cobalt(II) dinitrate	233-402-1	10141-05-6	Carcinogenic and toxic for reproduction	N.D.
39	Cobalt(II) carbonate	208-169-4	513-79-1	Carcinogenic and toxic for reproduction	N.D.
40	Cobalt(II) diacetate	200-755-8	71-48-7	Carcinogenic and toxic for reproduction	N.D.
41	2-Methoxyethanol	203-713-7	109-86-4	Toxic for reproduction	N.D.
42	2-Ethoxyethanol	203-804-1	110-80-5	Toxic for reproduction	N.D.
43	Chromium trioxide	215-607-8	1333-82-0	Carcinogenic and mutagenic	N.D.
44	Acids generated from chromium trioxide and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid	231-801-5	7738-94-5	Carcinogenic	N.D.
45	2-ethoxyethyl acetate	203-839-2	111-15-9	Toxic for reproduction	N.D.
46	Strontium chromate	232-142-6	7789-06-2	Carcinogenic	N.D.
47	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	271-084-6	68515-42-4	Toxic for reproduction	N.D.
48	Hydrazine	206-114-9	302-01-2 7803-57-8	Carcinogenic	N.D.



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No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
49	1-methyl-2-pyrrolidone	212-828-1	872-50-4	Toxic for reproduction	N.D.
50	1,2,3-trichloropropane	202-486-1	96-18-4	Carcinogenic and toxic for reproduction	N.D.
51	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters,C7-rich (DIHP)	276-158-1	71888-89-6	Toxic for reproduction	N.D.
52	Zirconia Aluminosilicate Refractory Ceramic Fibres	/	/	Carcinogenic	N.D.
53	Calcium arsenate	231-904-5	7778-44-1	Carcinogenic	N.D.
54	Bis(2-methoxyethyl) ether	203-924-4	111-96-6	Toxic for reproduction	N.D.
55	Potassium hydroxyoctaoxodizincatedichromate	234-329-8	11103-86-9	Carcinogenic	N.D.
56	Aluminosilicate Refractory Ceramic Fibres	/	/	Carcinogenic	N.D.
57	N,N-dimethylacetamide	204-826-4	127-19-5	Toxic for reproduction	N.D.
58	Arsenic acid	231-901-9	7778-39-4	Carcinogenic	N.D.
59	Lead dipicrate	229-335-2	6477-64-1	Toxic for reproduction	N.D.
60	1,2-dichloroethane	203-458-1	107-06-2	Carcinogenic	N.D.
61	2-Methoxyaniline; o-Anisidine	201-963-1	90-04-0	Carcinogenic	N.D.
62	Trilead diarsenate	222-979-5	3687-31-8	Carcinogenic and toxic for reproduction	N.D.
63	Pentazinc chromate octahydroxide	256-418-0	49663-84-5	Carcinogenic	N.D.



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No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
64	4-(1,1,3,3-tetramethylbutyl)phenol	205-426-2	140-66-9	Equivalent level of concern having probable serious effects to human health and the environment	N.D.
65	Formaldehyde, oligomeric reaction products with aniline	500-036-1	25214-70-4	Carcinogenic	N.D.
66	Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8	Toxic for reproduction	N.D.
67	Lead diazide, Lead azide	236-542-1	13424-46-9	Toxic for reproduction	N.D.
68	Lead styphnate	239-290-0	15245-44-0	Toxic for reproduction	N.D.
69	2,2'-dichloro-4,4'-methylenedianiline	202-918-9	101-14-4	Carcinogenic	N.D.
70	Phenolphthalein	201-004-7	77-09-8	Carcinogenic	N.D.
71	Dichromium tris(chromate)	246-356-2	24613-89-6	Carcinogenic	N.D.
72	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3	112-49-2	Toxic for reproduction	N.D.
73	1,2-dimethoxyethane; ethylene glycol dimethylether (EGDME)	203-794-9	110-71-4	Toxic for reproduction	N.D.
74	Diboron trioxide	215-125-8	1303-86-2	Toxic for reproduction	N.D.
75	Formamide	200-842-0	75-12-7	Toxic for reproduction	N.D.
76	Lead(II) bis(methanesulfonate)	401-750-5	17570-76-2	Toxic for reproduction	N.D.
77	(1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)	219-514-3	2451-62-9	Mutagenic	N.D.



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No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
78	β -TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)	423-400-0	59653-74-6	Mutagenic	N.D.
79	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	202-027-5	90-94-8	Carcinogenic	N.D.
80	N,N,N',N'-tetramethyl-4,4'-methylene dianiline (Michler's base)	202-959-2	101-61-1	Carcinogenic	N.D.
81	[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	208-953-6	548-62-9	Carcinogenic	N.D.
82	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Blue 26)	219-943-6	2580-56-5	Carcinogenic	N.D.
83	α,α -Bis[4-(dimethylamino)phenyl]-4(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	229-851-8	6786-83-0	Carcinogenic	N.D.
84	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	209-218-2	561-41-1	Carcinogenic	N.D.
85	Bis(pentabromophenyl) ether (DecaBDE)	214-604-9	1163-19-5	PBT; vPvB	N.D.
86	Pentacosafuorotridecanoic acid	276-745-2	72629-94-8	vPvB	N.D.
87	Tricosafuorododecanoic acid	206-203-2	307-55-1	vPvB	N.D.
88	Henicosafuoroundecanoic acid	218-165-4	2058-94-8	vPvB	N.D.
89	Heptacosafuorotetradecanoic acid	206-803-4	376-06-7	vPvB	N.D.



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No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
90	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated - covering well-defined substances and UVCB substances, polymers and homologues	/	/	Equivalent level of concern having probable serious effects to the environment	N.D.
91	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	/	/	Equivalent level of concern having probable serious effects to the environment	N.D.
92	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	204-650-8	123-77-3	Equivalent level of concern having probable serious effects to human health	N.D.



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No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
93	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].	201-604-9 236-086-3 238-009-9	85-42-7 13149-00-3 14166-21-3	Equivalent level of concern having probable serious effects to human health	N.D.
94	Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride	247-094-1, 243-072-0, 256-356-4, 260-566-1	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	Equivalent level of concern having probable serious effects to human health	N.D.
95	Methoxy acetic acid	210-894-6	625-45-6	Toxic for reproduction	N.D.
96	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	84777-06-0	Toxic for reproduction	N.D.
97	Diisopentylphthalate (DIPP)	210-088-4	605-50-5	Toxic for reproduction	N.D.
98	N-pentyl-isopentylphthalate	/	776297-69-9	Toxic for reproduction	N.D.
99	1,2-Diethoxyethane	211-076-1	629-14-1	Toxic for reproduction	N.D.
100	N,N-dimethylformamide; dimethyl formamide	200-679-5	68-12-2	Toxic for reproduction	N.D.



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No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
101	Dibutyltin dichloride (DBT)	211-670-0	683-18-1	Toxic for reproduction	N.D.
102	Acetic acid, lead salt, basic	257-175-3	51404-69-4	Toxic for reproduction	N.D.
103	Basic lead carbonate (trilead bis(carbonate)dihydroxide)	215-290-6	1319-46-6	Toxic for reproduction	N.D.
104	Lead oxide sulfate (basic lead sulfate)	234-853-7	12036-76-9	Toxic for reproduction	N.D.
105	[Phthalato(2-)]dioxotrilead (dibasic lead phthalate)	273-688-5	69011-06-9	Toxic for reproduction	N.D.
106	Dioxobis(stearato)trilead	235-702-8	12578-12-0	Toxic for reproduction	N.D.
107	Fatty acids, C16-18, lead salts	292-966-7	91031-62-8	Toxic for reproduction	N.D.
108	Lead bis(tetrafluoroborate)	237-486-0	13814-96-5	Toxic for reproduction	N.D.
109	Lead cyanamidate	244-073-9	20837-86-9	Toxic for reproduction	N.D.
110	Lead dinitrate	233-245-9	10099-74-8	Toxic for reproduction	N.D.
111	Lead oxide (lead monoxide)	215-267-0	1317-36-8	Toxic for reproduction	N.D.
112	Lead tetroxide (orange lead)	215-235-6	1314-41-6	Toxic for reproduction	N.D.
113	Lead titanium trioxide	235-038-9	12060-00-3	Toxic for reproduction	N.D.
114	Lead Titanium Zirconium Oxide	235-727-4	12626-81-2	Toxic for reproduction	N.D.
115	Pentalead tetraoxide sulphate	235-067-7	12065-90-6	Toxic for reproduction	N.D.



Test Report

No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
116	Pyrochlore, antimony lead yellow	232-382-1	8012-00-8	Toxic for reproduction	N.D.
117	Silicic acid (H ₂ Si ₂ 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]	272-271-5	68784-75-8	Toxic for reproduction	N.D.
118	Silicic acid, lead salt	234-363-3	11120-22-2	Toxic for reproduction	N.D.
119	Sulfurous acid, lead salt, dibasic	263-467-1	62229-08-7	Toxic for reproduction	N.D.
120	Tetraethyllead	201-075-4	78-00-2	Toxic for reproduction	N.D.
121	Tetralead trioxide sulphate	235-380-9	12202-17-4	Toxic for reproduction	N.D.
123	Trilead dioxide phosphonate	235-252-2	12141-20-7	Toxic for reproduction	N.D.
124	Propylene oxide; 1,2-epoxypropane; methyloxirane	200-879-2	75-56-9	Carcinogenic , Mutagenic	N.D.
125	Diethyl sulphate	200-589-6	64-67-5	Carcinogenic , Mutagenic	N.D.
126	Dimethyl sulphate	201-058-1	77-78-1	Carcinogenic	N.D.
127	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	421-150-7	143860-04-2	Toxic for reproduction	N.D.



Test Report

No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
128	Dinoseb	201-861-7	88-85-7	Toxic for reproduction	N.D.
129	4,4'-methylenedi-o-toluidine	212-658-8	838-88-0	Carcinogenic	N.D.
130	4,4'-oxydianiline and its salts	202-977-0	101-80-4	Carcinogenic , Mutagenic	N.D.
131	4-Aminoazobenzene; 4-Phenylazoaniline	200-453-6	60-09-3	Carcinogenic	N.D.
132	4-methyl-m-phenylenediamine (2,4-toluene-diamine)	202-453-1	95-80-7	Carcinogenic	N.D.
133	6-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8	Carcinogenic	N.D.
134	Biphenyl-4-ylamine	202-177-1	92-67-1	Carcinogenic	N.D.
135	o-aminoazotoluene	202-591-2	97-56-3	Carcinogenic	N.D.
136	o-Toluidine; 2-Aminotoluene	202-429-0	95-53-4	Carcinogenic	N.D.
137	N-methylacetamide	201-182-6	79-16-3	Toxic for reproduction	N.D.
138	1-bromopropane; n-propyl bromide	203-445-0	106-94-5	Toxic for reproduction	N.D.
139	Cadmium	231-152-8	7440-43-9	Carcinogenic; Equivalent level of concern having probable serious effects to human health	N.D.



Test Report

No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
140	Cadmium oxide	215-146-2	1306-19-0	Carcinogenic; Equivalent level of concern having probable serious effects to human health (effects on kidney and bone)	N.D.
141	Ammonium pentadecafluorooctanoate	223-320-4	3825-26-1	Toxic for reproduction ; PBT	N.D.
142	Pentadecafluorooctanoic acid	206-397-9	335-67-1	Toxic for reproduction ; PBT	N.D.
143	Dipentyl phthalate	205-017-9	131-18-0	Toxic for reproduction	N.D.
144	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]	/	/	Equivalent level of concern having probable serious effects to the environment (due to the endocrine disrupting properties of the degradation products)	N.D.



Test Report

No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
145	Cadmium sulphide	215-147-8	1306-23-6	Carcinogenic; Equivalent level of concern having probable serious effects to human health	N.D.
146	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate)(C.I. Direct Red 28)	209-358-4	573-58-0	Carcinogenic	N.D.
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)	217-710-3	1937-37-7	Carcinogenic	N.D.
148	Dihexyl phthalate	201-559-5	84-75-3	Toxic for reproduction	N.D.
149	Imidazolidine-2-thione (2-imidazoline-2-thiol)	202-506-9	96-45-7	Toxic for reproduction	N.D.
150	Lead di(acetate)	206-104-4	301-04-2	Toxic for reproduction	N.D.
151	Trixylyl phosphate	246-677-8	25155-23-1	Toxic for reproduction	N.D.
152	Cadmium chloride	233-296-7	10108-64-2	CMR	N.D.
153	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	271-093-5	68515-50-4	Toxic for reproduction	N.D.



Test Report

No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
154	Sodium peroxometaborate	231-556-4	7632-04-4	Toxic for reproduction	N.D.
155	Sodium perborate; perboric acid, sodium salt	239-172-9 234-390-0	/	Toxic for reproduction	N.D.
156	Cadmium fluoride	232-222-0	7790-79-6	CMR; Equivalent level of concern having probable serious effects to human health	N.D.
157	Cadmium sulphate	233-331-6	10124-36-4 31119-53-6	CMR; Equivalent level of concern having probable serious effects to human health	N.D.
158	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	223-346-6	3846-71-7	PBT; vPvB	N.D.
159	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	247-384-8	25973-55-1	PBT; vPvB	N.D.
160	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	239-622-4	15571-58-1	Toxic for reproduction	N.D.



Test Report

No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
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)	/	/	Toxic for reproduction	N.D.
162	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)	271-094-0 272-013-1	68515-51-5 68648-93-1	Toxic for reproduction	N.D.
163	karanal 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	/	/	vPvB	N.D.
164	1,3-propanesultone	214-317-9	1120-71-4	Carcinogenic	N.D.
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	223-383-8	3864-99-1	vPvB	N.D.
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	253-037-1	36437-37-3	vPvB	N.D.



Test Report

No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
167	Nitrobenzene	202-716-0	98-95-3	Toxic for reproduction	N.D.
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	206-801-3	375-95-1 21049-39-8 4149-60-4	Toxic for reproduction ; PBT	N.D.
169	Benzopyrene	200-028-5	50-32-8	Carcinogenic	N.D.
170	4,4'-isopropylidenediphenol(bisphenol A)	80-05-7	201-245-8	Toxic for reproduction	N.D.
171	Nonadecafluorodecanoic acid(PFDA) and its sodium and ammonium salts	3108-42-7 335-76-2 3830-45-3	- 206-400-3 221-470-5	Toxic for reproduction	N.D.
172	4-heptylphenol, branched and linear(4-HPbl)	-	-	Equivalent level of concern having probable serious effects to the environment	N.D.
173	4-tert-pentylphenol(PTAP)	80-46-6	201-280-9	Equivalent level of concern having probable serious effects to the environment	N.D.
174	perfluorohexane-1-sulphonic acid its salts (PFHxS)	-	-	vPvB	N.D.



Test Report

No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
175	Dechlorane(Includes all trans and cis isomers and combinations thereof)	-	-	vPvB	N.D.
176	Benzo (a) anthracene	56-55-3	200-280-6	PBT; vPvB	N.D.
177	Cadmium nitrate	10325-94-7	233-710-6	Carcinogenic; Equivalent level of concern having probable serious effects to human health	N.D.
178	Cadmium carbonate	513-78-0	208-168-9	Carcinogenic; Equivalent level of concern having probable serious effects to human health	N.D.
179	Cadmium hydroxide	21041-95-2	244-168-5	Carcinogenic; Equivalent level of concern having probable serious effects to human health	N.D.



Test Report

No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
180	Chrysene	205-923-4	218-01-9	Carcinogenic; PBT; vPvB	N.D.
181	1,3,4-thiadiazolidine-2,5-dithione , the reaction products of branched and straight chain (RP-HP) of formaldehyde and 4-heptylphenol [4-heptylphenol, Linear content $\geq 0.1\%$ w / w]	-	-	Equivalent level of concern having probable serious effects to the environment (due to the endocrine disrupting pro perties of the degradation products)	N.D.
182	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride)	552-30-7	209-008-0	Toxic for reproduction	N.D.
183	Dicyclohexyl phthalate (DCHP)	84-61-7	201-545-9	Toxic for reproduction	N.D.
184	Octamethylcyclotetrasiloxane	556-67-2	209-136-7	PBT vPvB	N.D.
185	Decamethylcyclopentasiloxane	541-02-6	208-764-9	PBT vPvB	N.D.
186	Dodecamethylcyclohexasiloxane	540-97-6	208-762-8	PBT vPvB	N.D.
187	Lead	7439-92-1	231-100-4	Toxic for reproduction	N.D.
188	Disodium octaborate	12008-41- 2	234-541-0	Toxic for reproduction	N.D.



Test Report

No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
189	Benzo[ghi]perylene	191-24-2	205-883-8	PBT vPvB	N.D.
190	Terphenyl, hydrogenated	61788-32-7	262-967-7	vPvB	N.D.
191	Ethylenediamine	107-15-3	203-468-6	Respiratory sensitising properties	N.D.
192	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one (3-benzylidene camphor; 3-BC	15087-24-8	239-139-9	Endocrine disrupting properties	N.D.
193	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	6807-17-1	Toxic for reproduction	N.D.
194	Benzo[k]fluoranthene	207-08-9	205-916-6	Carcinogenic PBT vPvB	N.D.
195	Fluoranthene	206-44-0; 93951-69-0	205-912-4	PBT vPvB	N.D.
196	Phenanthrene	85-01-8	201-581-5	vPvB	N.D.
197	Pyrene	129-00-0; 1718-52-1	204-927-3	PBT vPvB	N.D.



Test Report

No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
198	4-tert-Butylphenol	98-54-4	--	Carcinogenic, mutagenic, toxic to the reproductive system PBT (Article 57 d) vPvB (Article 57 e) Substances that may have serious effects on human health and the environment	N.D.
199	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof) HFPO-DA	--	--	Equivalent level of concern having probable serious effects on the environment (Article 57f) Equivalent level of concern having probable serious effects on human health (Article 57f)	N.D.



Test Report

No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
200	2-methoxyethyl acetate	110-49-6	--	Toxic for reproduction (Article 57c)	N.D.
201	Tris(4-nonylphenyl,branched and linear) phosphite (TNPP) with \geq 0.1% w/w of 4-nonylphenol,branched and linear (4-NP) TNPP	--	--	Endocrine disrupting	N.D.
202	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	404-360-3	Toxic for reproduction (Article 57c)	N.D.
203	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	400-600-6	Toxic for reproduction (Article 57c)	N.D.
204	Diisohexyl phthalate	71850-09-4	--	Toxic for reproduction (Article 57c)	N.D.
205	Perfluorobutane sulfonic acid (PFBS) and its salts	--	--	Equivalent level of concern having probable serious effects on the environment (Article 57f) Equivalent level of concern having probable serious effects on human health (Article 57f)	N.D.



Test Report

No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
206	1-vinylimidazole	1072-63-5	214-012-0	Toxic for reproduction (Article 57c)	N.D.
207	2-methylimidazole	693-98-1	211-765-7	Toxic for reproduction (Article 57c)	N.D.
208	Butyl 4-hydroxybenzoate	94-26-8	202-318-7	Equivalent level of concern having probable serious effects on human health (Article 57f)	N.D.
209	Dibutylbis(pentane-2,4-dionato-O,O')tin	22673-19-4	245-152-0	Toxic for reproduction (Article 57c)	N.D.
210	Bis(2-(2-methoxyethoxy)ethyl ether	143-24-8	205-594-7	Toxic for reproduction (Article 57c)	N.D.
211	Diocetyl tin dilaurate, stannane, Diocetyl-,bis(coco acyloxy) derivs., And any other stannane,diocetyl-, Bis(fatty acyloxy) derivs. Wherein C12 is the predominant carbon number of the fatty acyloxy moiety	--	--	Toxic for reproduction (Article 57c)	N.D.



Test Report

No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
212	1,4-dioxane	123-91-1	204-661-8	Equivalent level of concern having probable serious effects on the environment (Article 57f) Equivalent level of concern having probable serious effects on human health (Article 57f)	N.D.
213	2,2-bis (bromomethyl) propane 1,3- diol(BMP) 2,2-dimethylpropan-1-ol, rtibromo derivative/3-bromo-2,2-bis (bromomethyl) -1-propanol(TBNPA) 2,3 -dibromo-1-propanol (2,3-DBPA)	3296-90-0 36483-57- 5/1522-92 -5 96-13-9	221-967-7 253-057-0 202-480-9	Carcinogenicity(Article 57a)	N.D.
214	2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers	--	--	Toxic for reproduction (Article 57c)	N.D.



Test Report

No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
215	4,4'-(1-methylpropylidene) bisphenol (Bisphenol b)	77-40-7	201-025-1	Endocrine disruption (Article 57c)	N.D.
216	Glutaral	111-30-8	203-856-5	Respiratory sensitization (Article 57f)	N.D.
217	Medium-chain chlorinated paraffins (MCCP) [uvcb substances consisting of more than or equal to 80% linear chloroalkanes with carbon chain length within the range from C14 and C17]	--	--	Carcinogenic, mutagenic, toxic to the reproductive system PBT (Article 57 d) vPvB (Article 57 e) Substances that may have serious effects on human health and the environment	N.D.
218	Orthoboric acid, sodium salt	13840-56-7	237-560-2	Toxic for reproduction (Article 57c)	N.D.



Test Report

No.	Substance Name(s)	CAS No.	EC No.	SVHC	Concentration(%)
219	Phenol, alkylation products (mainly in paraposition) with C12-rich branched or linearalkyl chains from oligomerisation, covering any individual isomers and/or combinations thereof(PDDP)	--	--	Equivalent level of concern having probable serious effects on the environment (Article 57f) Equivalent level of concern having probable serious effects on human health (Article 57f) Toxic for reproduction (Article 57c)	N.D.

Note:

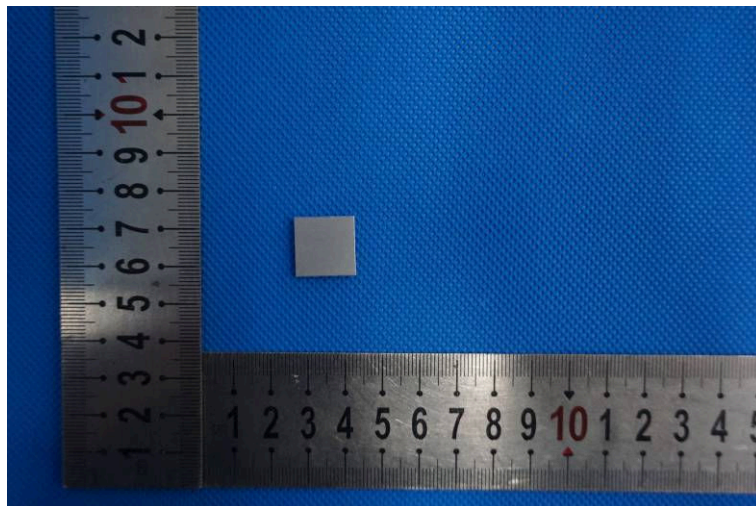
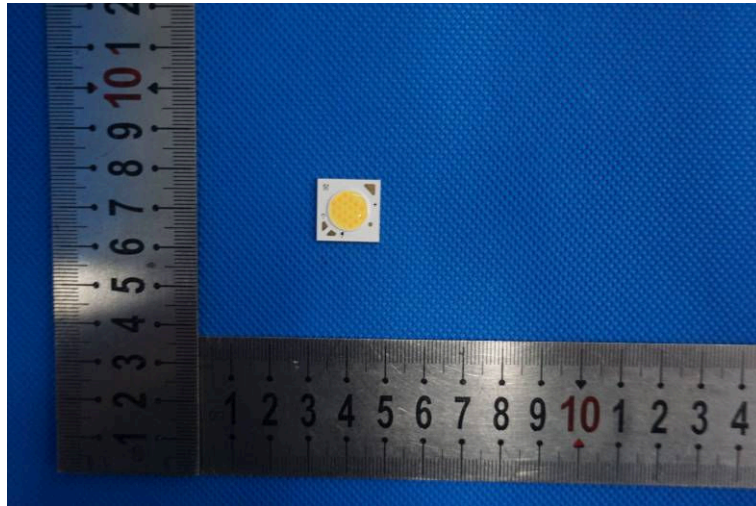
N.D. = Not Detected (<report limit=0.1%)

0.1%= 1000 mg/kg =1000 ppm



Test Report

Photo(s) of the sample(s)



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

Remark: This report is considered invalidated without the Special Seal for Inspection of the HTT, This report shall not be altered, increased or deleted. The results shown in this test report refer only to the sample(s) tested. Without written approval of HTT, this test report shall not be copied except in full and published as advertisement.