

Test Report

Report No. SCL01J01570710

Page 1 of 22

Applicant DONG GUAN BRIGHT LED ELECTRONICS LTD

Address NO.8,GAO LONG EAST RD ,GAOBU TOWN,DONG GUAN CTY,GUANG DONG PROVINCE,CHINA 523283

The following sample(s) and sample information was/were submitted and identified by/on the behalf of the client

No.	Sample Name(s)
(1)	PLCC series 支架
(2)	PLCC series 塑膠
(3)	PLCC series 樹脂

Sample Received Date Mar. 23, 2017

Testing Period Mar. 23, 2017 to Apr. 7, 2017

Test Requested As specified by client, to screen the 173 substances of very high concern(SVHC) under Regulation (EC) No 1907/2006 of REACH in the submitted sample(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 173 SVHC substances are all less than 0.1% (w/w) in the submitted sample(s).

Tested by

Jerry Guo

Reviewed by

Frank Jones

Approved by

Danny Liu

Date

Apr. 7, 2017

Danny Liu

Technical Manager

No. R169561330

Centre Testing International Group Co.,Ltd.

Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China

Test Report

Report No. SCL01J01570710

Page 2 of 22

Substances Information

Batch	No.	Substance Name(s)	CAS No.	EC No.
I	1	Anthracene	120-12-7	204-371-4
I	2	4,4'- Diaminodiphenylmethane	101-77-9	202-974-4
I	3	Dibutyl phthalate(DBP)	84-74-2	201-557-4
I	4	Cobalt dichloride*	7646-79-9	231-589-4
I	5	Diarsenic pentaoxide*	1303-28-2	215-116-9
I	6	Diarsenic trioxide*	1327-53-3	215-481-4
I	7	Sodium dichromate*	7789-12-0 10588-01-9	234-190-3
I	8	Musk xylene	81-15-2	201-329-4
I	9	Bis(2-ethyl(hexyl)phthalate)(DEHP)	117-81-7	204-211-0
I	10	Hexabromocyclododecane (HBCDD)	25637-99-4, 3194-55-6	247-148-4, 221-695-9
I	11	ShortChain Chlorinated Paraffins(SCCPs)	85535-84-8	287-476-5
I	12	Bis(tributyltin)oxide (TBTO)*	56-35-9	200-268-0
I	13	Lead hydrogen arsenate*	7784-40-9	232-064-2
I	14	Benzyl butyl phthalate(BBP)	85-68-7	201-622-7
I	15	Triethyl arsenate*	15606-95-8	427-700-2
II	16	^① Anthracene oil	90640-80-5	292-602-7
II	17	^① Anthracene oil, anthracene paste,distn.Lights ****	91995-17-4	295-278-5
II	18	^① Anthracene oil, anthracene paste,anthracene fraction	91995-15-2	295-275-9
II	19	^① Anthracene oil, anthracene-low	90640-82-7	292-604-8
II	20	^① Anthracene oil, anthracene paste	90640-81-6	292-603-2
II	21	^① Coal tar pitch, high temperature	65996-93-2	266-028-2
II	22	Acrylamide	79-06-1	201-173-7
II	23	2,4-Dinitrotoluene	121-14-2	204-450-0
II	24	Diisobutyl phthalate (DIBP)	84-69-5	201-553-2
II	25	^② Lead chromate	7758-97-6	231-846-0
II	26	^② Lead chromate molybdate sulphate red (C.I. Pigment Red 104)***	12656-85-8	235-759-9
II	27	^② Lead sulfochromate yellow (C.I. Pigment Yellow 34)***	1344-37-2	215-693-7
II	28	Tris(2-chloroethyl)phosphate (TCEP)	115-96-8	204-118-5
III	29	Trichloroethylene	79-01-6	201-167-4
III	30	^③ Boric acid	10043-35-3 11113-50-1	233-139-2 234-343-4

Test Report

Report No. SCL01J01570710

Page 3 of 22

Batch	No.	Substance Name(s)	CAS No.	EC No.
III	31	^③ Disodium tetraborate, anhydrous*****	1330-43-4 12179-04-3 1303-96-4	215-540-4
III	32	^③ Tetraboron disodium heptaoxide, hydrate*****	12267-73-1	235-541-3
III	33	Sodium chromate*	7775-11-3	231-889-5
III	34	Potassium chromate*	7789-00-6	232-140-5
III	35	Ammonium dichromate*	7789-09-5	232-143-1
III	36	Potassium dichromate*	7778-50-9	231-906-6
IV	37	Cobalt(II) sulphate*	10124-43-3	233-334-2
IV	38	Cobalt(II) dinitrate*	10141-95-6	233-402-1
IV	39	Cobalt(II) carbonate*	513-79-1	208-169-4
IV	40	Cobalt(II) diacetate*	71-48-7	200-755-8
IV	41	2-Methoxyethanol	109-86-4	203-713-7
IV	42	2-Ethoxyethanol	110-80-5	203-804-1
IV	43	Chromium trioxide*	1333-82-0	215-607-8
IV	44	^① Acids generated from chromium trioxide and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid*	7738-94-5 13530-68-2	231-801-5 236-881-5
V	45	2-ethoxyethyl acetate	111-15-9	203-839-2
V	46	Strontium chromate*	7789-06-2	232-142-6
V	47	^① 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	271-084-6
V	48	Hydrazine	7803-57-8 302-01-2	206-114-9
V	49	1-methyl-2-pyrrolidone	872-50-4	212-828-1
V	50	1,2,3-trichloropropane	96-18-4	202-486-1
V	51	^① 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	276-158-1
VI	52	Dichromium tris(chromate)*	24613-89-6	246-356-2
VI	53	Potassium hydroxyoctaoxodizincatedichromate*	11103-86-9	234-329-8
VI	54	Pentazinc chromate octahydroxide*	49663-84-5	256-418-0
VI	55	^② Aluminosilicate Refractory Ceramic Fibres (RCF) **	-	-
VI	56	^② Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) **	-	-
VI	57	^① Formaldehyde, oligomeric reaction products with aniline (technical MDA) [▲]	25214-70-4	500-036-1
VI	58	Bis(2-methoxyethyl) phthalate	117-82-8	204-212-6

Test Report

Report No. SCL01J01570710

Page 4 of 22

Batch	No.	Substance Name(s)	CAS No.	EC No.
VI	59	2-Methoxyaniline(o-Anisidine)	90-04-0	201-963-1
VI	60	4-(1,1,3,3-tetramethylbutyl)phenol (4-tert-Octylphenol)	140-66-9	205-426-2
VI	61	1,2-Dichloroethane	107-06-2	203-458-1
VI	62	Bis(2-methoxyethyl) ether	111-96-6	203-924-4
VI	63	Arsenic acid*	7778-39-4	231-901-9
VI	64	Calcium arsenate*	7778-44-1	231-904-5
VI	65	Trilead diarsenate*	6687-31-8	222-979-5
VI	66	N,N-dimethylacetamide (DMAC)	127-19-5	204-826-4
VI	67	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	202-918-9
VI	68	Phenolphthalein	77-97-8	201-004-7
VI	69	Lead diazide*	13424-46-9	236-542-1
VI	70	Lead 2,4,6-trinitro-m-phenylene dioxide (Lead styphnate)*	15245-44-0	239-290-0
VI	71	Lead dipicrate*	6477-64-1	229-335-2
VII	72	1,2-bis(2-methoxyethoxy) ethane (TEGDME; triglyme)	112-49-2	203-977-3
VII	73	1,2-dimethoxyethane:ethylene glycol dimethyl ether (EGDME)	110-71-4	203-794-9
VII	74	Diboron trioxide	1303-86-2	215-125-8
VII	75	Formamide	75-12-7	200-842-0
VII	76	Lead(II) bis methanesulfonate*	17570-76-2	401-750-5
VII	77	TGIC(1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)	2451-62-9	219-514-3
VII	78	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
VII	79	4,4'-bis(dimethylamino) benzophenone (Michler's ketone)	90-94-8	202-027-5
VII	80	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	202-959-2
VII	81	[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
VII	82	[4-[[4-aminophenyl] [4-(dimethylamino)phenyl] methylene]cyclohexa-2,5- dien-1-ylidene] dimethylammonium chloride(C.I. Basic Blue 26)***	2580-56-5	219-943-6
VII	83	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)***	6786-83-0	229-851-8
VII	84	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1	209-218-2

Test Report

Report No. SCL01J01570710

Page 5 of 22

Batch	No.	Substance Name(s)	CAS No.	EC No.
VIII	85	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	1163-19-5	214-604-9
VIII	86	^① 4-Nonylphenol, branched and linear [<i>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</i>]	-	-
VIII	87	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	204-650-8
VIII	88	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [<i>covering well-defined substances and UVCB substances, polymers and homologues</i>]	-	-
VIII	89	Henicosafluoroundecanoic acid	2058-94-8	218-165-4
VIII	90	Pentacosafloortridecanoic acid	72629-94-8	276-745-2
VIII	91	Cyclohexane-1,2-dicarboxylic anhydride, cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride	85-42-7, 13149-00-3, 14166-21-3	201-604-9, 236-086-3, 238-009-9
VIII	92	Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	247-094-1, 243-072-0, 256-356-4, 260-566-1
VIII	93	Heptacosafloortetradecanoic acid	376-06-7	206-803-4
VIII	94	Diisopentylphthalate(DIPP)	605-50-5	210-088-4
VIII	95	^② 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	284-032-2
VIII	96	N-pentyl-isopentylphthalate	776297-69-9	-
VIII	97	Methoxyacetic acid	625-45-6	210-894-6
VIII	98	Tricosafloordodecanoic acid	307-55-1	206-203-2
VIII	99	1,2-Diethoxyethane	629-14-1	211-076-1
VIII	100	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	421-150-7
VIII	101	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	202-453-1
VIII	102	N-methylacetamide	79-16-3	201-182-6
VIII	103	Pentalead tetraoxide sulphate*	12065-90-6	235-067-7
VIII	104	Biphenyl-4-ylamine	92-67-1	202-177-1
VIII	105	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	201-861-7
VIII	106	Dioxobis(stearato)trilead*	12578-12-0	235-702-8
VIII	107	Lead dinitrate*	10099-74-8	233-245-9
VIII	108	Tetrolead trioxide sulphate*	12202-17-4	235-380-9

Test Report

Report No. SCL01J01570710

Page 6 of 22

Batch	No.	Substance Name(s)	CAS No.	EC No.
VIII	109	Lead monoxide (lead oxide)*	1317-36-8	215-267-0
VIII	110	Lead titanium trioxide*	12060-00-3	235-038-9
VIII	111	4,4'-methylenedi-o-toluidine	838-88-0	212-658-8
VIII	112	Acetic acid, lead salt, basic*	51404-69-4	257-175-3
VIII	113	Dimethyl sulphate	77-78-1	201-058-1
VIII	114	Furan	110-00-9	203-727-3
VIII	115	Pyrochlore, antimony lead yellow*	8012-00-8	232-382-1
VIII	116	Tetraethyllead*	78-00-2	201-075-4
VIII	117	[Phthalato(2-)]dioxotrilead*	69011-06-9	273-688-5
VIII	118	Diethyl sulphate	64-67-5	200-589-6
VIII	119	Lead cyanamidate*	20837-86-9	244-073-9
VIII	120	Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped*	68784-75-8	272-271-5
VIII	121	Trilead dioxide phosphonate*	12141-20-7	235-252-2
VIII	122	<i>o</i> -Toluidine	95-53-4	202-429-0
VIII	123	<i>o</i> -aminoazotoluene	97-56-3	202-591-2
VIII	124	4-aminoazobenzene	60-09-3	200-453-6
VIII	125	6-methoxy- <i>m</i> -toluidine (<i>p</i> -cresidine)	120-71-8	204-419-1
VIII	126	Dibutyltin dichloride (DBTC)	683-18-1	211-670-0
VIII	127	Lead titanium zirconium oxide*	12626-81-2	235-727-4
VIII	128	Methyloxirane (Propylene oxide)	75-56-9	200-879-2
VIII	129	1-bromopropane (n-propyl bromide)	106-94-5	203-445-0
VIII	130	Trilead bis(carbonate)dihydroxide*	1319-46-6	215-290-6
VIII	131	Fatty acids, C16-18, lead salts*	91031-62-8	292-966-7
VIII	132	Orange lead (lead tetroxide)*	1314-41-6	215-235-6
VIII	133	Sulfurous acid, lead salt, dibasic*	62229-08-7	263-467-1
VIII	134	4,4'-oxydianiline and its salts	101-80-4	202-977-0
VIII	135	Lead oxide sulfate*	12036-76-9	234-853-7
VIII	136	Lead bis(tetrafluoroborate)*	13814-96-5	237-486-0
VIII	137	Silicic acid, lead salt*	11120-22-2	234-363-3
VIII	138	N,N-dimethylformamide	68-12-2	200-679-5
IX	139	Cadmium	7440-43-9	231-152-8
IX	140	Cadmium oxide*	1306-19-0	215-146-2
IX	141	Dipentyl phthalate (DPP)	131-18-0	205-017-9

Test Report

Report No. SCL01J01570710

Page 7 of 22

Batch	No.	Substance Name(s)	CAS No.	EC No.
IX	142	^① 4-Nonylphenol, branched and linear, ethoxylated[<i>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>]		-
IX	143	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	223-320-4
IX	144	Pentadecafluorooctanoic acid (PFOA)	335-67-1	206-397-9
X	145	^① Trixylyl phosphate	25155-23-1	246-677-8
X	146	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
X	147	Dihexyl phthalate	84-75-3	201-559-5
X	148	Cadmium sulphide*	1306-23-6	215-147-8
X	149	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
X	150	Lead di(acetate)*	301-04-2	206-104-4
X	151	Imidazolidine-2-thione; 2-imidazoline-2-thiol	96-45-7	202-506-9
XI	152	^① 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	271-093-5
XI	153	Cadmium chloride*	10108-64-2	233-296-7
XI	154	^③ Sodium perborate; perboric acid, sodium salt*****	-	239-172-9, 234-390-0
XI	155	^③ Sodium peroxometaborate*****	7632-04-4	231-556-4
XII	156	2-(2H-Benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	247-384-8
XII	157	2-Benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	223-346-6
XII	158	2-ethylhexyl 10-ethyl-4,4-dioctyl- 7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)*	15571-58-1	239-622-4
XI	159	Cadmium fluoride*	7790-79-6	232-222-0
XII	160	Cadmium sulphate*	10124-36-4, 31119-53-6	233-331-6

Test Report

Report No. SCL01J01570710

Page 8 of 22

Batch	No.	Substance Name(s)	CAS No.	EC No.
XII	161	^① 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)*	-	-
XIII	162	^① 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
XIII	163	^① 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]	-	-
XIV	164	Nitrobenzene	98-95-3	202-716-0
XIV	165	2,4-di-tert-butyl-6-(5- chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	223-383-8
XIV	166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	253-037-1
XIV	167	1,3-propanesultone	1120-71-4	214-317-9
XIV	168	Perfluorononan-1-oic-acid and its sodium and ammonium salts	375-95-1 21049-39-8 4149-60-4	206-801-3
XV	169	Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	200-028-5
XVI	170	4,4'-isopropylidenediphenol (bisphenol A; BPA)	80-05-7	201-245-8
XVI	171	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	3108-42-7 335-76-2 3830-45-3	221-470-5 206-400-3 --
XVI	172	<i>p</i> -(1,1-dimethylpropyl)phenol	80-46-6	201-280-9
XVI	173	^① 4-heptylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	--	--

Test Report

Report No. SCL01J01570710

Page 9 of 22

Test Result(s)

Batch	No.	Substance Name(s)	Concentration(%)			Report Limit
			(1)	(2)	(3)	
I	1	Anthracene	/	N.D.	N.D.	0.005%
I	2	4,4' - Diaminodiphenylmethane	/	N.D.	N.D.	0.005%
I	3	Dibutyl phthalate(DBP)	/	N.D.	N.D.	0.005%
I	4	Cobalt dichloride*	N.D.	N.D.	N.D.	0.01%
I	5	Diarsenic pentaoxide*	N.D.	N.D.	N.D.	0.01%
I	6	Diarsenic trioxide*	N.D.	N.D.	N.D.	0.01%
I	7	Sodium dichromate*	N.D.	N.D.	N.D.	0.01%
I	8	Musk xylene	/	N.D.	N.D.	0.005%
I	9	Bis(2-ethyl(hexyl)phthalate)(DEHP)	/	N.D.	N.D.	0.005%
I	10	Hexabromocyclododecane (HBCDD)	/	N.D.	N.D.	0.005%
I	11	ShortChain Chlorinated Paraffins(SCCPs)	/	N.D.	N.D.	0.01%
I	12	Bis(tributyltin)oxide (TBTO)*	/	N.D.	N.D.	0.005%
I	13	Lead hydrogen arsenate*	N.D.	N.D.	N.D.	0.01%
I	14	Benzyl butyl phthalate(BBP)	/	N.D.	N.D.	0.005%
I	15	Triethyl arsenate*	N.D.	N.D.	N.D.	0.01%
II	16	^① Anthracene oil	/	N.D.	N.D.	0.05%
II	17	^① Anthracene oil, anthracene paste, distn.Lights ****	/	N.D.	N.D.	0.05%
II	18	^① Anthracene oil, anthracene paste,anthracene fraction	/	N.D.	N.D.	0.05%
II	19	^① Anthracene oil, anthracene-low	/	N.D.	N.D.	0.05%
II	20	^① Anthracene oil, anthracene paste	/	N.D.	N.D.	0.05%
II	21	^① Coal tar pitch, high temperature	/	N.D.	N.D.	0.05%
II	22	Acrylamide	/	N.D.	N.D.	0.01%
II	23	2,4-Dinitrotoluene	/	N.D.	N.D.	0.01%
II	24	Diisobutyl phthalate (DIBP)	/	N.D.	N.D.	0.005%
II	25	^② Lead chromate	N.D.	N.D.	N.D.	0.05%
II	26	^② Lead chromate molybdate sulphate red (C.I. Pigment Red 104)***	N.D.	N.D.	N.D.	0.05%
II	27	^② Lead sulfochromate yellow (C.I. Pigment Yellow 34)***	N.D.	N.D.	N.D.	0.05%
II	28	Tris(2-chloroethyl)phosphate (TCEP)	/	N.D.	N.D.	0.01%
III	29	Trichloroethylene	/	N.D.	N.D.	0.005%
III	30	^③ Boric acid	N.D.	N.D.	N.D.	0.01%

Test Report

Report No. SCL01J01570710

Page 10 of 22

Batch	No.	Substance Name(s)	Concentration(%)			Report Limit
			(1)	(2)	(3)	
III	31	^③ Disodium tetraborate, anhydrous*****	N.D.	N.D.	N.D.	0.01%
III	32	^③ Tetraboron disodium heptaoxide, hydrate*****	N.D.	N.D.	N.D.	0.01%
III	33	Sodium chromate*	N.D.	N.D.	N.D.	0.01%
III	34	Potassium chromate*	N.D.	N.D.	N.D.	0.01%
III	35	Ammonium dichromate*	N.D.	N.D.	N.D.	0.01%
III	36	Potassium dichromate*	N.D.	N.D.	N.D.	0.01%
IV	37	Cobalt(II) sulphate*	N.D.	N.D.	N.D.	0.01%
IV	38	Cobalt(II) dinitrate*	N.D.	N.D.	N.D.	0.01%
IV	39	Cobalt(II) carbonate*	N.D.	N.D.	N.D.	0.01%
IV	40	Cobalt(II) diacetate*	N.D.	N.D.	N.D.	0.01%
IV	41	2-Methoxyethanol	/	N.D.	N.D.	0.005%
IV	42	2-Ethoxyethanol	/	N.D.	N.D.	0.005%
IV	43	Chromium trioxide*	N.D.	N.D.	N.D.	0.01%
IV	44	^① Acids generated from chromium trioxide and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid*	N.D.	N.D.	N.D.	0.01%
V	45	2-ethoxyethyl acetate	/	N.D.	N.D.	0.01%
V	46	Strontium chromate*	N.D.	N.D.	N.D.	0.01%
V	47	^① 1,2-Benzene dicarboxylic acid, di-C7-11 branched and linear alkyl esters	/	N.D.	N.D.	0.01%
V	48	Hydrazine	/	N.D.	N.D.	0.01%
V	49	1-methyl-2-pyrrolidone	/	N.D.	N.D.	0.01%
V	50	1,2,3-trichloropropane	/	N.D.	N.D.	0.01%
V	51	^① 1,2-Benzene dicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	/	N.D.	N.D.	0.01%
VI	52	Dichromium tris(chromate)*	N.D.	N.D.	N.D.	0.01%
VI	53	Potassium hydroxyoctaoxidizincatedichromate*	N.D.	N.D.	N.D.	0.01%
VI	54	Pentazine chromate octahydroxide*	N.D.	N.D.	N.D.	0.01%
VI	55	^② Aluminosilicate Refractory Ceramic Fibres (RCF) **	N.D.	N.D.	N.D.	0.05%

Test Report

Report No. SCL01J01570710

Page 11 of 22

Batch	No.	Substance Name(s)	Concentration(%)			Report Limit
			(1)	(2)	(3)	
VI	56	² Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) **	N.D.	N.D.	N.D.	0.05%
VI	57	¹ Formaldehyde, oligomeric reaction products with aniline (technical MDA) [▲]		N.D.	N.D.	0.01%
VI	58	Bis(2-methoxyethyl) phthalate	/	N.D.	N.D.	0.005%
VI	59	2-Methoxyaniline(o-Anisidine)	/	N.D.	N.D.	0.005%
VI	60	4-(1,1,3,3-tetramethylbutyl)phenol (4-tert-Octylphenol)	/	N.D.	N.D.	0.005%
VI	61	1,2-Dichloroethane	/	N.D.	N.D.	0.005%
VI	62	Bis(2-methoxyethyl) ether	/	N.D.	N.D.	0.005%
VI	63	Arsenic acid*	N.D.	N.D.	N.D.	0.01%
VI	64	Calcium arsenate*	N.D.	N.D.	N.D.	0.01%
VI	65	Trilead diarsenate*	N.D.	N.D.	N.D.	0.01%
VI	66	N,N-dimethylacetamide (DMAC)	/	N.D.	N.D.	0.005%
VI	67	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	/	N.D.	N.D.	0.005%
VI	68	Phenolphthalein	/	N.D.	N.D.	0.005%
VI	69	Lead diazide*	N.D.	N.D.	N.D.	0.01%
VI	70	Lead 2,4,6-trinitro-m-phenylene dioxide (Lead styphnate)*	N.D.	N.D.	N.D.	0.01%
VI	71	Lead dipicrate*	N.D.	N.D.	N.D.	0.01%
VII	72	1,2-bis(2-methoxyethoxy) ethane (TEGDME; triglyme)	/	N.D.	N.D.	0.01%
VII	73	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	/	N.D.	N.D.	0.01%
VII	74	Diboron trioxide	N.D.	N.D.	N.D.	0.01%
VII	75	Formamide	/	N.D.	N.D.	0.01%
VII	76	Lead(II) bis methanesulfonate*	N.D.	N.D.	N.D.	0.01%
VII	77	TGIC(1,3,5-tris(oxymethyl)-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)	/	N.D.	N.D.	0.01%
VII	78	β-TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)	/	N.D.	N.D.	0.01%
VII	79	4,4'-bis(dimethylamino) benzophenone (Michler's ketone)	/	N.D.	N.D.	0.01%

Test Report

Report No. SCL01J01570710

Page 12 of 22

Batch	No.	Substance Name(s)	Concentration(%)			Report Limit
			(1)	(2)	(3)	
VII	80	N,N,N',N'-tetramethyl-4,4'-methylene dianiline (Michler's base)	/	N.D.	N.D.	0.01%
VII	81	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride(C.I. Basic Violet 3)***	/	N.D.	N.D.	0.01%
VII	82	[4-[[4-anilino-1-naphthyl] [4-(dimethylamino)phenyl] methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride(C.I. Basic Blue 26)***	/	N.D.	N.D.	0.01%
VII	83	α,α -Bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)***	/	N.D.	N.D.	0.01%
VII	84	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	/	N.D.	N.D.	0.01%
VIII	85	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	/	N.D.	N.D.	0.05%
VIII	86	^① 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]	/	N.D.	N.D.	0.05%
VIII	87	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	/	N.D.	N.D.	0.05%
VIII	88	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	/	N.D.	N.D.	0.05%
VIII	89	Heptacosfluoroundecanoic acid	/	N.D.	N.D.	0.05%
VIII	90	Pentacosfluorotridecanoic acid	/	N.D.	N.D.	0.05%

Test Report

Report No. SCL01J01570710

Page 13 of 22

Batch	No.	Substance Name(s)	Concentration(%)			Report Limit
			(1)	(2)	(3)	
VIII	91	Cyclohexane-1,2-dicarboxylic anhydride, cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride	/	N.D.	N.D.	0.05%
VIII	92	Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride	/	N.D.	N.D.	0.05%
VIII	93	Heptacosafuorotetradecanoic acid	/	N.D.	N.D.	0.05%
VIII	94	Diisopentylphthalate(DIPP)	/	N.D.	N.D.	0.05%
VIII	95	[Ⓢ] 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	/	N.D.	N.D.	0.05%
VIII	96	N-pentyl-isopentylphthalate	/	N.D.	N.D.	0.05%
VIII	97	Methoxyacetic acid	/	N.D.	N.D.	0.05%
VIII	98	Tricosafuorododecanoic acid	/	N.D.	N.D.	0.05%
VIII	99	1,2-Diethoxyethane	/	N.D.	N.D.	0.05%
VIII	100	3-ethyl-2-methyl-2-(3-methylbutyl)-1-β-oxazolidine	/	N.D.	N.D.	0.05%
VIII	101	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	/	N.D.	N.D.	0.05%
VIII	102	N-methylacetamide	/	N.D.	N.D.	0.05%
VIII	103	Pentalead tetraoxide sulphate*	N.D.	N.D.	N.D.	0.01%
VIII	104	Biphenyl-4-ylamine	/	N.D.	N.D.	0.05%
VIII	105	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	/	N.D.	N.D.	0.05%
VIII	106	Dioxobis(stearato)trilead*	N.D.	N.D.	N.D.	0.01%
VIII	107	Lead dinitrate*	N.D.	N.D.	N.D.	0.01%
VIII	108	Tetralead trioxide sulphate*	N.D.	N.D.	N.D.	0.01%
VIII	109	Lead monoxide (lead oxide)*	N.D.	N.D.	N.D.	0.01%
VIII	110	Lead titanium trioxide*	N.D.	N.D.	N.D.	0.01%
VIII	111	4,4'-methylenedi-o-toluidine	/	N.D.	N.D.	0.05%

Test Report

Report No. SCL01J01570710

Page 14 of 22

Batch	No.	Substance Name(s)	Concentration(%)			Report Limit
			(1)	(2)	(3)	
VIII	112	Acetic acid, lead salt, basic*	N.D.	N.D.	N.D.	0.01%
VIII	113	Dimethyl sulphate	/	N.D.	N.D.	0.05%
VIII	114	Furan	/	N.D.	N.D.	0.05%
VIII	115	Pyrochlore, antimony lead yellow*	N.D.	N.D.	N.D.	0.01%
VIII	116	Tetraethyllead*	N.D.	N.D.	N.D.	0.01%
VIII	117	[Phthalato(2-)]dioxotrilead*	N.D.	N.D.	N.D.	0.01%
VIII	118	Diethyl sulphate	/	N.D.	N.D.	0.05%
VIII	119	Lead cyanamidate*	N.D.	N.D.	N.D.	0.01%
VIII	120	Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped*	N.D.	N.D.	N.D.	0.01%
VIII	121	Trilead dioxide phosphonate*	N.D.	N.D.	N.D.	0.01%
VIII	122	<i>o</i> -Toluidine	/	N.D.	N.D.	0.05%
VIII	123	<i>o</i> -aminoazotoluene	/	N.D.	N.D.	0.05%
VIII	124	4-aminoazobenzene	/	N.D.	N.D.	0.05%
VIII	125	6-methoxy- <i>m</i> -toluidine (<i>p</i> -cresidine)	/	N.D.	N.D.	0.05%
VIII	126	Dibutyltin dichloride (DBTC)	/	N.D.	N.D.	0.05%
VIII	127	Lead titanium zirconium oxide*	N.D.	N.D.	N.D.	0.01%
VIII	128	Methyloxirane (Propylene oxide)	/	N.D.	N.D.	0.05%
VIII	129	1-bromopropane (n-propyl bromide)	/	N.D.	N.D.	0.05%
VIII	130	Trilead bis(carbonate)dihydroxide*	N.D.	N.D.	N.D.	0.01%
VIII	131	Fatty acids, C16-18, lead salts*	N.D.	N.D.	N.D.	0.01%
VIII	132	Orange lead (lead tetroxide)*	N.D.	N.D.	N.D.	0.01%
VIII	133	Sulfurous acid, lead salt, dibasic*	N.D.	N.D.	N.D.	0.01%
VIII	134	4,4'-oxydianiline and its salts	/	N.D.	N.D.	0.05%
VIII	135	Lead oxide sulfate*	N.D.	N.D.	N.D.	0.01%
VIII	136	Lead bis(tetrafluoroborate)*	N.D.	N.D.	N.D.	0.01%
VIII	137	Silicic acid, lead salt*	N.D.	N.D.	N.D.	0.01%
VIII	138	N,N-dimethylformamide	/	N.D.	N.D.	0.05%
IX	139	Cadmium	N.D.	N.D.	N.D.	0.01%
IX	140	Cadmium oxide*	N.D.	N.D.	N.D.	0.01%
IX	141	Dipentyl phthalate (DPP)	/	N.D.	N.D.	0.01%

Test Report

Report No. SCL01J01570710

Page 15 of 22

Batch	No.	Substance Name(s)	Concentration(%)			Report Limit
			(1)	(2)	(3)	
IX	142	^① 4-Nonylphenol, branched and linear, ethoxylated[<i>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>]	/	N.D.	N.D.	0.05%
IX	143	Ammonium pentadecafluorooctanoate (APFO)	/	N.D.	N.D.	0.01%
IX	144	Pentadecafluorooctanoic acid (PFOA)	/	N.D.	N.D.	0.01%
X	145	^① Trixylyl phosphate	/	N.D.	N.D.	0.01%
X	146	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)	/	N.D.	N.D.	0.01%
X	147	Dibexyl phthalate	/	N.D.	N.D.	0.01%
X	148	Cadmium sulphide*	N.D.	N.D.	N.D.	0.01%
X	149	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)***	/	N.D.	N.D.	0.01%
X	150	Lead di(acetate)*	N.D.	N.D.	N.D.	0.01%
X	151	Imidazolidine-2-thione; 2-imidazoline-2-thiol	/	N.D.	N.D.	0.01%
XI	152	^① 1,2-Benzenedicarboxylic acid, dimethyl ester, branched and linear	/	N.D.	N.D.	0.01%
XI	153	Cadmium chloride*	N.D.	N.D.	N.D.	0.01%
XI	154	^③ Sodium perborate; perboric acid, sodium salt*****	N.D.	N.D.	N.D.	0.01%
XI	155	^③ Sodium peroxometaborate*****	N.D.	N.D.	N.D.	0.01%
XII	156	2, (2H-Benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	/	N.D.	N.D.	0.01%

Test Report

Report No. SCL01J01570710

Page 16 of 22

Batch	No.	Substance Name(s)	Concentration(%)			Report Limit
			(1)	(2)	(3)	
XII	157	2-Benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	/	N.D.	N.D.	0.01%
XII	158	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)*	/	N.D.	N.D.	0.05%
XII	159	Cadmium fluoride*	N.D.	N.D.	N.D.	0.01%
XII	160	Cadmium sulphate*	N.D.	N.D.	N.D.	0.01%
XII	161	^① 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 MO TE)*	/	N.D.	N.D.	0.05%
XIII	162	^① 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)	/	N.D.	N.D.	0.05%
XIII	163	^① 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]	/	N.D.	N.D.	0.05%
XIV	164	Nitrobenzene	/	N.D.	N.D.	0.01%
XIV	165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	/	N.D.	N.D.	0.01%
XIV	166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	/	N.D.	N.D.	0.01%
XIV	167	1,3-propanesultone	/	N.D.	N.D.	0.01%
XIV	168	Perfluorononan-1-oic-acid and its sodium and ammonium salts	/	N.D.	N.D.	0.01%

Test Report

Report No. SCL01J01570710

Page 17 of 22

Batch	No.	Substance Name(s)	Concentration(%)			Report Limit
			(1)	(2)	(3)	
XV	169	Benzo[def]chrysene (Benzo[a]pyrene)	/	N.D.	N.D.	0.01%
XVI	170	4,4'-isopropylidenediphenol (bisphenol A; BPA)	/	N.D.	N.D.	0.01%
XVI	171	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	/	N.D.	N.D.	0.01%
XVI	172	<i>p</i> -(1,1-dimethylpropyl)phenol	/	N.D.	N.D.	0.01%
XVI	173	^① 4-heptylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	/	N.D.	N.D.	0.05%

Test Method:

Refer to US EPA3052:1996, US EPA 3050B:1996, US EPA3060A:1996, US EPA 3550C:2007,
US EPA 3540C:1996, ISO 17353:2004(E), BS EN 14582:2007 for sample pretreatment.

Analyzed by ICP-OES, UV-Vis, IC, HPLC, GC-MS, GC-MS(NCI), Headspace-GCMS and LC-MS-MS.

Tested Sample Part Description

- (1) Mixed test, metal with silver-white plating[#]
- (2) White plastic
- (3) Semi-transparent resin

Test Report

Report No. SCL01J01570710

Page 18 of 22

Note:

1. w/w = weight by weight; 0.1% = 1000 mg/kg = 1000 ppm
2. N.D. = Not Detected (<report limit); ‘ / ’ = Not Tested
3. *: Concentration value of the substance by the conversion from the test results of certain elements.
Concentration value of Bis(tributyltin)oxide(TBTO), 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE), 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) by the conversion from the test results of certain compounds(Tributyl Tins(TBT), Dioctyl Tins(DOT), Monoctyl Tins(MOT)).
4. **: All refractory ceramic fibres are covered by index number 650-017-00-8 in Annex VI of the Regulation on Classification, Labeling and Packaging of chemical substances and mixtures, the so called CLP Regulation (Regulation (EC) No 1272/2008).
5. ***:C.I.: Colour Index
6. ****:Light fractions from distillation
7. *****: Concentration value of Disodiumtetraborate, anhydrous and Tetraboron disodium heptaoxide, hydrate is evaluated by Disodiumtetraborate, with no consider of the hydrate. Concentration value of Sodium perborate; perboric acid, sodium salt; Sodium peroxometaborate is evaluated by Sodium perborate, with no consider of the hydrate.
8. ▲:Concentration value of Formaldehyde, oligomeric reaction products with aniline(technical MDA) by the conversion from the test results of certain compounds(2,4-Diaminodiphenylmethane, 4,4'-Diaminodiphenylmethane, 2,6-Diaminodiphenylmethane).
9. ①: In view of the substances are established as UVCB substances (substances of unknown or variable composition, complex reaction products or biological materials) consisting of different and variable constituents, the test results are calculated based on the main constituents of the representative compounds for substances.
10. ②: In view of the substance contain variable substances, the test results are calculated based on main constituents of the representative compounds for the substances, and the test results of the representative compounds are calculated based on the result of specified heavy metal elements.
11. ③: Concentration value of Boric acid; Disodiumtetraborate, anhydrous; Tetraboron disodium heptaoxide,hydrate; Diboron trioxide; Sodium perborate; perboric acid, sodium salt; Sodium peroxometaborate is calculated by the conversion from the test results of certain elements and confirmed by appropriate solvent extraction, meanwhile the book of materials is suggested to be checked for further confirmation.

Remark:

As specified by client, the test was conducted by mixing several samples together. The result(s) shown on this report may be different from the content of any homogeneous material.

Test Report

Report No. SCL01J01570710

Page 19 of 22

Appendix:

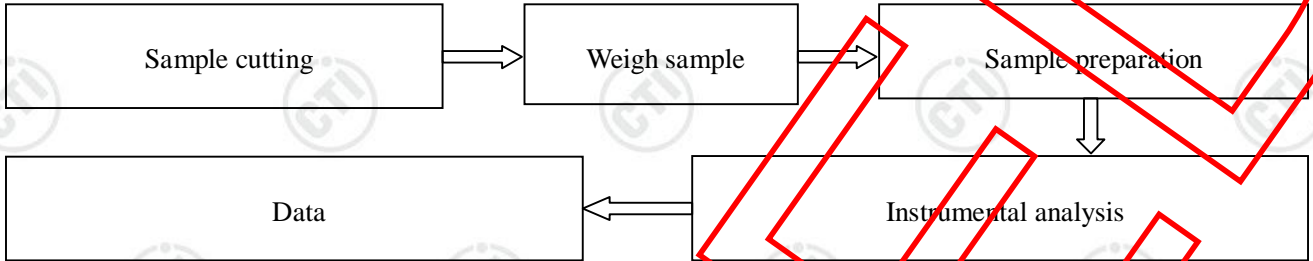
1. Any supplier of an article containing a substance that is included in the Candidate List in a concentration above 0.1 % weight by weight (w/w) has the duty to communicate information in accordance with Article 33 of European Union regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).
 - 1) Any supplier shall provide the recipient of the article with sufficient information to allow safe use of the article including, as a minimum, the name of that substance.
 - 2) On request by a consumer any supplier shall provide the consumer with sufficient information to allow safe use of the article including, as a minimum, the name of that substance within 45 days of receipt of the request, free of charge.
2. The supplier of a substance that is included in the Candidate List on their own shall provide the recipient of the substance with a safety data sheet for free compiled in accordance with Article 3 and Annex II of REACH.
3. The supplier of a mixture that containing a substance that is included in the Candidate List shall exchange information in accordance with Article 31, Article 32, and Annex II of REACH.
 - 1) Any supplier shall provide the recipient of the mixture with a safety data sheet for free where a preparation meets the criteria for classification as dangerous in accordance with Directives 1999/45/EC.
 - 2) Any supplier shall provide the recipient of the mixture with a safety data sheet for free where a preparation does not meet the criteria for classification as dangerous in accordance with Directive 1999/45/EC, but contains any substance that is included in the Candidate List in an individual concentration of ≥ 0.1 % by weight for non-gaseous mixtures or ≥ 0.2 % by volume for gaseous mixtures.

Test Report

Report No. SCL01J01570710

Page 20 of 22

Test Process



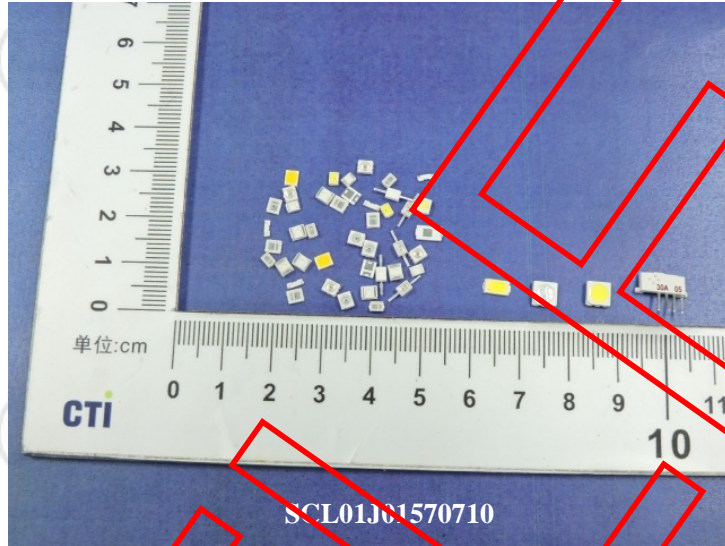
RECEIVED

Test Report

Report No. SCL01J01570710

Page 21 of 22

Photo(s) of the Finished Product(s)



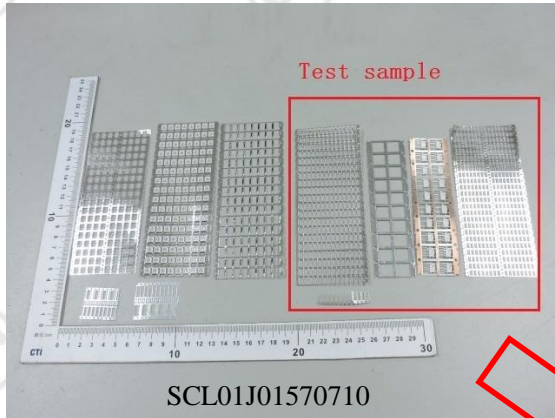
Test Report

Report No. SCL01J01570710

Page 22 of 22

Photo(s) of the sample(s)

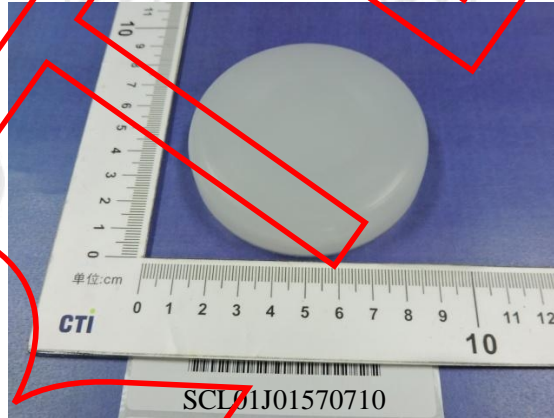
(1)



(2)



(3)



*** End of Report ***

The test report is effective only with both signature and specialized stamp. The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.