



Test Report

Number: LCZC14030932-E

Date: Apr. 01, 2014

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Applicant : JIANGMEN PENGJIANG HETANG LIANHENG ORGANOSILICON MATERIAL
FACTORY

Address : 2, NO.57, ZHONGXING 3 ROAD, HETANG TOWN, PENGJIANG

Date of Received : Mar. 26, 2014

Testing Period : From Mar. 26, 2014 to Apr. 01, 2014

Report on the submitted sample said to be:

Item Name : silicon rubber

Model No. : LH-****

Please see the next page(s) for details.

Signed for and on behalf of **LCTECH**

Approved by


Robert Lu
Technical Manager



Test Report

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Sample No.	Test Request	Conclusion
01	Regulation (EC) No.1907/2006 (REACH) — Substances of Very High Concern (SVHC) candidate list updated on Dec. 16, 2013, testing of the 151 SVHC was performed by currently available analytical techniques	See Result
01	German ZEK 01.4-08 for GS-MARK — Polycyclic aromatic hydrocarbons (PAHs)	See Result
01	European RoHS directive 2011/65/EU (Recast of directive 2002/95/EC) — Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium (Cr(VI)) and Polybrominated Biphenyls & Polybrominated Biphenyl Ethers (PBBs & PBDEs) content	Pass
01	Annex XVII of Regulation (EC) No.1907/2006 (REACH) — Cadmium (Cd) content	Pass
01	US —Consumer Product Safety Improvement Act 2008 (CPSIA)II — Total Lead(Pb) content	Pass
01	US —Consumer Product Safety Improvement Act 2008 (CPSIA)II — Phthalates content	Pass
01	Annex XVII of Regulation (EC) No.1907/2006 (REACH) — Phthalates content	Pass
01	As requested by the applicant — Phthalates (DnHP, DIBP) content	Pass

1 TEST RESULT

1.1 SVHC Testing Results — Regulation(EC) No.1907/2006

No.	Substance of Very High Concern	CAS No.	Result (%)
			01
1	Anthracene *	120-12-7	ND
2	4, 4' -Diaminodiphenylmethane(MDA)	101-77-9	ND
3	Dibutyl Phthalate (DBP) *	84-74-2	ND
4	Cobalt Dichloride Δ	7646-79-9	ND
5	Diarsenic Pentaoxide Δ	1303-28-2	ND
6	Diarsenic Trioxide Δ	1327-53-3	ND
7	Sodium Dichromate Δ	7789-12-0, 10588-01-9	ND
8	5-Tert-Butyl-2,4,6-Trinitro-M-Xylene * (Musk-Xylene)	81-15-2	ND
9	Bis (2-Ethyl Hexyl) Phthalate(DEHP) *	117-81-7	ND
10	Hexabromocyclododecane, * (HBCDD) #1	25637-99-4, 3194-55-6	ND
11	Short Chain Chlorinated Paraffin,C10-C13 (SCCP) *	85535-84-8	ND
12	Bis (Tributyltin) Oxide(TBTO)#2	56-35-9	ND
13	Lead Hydrogen Arsenate Δ	7784-40-9	ND
14	Triethyl Arsenate Δ	15606-95-8	ND
15	Benzyl Butyl Phthalate (BBP) *	85-68-7	ND
16	Anthracene oil#3	90640-80-5	ND
17	Anthracene oil, Anthracene paste, distn.Lights#3	91995-17-4	ND
18	Anthracene oil, anthracene paste, anthracene fraction#3	91995-15-2	ND
19	Anthracene oil, Anthracene-low#3	90640-82-7	ND
20	Anthracene oil, anthracene paste#3	90640-81-6	ND
21	Pitch, coal tar, high-temp#3	65996-93-2	ND
22	Aluminosilicate, Refractory Ceramic Fibres #4 Δ	Index no.: 650-017-00-8	ND
23	Zirconia Aluminosilicate,Refractory Ceramic Fibres #5 Δ	Index no. 650-017-00-8	ND

No.	Substance of Very High Concern	CAS No.	Result (%)
			01
24	Di-isobutylphthalate (DIBP) *	84-69-5	ND
25	2,4-Dinitrotoluene (DNT) *	121-14-2	ND
26	Tris(2-chloroethyl) phosphate (TCEP) *	115-96-8	ND
27	Lead chromate Δ	7758-97-6	ND
28	Lead chromate molybdate sulphate red(C.I. Pigment Red104) Δ	12656-85-8	ND
29	Lead sulfochromate yellow (C.I. Pigment Yellow 34) Δ	1344-37-2	ND
30	Acrylamide*	79-06-1	ND
31	Trichloroethylene (TCE) *	79-01-6	ND
32	Boric acid Δ	10043-35-3, 11113 -50-1	ND
33	Disodium tetraborate, Anhydrous Δ	1303-96-4, 1330-43-4, 12179-04-3	ND
34	Tetraboron disodium heptaoxide, hydrate Δ	12267-73-1	ND
35	Sodium chromate Δ	7775-11-3	ND
36	Potassium chromate Δ	7789-00-6	ND
37	Ammonium dichromate Δ	7789-09-5	ND
38	Potassium dichromate Δ	7778-50-9	ND
39	Cobalt(II) sulphate Δ	10124-43-3	ND
40	Cobalt(II) dinitrate Δ	10141-05-6	ND
41	Cobalt(II) carbonate Δ	513-79-1	ND
42	Cobalt(II) diacetate Δ	71-48-7	ND
43	2-Methoxyethanol (ME) *	109-86-4	ND
44	2-Ethoxyethanol (EE) *	110-80-5	ND
45	Chromium trioxide Δ	1333-82-0	ND
46	Oligomers of chromic acid and dichromic acid Δ	7738-94-5, 13530-68-2	ND
47	Strontium chromate Δ	7789-06-2	ND
48	2-ethoxyethyl acetate(EEA)	111 -15-9	ND
49	Hydrazine	302-01-2, 7803-57-8	ND

No.	Substance of Very High Concern	CAS No.	Result (%)
			01
50	1-methyl-2-pyrrolidone(MP) *	872-50-4	ND
51	1,2,3-trichloropropane(TCP) *	96-18-4	ND
52	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	ND
53	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	ND
54	Dichromium tris(chromate) Δ	24613-89-6	ND
55	Potassium hydroxyoctaoxodi zincatedichromate Δ	11103-86-9	ND
56	Pentazinc chromate octahydroxide Δ	49663-84-5	ND
57	Formaldehyde, oligomeric reaction products with aniline *	25214-70-4	ND
58	Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	ND
59	2-Methoxyaniline(MA)	90-04-0	ND
60	4-(1,1,3,3-tetramethylbutyl)phenol (4-tert-Octylphenol)	140-66-9	ND
61	1,2-Dichloroethane (DCE)	107-06-2	ND
62	Bis(2-methoxy ethyl)ether (BMEE)	111-96-6	ND
63	Arsenic acid Δ	7778-39-4	ND
64	Calcium arsenate Δ	7778-44-1	ND
65	Trilead diarsenate Δ	3687-31-8	ND
66	N,N-Dimethylacetamide (DMAC)	127-19-5	ND
67	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	ND
68	Phenolphthalein	77-09-8	ND
69	Lead azide Δ	13424-46-9	ND
70	Lead styphnate Δ	15245-44-0	ND
71	lead dipicrate Δ	6477-64-1	ND
72	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	ND
73	Ethylene glycol dimethyl ether (EGDME)	110-71-4	ND
74	Diboron trioxideΔ	1303-86-2	ND

No.	Substance of Very High Concern	CAS No.	Result (%)
			01
75	Formamide	75-12-7	ND
76	Lead(II) bis(methanesulfonate) Δ	17570-76-2	ND
77	1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (TGIC)	2451-62-9	ND
78	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β -TGIC)	59653-74-6	ND
79	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	ND
80	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	ND
81	[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	ND
82	[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9	ND
83	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1	ND
84	α,α -Bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	ND
85	Pyrochlore, antimony lead yellow Δ	8012-00-8	ND
86	6-methoxy-m-toluidine (p-cresidine)	120-71-8	ND
87	Henicosfluoroundecanoic acid	2058-94-8	ND
88	Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] [The individual isomers [2], [3] and [4] (including their cis- and trans- stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry]	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	ND

No.	Substance of Very High Concern	CAS No.	Result (%)
			01
89	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]	85-42-7, 13149-00-3, 14166-21-3	ND
90	Dibutyltin dichloride (DBTC)	683-18-1	ND
91	Lead bis(tetrafluoroborate) Δ	13814-96-5	ND
92	Lead dinitrate Δ	10099-74-8	ND
93	Silicic acid, lead salt Δ	11120-22-2	ND
94	4-Aminoazobenzene	60-09-3	ND
95	Lead Titanium Zirconium Oxide Δ	12626-81-2	ND
96	Lead oxide (lead monoxide) Δ	1317-36-8	ND
97	o-Toluidine	95-53-4	ND
98	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	ND
99	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] Δ	68784-75-8	ND
100	Trilead bis(carbonate)dihydroxide Δ	1319-46-6	ND
101	Furan	110-00-9	ND
102	N,N-dimethylformamide*	68-12-2	ND
103	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	-	ND

No.	Substance of Very High Concern	CAS No.	Result (%)
			01
104	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]	-	ND
105	4,4'-methylenedi-o-toluidine	838-88-0	ND
106	Diethyl sulphate	64-67-5	ND
107	Dimethyl sulphate	77-78-1	ND
108	Lead oxide sulfate Δ	12036-76-9	ND
109	Lead titanium trioxide Δ	12060-00-3	ND
110	Acetic acid, lead salt, basic Δ	51404-69-4	ND
111	[Phthalato(2-)]dioxotrilead Δ	69011-06-9	ND
112	Bis(pentabromophenyl) ether (DecaBDE) *	1163-19-5	ND
113	N-methylacetamide	79-16-3	ND
114	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	ND
115	1,2-Diethoxyethane	629-14-1	ND
116	Tetralead trioxide sulphate Δ	12202-17-4	ND
117	N-pentyl-isopentylphthalate	776297-69-9	ND
118	Dioxobis(stearato)trilead Δ	12578-12-0	ND
119	Tetraethyllead Δ	78-00-2	ND
120	Pentalead tetraoxide sulphate Δ	12065-90-6	ND
121	Pentacosafuorotridecanoic acid	72629-94-8	ND
122	Tricosafuorododecanoic acid	307-55-1	ND
123	Heptacosafuorotetradecanoic acid	376-06-7	ND
124	1-bromopropane (n-propyl bromide)	106-94-5	ND
125	Methoxy acetic acid	625-45-6	ND
126	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	ND
127	Methyloxirane (Propylene oxide)	75-56-9	ND
128	Trilead dioxide phosphonate Δ	12141-20-7	ND
129	o-aminoazotoluene	97-56-3	ND
130	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	ND

No.	Substance of Very High Concern	CAS No.	Result (%)
			01
131	4,4'-oxydianiline and its salts	101-80-4	ND
132	Orange lead (lead tetroxide) Δ	1314-41-6	ND
133	Biphenyl-4-ylamine	92-67-1	ND
134	Diisopentylphthalate (DIPP)	605-50-5	ND
135	Fatty acids, C16-18, lead salts Δ	91031-62-8	ND
136	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	ND
137	Sulfurous acid, lead salt, dibasic Δ	62229-08-7	ND
138	Lead cyanamidate Δ	20837-86-9	ND
139	Cadmium *	7440-73-9	ND
140	Cadmium oxide Δ*	1306-19-0	ND
141	Ammonium pentadecafluorooctanoate (APFO)	385-26-1	ND
142	Pentadecafluorooctanoic acid (PFOA)	335-67-1	ND
143	Dipentyl phthalate (DPP)	131-18-0	ND
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]	--	ND
145	Cadmium sulphide Δ	1306-23-6	ND
146	Dihexyl phthalate	84-75-3	ND
147	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	ND
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	ND
149	Imidazolidine-2-thione; 2-imidazoline-2-thiol	96-45-7	ND
150	Lead di(acetate) Δ	301-04-2	ND
151	Trixylyl phosphate	25155-23-1	ND

Remark:

- ND= Not detected (less than report limit).
- report limit = 0.01%.
- % = percentage by weight.
- SVHC = Substance Of Very High Concern.
- Δ= According to currently available analytical techniques, Concentration of substance is converted from the concentration of specific heavy metal or inorganic element (As, Cr⁶⁺, Pb, Al, Si, Zr, B/H₃BO₃, Co, Mo, Zn, Sb, Ti, Ba, Cd).
- ※ = The testing item marked with ※ and Arsenic (As), Hexavalent Chromium (Cr⁶⁺), Lead (Pb), Cobalt (Co), Molybdenum (Mo), Strontium (Sr), Silicon(Si), Titanium(Ti), Boron (B) and Cadmium(Cd) are accredited by the CNAS.
- * = Concentration of substance is converted from the concentration of 4,4'-diaminodiphenylmethane (4,4'-MDA). According to the Annex XV dossiers, 4,4'-MDA is a major constituent (47%~65%,w/w) of the UVCB substance formaldehyde, oligomeric reaction products with aniline.
- #1 Hexabromocyclododecane(HBCDD), and all major diastereoisomers identified:(α, β, γ- HBCDD).
- #2 Calculated concentration based on the identified tributyltin, TBT results.
- #3 Calculated concentration based on the total concentration of the identified polyaromatic hydrocarbons (PAHs), aromatic hydrocarbons and heterocycles results. Identity and ratio of each substance shall refer to the respective Annex XV dossiers submitted to the ECHA.
- #4 Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008, and fulfil the three following conditions:
 - a) Al₂O₃ and SiO₂ are the main components present within variable concentration ranges.
 - b) Fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometers (μm).
 - c) Alkaline oxide and alkali earth oxide(Na₂O+K₂O+CaO+MgO+BaO) content less or equal to 18%w/w.
- #5 Zirconia Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008, and fulfil the three following conditions:
 - a) Al₂O₃, SiO₂ and ZrO₂, are the main components present within variable concentration Ranges
 - b) Fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometers (μm).
 - c) Alkaline oxide and alkali earth oxide(Na₂O+K₂O+CaO+MgO+BaO) content less or equal to 18%w/w.

Note:

- Substances of very high concern (SVHC) are classified as:
 - Carcinogenic, mutagenic or toxic to reproduction (CMR);
 - Persistent, bio-accumulative and toxic (PBT);
 - Very persistent and very bio-accumulative (vPvB);
- The SVHC proposed list is under evaluation by ECHA and may subject to change in the future.
More information please refer to:

http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp#download

- In accordance with Regulation (EC) No. 1907/2006, any 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 is present in those articles in quantities totaling over one tonne per producer or importer per year; and (b) the substance is present in those articles above a concentration of 0,1% weight by weight (w/w).
- 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.

Test method:

Reference to

- 1). US EPA 3550C:2007 Ultrasonic extraction & US EPA 8270D:2007 Semivolatile organic compounds by gas Chromatography / mass Spectrometry (GC/MS).
- 2). US EPA 3540C:1996 Soxhlet Extraction & US EPA 8270D:2007 Semivolatile organic compounds by gas chromatography/mass spectrometry (GC/MS).
- 3). US EPA 3060A:1996 Alkaline Digestion for Hexavalent Chromium US EPA 7196A:1992 Chromium, Hexavalent (colorimetric) (UV-VIS Method).
- 4). ISO3613:2000 Chromate conversion coatings on zinc, calcium, aluminum-zinc alloys and zinc-aluminum alloys - Test methods: Determination of hexavalent chromium content of colored chromate coating (UV- VIS method).
- 5). US EPA 3052:1996 Microwave assisted acid digestion of siliceous and organically based matrices & US EPA 6010C:2007 Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES).
- 6). US EPA 3050B:1996 acid digestion of sediments, sludges, and soils & US EPA 6010C:2007 Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES).
- 7). In-house method for testing boron compounds by water extraction.
- 8). In-house method for testing hydrazine by UV- VIS method.
- 9). US EPA 8260C:2006 Head-Space GC method, Volatile organic compounds by Head-Space gas Chromatography / mass Spectrometry (HS/GC/MS).
- 10). EN 14362-1:2012 Textiles – Methods for the determination of certain aromatic amines derived from Azo colorants- Part 1: Detection of the use of certain Azo colorants accessible with and without Extracting the fibres.

- 11). US EPA 3550C(2007) & EPA 8321B(2007), determined by High Performance Liquid Chromatography (HPLC).
- 12). US EPA 3550C(2007) & EPA 8321B(2007), determined by Liquid Chromatography-Mass Spectrometer (LC-MS).
- 13). BS EN 14582-2007 Halogen and sulfur content-Oxygen combustion in closed systems and determination methods.

1.2 Polycyclic aromatic hydrocarbons (PAHs) content — German ZEK 01.4-08 for GS-MARK

Test Method: ZEK01.4-08, determined by Gas Chromatographic-Mass Spectrometric (GC-MS).

Test item	CAS No.	Test result (mg/kg)
		01
(1) Naphthalene	91-20-3	ND
(2) Acenaphthylene	208-96-8	ND
(3) Acenaphthene	83-32-9	ND
(4) Fluorene	86-73-7	ND
(5) Phenanthrene	85-01-8	ND
(6) Anthracene	120-12-7	ND
(7) Fluoranthene	206-44-0	ND
(8) Pyrene	129-00-0	ND
(9) Benzo(a)Anthracene	56-55-3	ND
(10) Chrysene	218-01-9	ND
(11) Benzo(b)Fluoranthene	205-99-2	ND
(12) Benzo(k)Fluoranthene	207-08-9	ND
(13) Benzo(α)Pyrene	50-32-8	ND
(14) Indeno(1,2,3-cd)Pyrene	193-39-5	ND
(15) Dibenz(a,h)Anthracene	53-70-3	ND
(16) Benzo(g,h,i)Perylene	191-24-2	ND
(17) Benzo(j)Fluoranthene	205-82-3	ND
(18) Benzo(e)Pyrene	192-97-2	ND
Sum of the 18 PAHs		ND

Remark:

- ND = Not Detected (less than Report Limit).
- Report Limit = 0.20 mg/kg.
- mg/kg = 0.0001% = ppm = parts per million.

Maximum Limits of PAHs according to ZEK 01.4-08.

	Category 1	Category 2	Category 3
Parameter	Materials intended to be put in the mouth or materials of toys for children aged < 36 months with intended skin contact	Materials not covered by category 1, with foreseeable skin contact for longer than 30 seconds (long-term skin contact)	Materials not covered by category 1 or 2 with foreseeable skin contact up to 30 seconds (short term skin contact)
Benzo(a)pyrene	Not detectable* (< 0.2 mg/kg)	1 mg/kg	20 mg/kg
Sum of 18 PAHs	Not detectable* (< 0.2 mg/kg)	10 mg/kg	200 mg/kg

* If the limits of category 1 are surpassed but the limits of category 2 still met, the confirmation of suitability of contact with foodstuff or the oral mucosa can be verified by an additional migration test of the PAH components according to DIN EN 1186 and §4LFBG 80.30 -1. The results of the migration test shall be evaluated according to law criteria for foodstuff.

1.3 Pb, Cd, Hg, Cr(VI) and PBBs & PBDEs content — European RoHS directive 2011/65/EU (Recast of directive 2002/95/EC)

Test item	Test result (mg/kg)	Maximum Limit (mg/kg)
	01	
Cadmium (Cd)	ND	100
Lead (Pb)	ND	1000
Mercury (Hg)	ND	1000
Chromium(VI) (Cr ⁶⁺)	ND	1000
Monobromobiphenyl (MonoBB)	ND	--
Dibromobiphenyl (DiBB)	ND	--
Tribromobiphenyl (TriBB)	ND	--
Tetrabromobiphenyl (TetraBB)	ND	--
Pentabromobiphenyl (PentaBB)	ND	--
Hexabromobiphenyl (HexaBB)	ND	--
Heptabromobiphenyl (HeptaBB)	ND	--
Octabromobiphenyl (OctaBB)	ND	--
Nonabromobiphenyl (NonaBB)	ND	--
Decabromobiphenyl (DecaBB)	ND	--
Sum of PBBs	ND	1000
MonobromodiphenylEther (MonoBDE)	ND	--
DibromodiphenylEther (DiBDE)	ND	--
Tribromodiphenyl Ether (TriBDE)	ND	--
TetrabromodiphenylEther (TetraBDE)	ND	--
PentabromodiphenylEther (PentaBDE)	ND	--
HexabromodiphenylEther (HexaBDE)	ND	--
HeptabromodiphenylEther (HeptaBDE)	ND	--
OctabromodiphenylEther (OctaBDE)	ND	--
NonabromodiphenylEther (NonaBDE)	ND	--
DecabromodiphenylEther (DecaBDE)	ND	--
Sum of PBDEs	ND	1000

Remark:

- ND = Not Detected (less than Report Limit).
- mg/kg = 0.0001% = ppm = parts per million.
- —|| Not required.



Test method and Report Limit:

Test item	Test method	Report Limit
Cadmium (Cd)	IEC 62321 :2008, determined by ICP-OES	5 mg/kg
Lead (Pb)	IEC 62321 :2008, determined by ICP-OES	5 mg/kg
Mercury (Hg)	IEC 62321 :2008, determined by ICP-OES	5 mg/kg
Chromium(VI) (Cr ⁶⁺)	IEC 62321 :2008, determined by UV-VIS	2 mg/kg
PBBs	IEC 62321 :2008, determined by GC-MS	5 mg/kg
PBDEs	IEC 62321 :2008, determined by GC-MS	5 mg/kg

1.4 Cadmium (Cd) content — Annex XVII of Regulation (EC) No.1907/2006 (REACH)

Test Method: US EPA 3052:1996 & US EPA 6010C:2007, determined by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Test Item	Test result (mg/kg)	Maximum Limit (mg/kg)
	01	
Cadmium (Cd)	ND	100

Remark:

- ND = Not Detected (less than Report Limit).
- Report Limit = 10 mg/kg.
- mg/kg = 0.0001% = ppm = parts per million.
- The limit is quoted from Annex XVII of Regulation (EC) No.1907/2006 (REACH).



1.5 Total Lead(Pb) content — US “Consumer Product Safety Improvement Act 2008(CPSIA)”

Test Method: CPSC-CH-E1002-8.1-2010, determined by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES).

Test item	Test result (mg/kg)	Maximum Limit
	01	
Total Lead (Pb)	ND	See remark

Remark:

- ND = Not Detected (less than Report Limit).
- Report Limit = 10 mg/kg.
- mg/kg = 0.0001% = ppm = parts per million.
- The maximum limit is quoted from US -Consumer Product Safety Improvement Act 2008 (CPSIA) II:
 - 90 mg/kg (0.009%) for total Lead content in surface coating, Aug.14, 2009.
 - 100 mg/kg (0.01%) for total Lead content in non-surface coating since Aug. 14, 2011.

1.6 Phthalates content — US “Consumer Product Safety Improvement Act 2008 (CPSIA)”

Test Method: CPSC-CH-C1001-09.3, determined by Gas Chromatographic-Mass Spectrometric (GC-MS).

Test item	Test result (mg/kg)	Maximum Limit (mg/kg)
	01	
Dibutyl Phthalate (DBP)	ND	1000
Bis(2-Ethylhexyl) Phthalate (DEHP)	ND	1000
Benzyl Butyl Phthalate (BBP)	ND	1000
Di-Iso-Nonyl Phthalate (DINP)	ND	1000
Di-N-Octyl Phthalate (DNOP)	ND	1000
Di-Iso-Decyl Phthalate (DIDP)	ND	1000

Remark:

- ND = Not Detected (less than Report Limit).
- Report Limit = 50 mg/kg.
- mg/kg = 0.0001% = ppm = parts per million.
- The maximum limit was quoted from US —Consumer Product Safety Improvement Act 2008 (CPSIA)II.

1.7 Phthalates content — Annex XVII of Regulation (EC) No.1907/2006 (REACH)

Test Method: EN 14372:2004, determined by Gas Chromatographic-Mass Spectrometric (GC-MS).

Test item	Test result (mg/kg)	Maximum Limit (mg/kg)
	01	
Dibutyl Phthalate (DBP)	ND	--
Bis(2-Ethylhexyl) Phthalate (DEHP)	ND	--
Benzyl Butyl Phthalate (BBP)	ND	--
Sum of (DBP+DEHP+BBP)	ND	1000
Di-Iso-Nonyl Phthalate (DINP)	ND	--
Di-N-Octyl Phthalate (DNOP)	ND	--
Di-Iso-Decyl Phthalate (DIDP)	ND	--
Sum of (DINP+DNOP+DIDP)	ND	1000

Remark:

- ND = Not Detected (less than Report Limit).
- Report Limit = 50 mg/kg.
- mg/kg = 0.0001% = ppm = parts per million.
- —|| = Not required.
- The maximum limit is quoted from Annex XVII of Regulation (EC) No.1907/2006 (REACH).

1.8 Phthalates (DnHP, DIBP) content

Test Method: US EPA 3540C:1996 & US EPA 8270D: 2007, determined by Gas Chromatographic-Mass Spectrometric (GC-MS).

Test item	Test result (mg/kg)	Client's Limit (mg/kg)
	01	
Di-n-Hexyl phthalate (DnHP)	ND	1000
Di-Iso-Butyl Phthalate (DIBP)	ND	1000

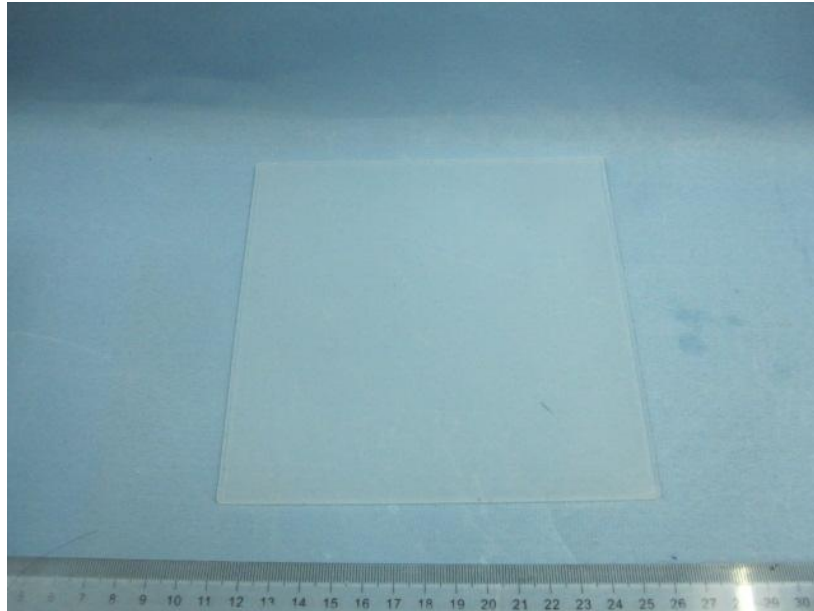
Remark:

- ND = Not Detected (less than Report Limit).
- Report Limit = 50mg/kg.
- mg/kg = 0.0001% = ppm = parts per million.

2 TESTED COMPONENTS

01 Beige plastic

Photo of the Sample



LCZC14030932

End of Report