

Test Report**Number: LCZC11020212****Date: Feb. 28, 2011****Page 1 of 9**

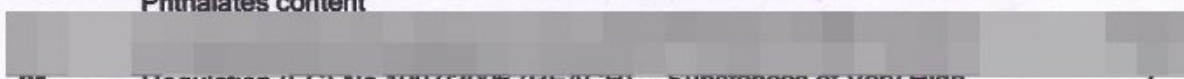
Date of Received : Feb. 21, 2011

Testing Period : From Feb. 21, 2011 to Feb. 28, 2011

Report on the submitted sample said to be:

Item Name : silicon rubber

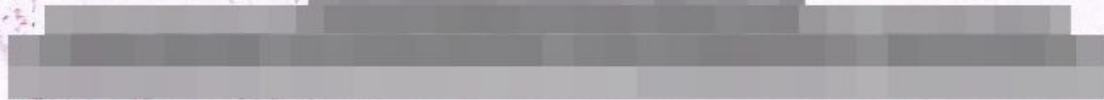
Model/P.O.No : LH-****

Sample No.	Test Request	Conclusion
01	European directive 2002/95/EC (RoHS) and it's amendment directives-Lead (Pb), Cadmium (Cd), Mercury (Hg) , Hexavalent Chromium (Cr(VI)) and Polybrominated Biphenyls & Polybrominated Biphenyl Ethers (PBBs & PBDEs) content	Pass
01	US "Consumer Product Safety Improvement Act 2008 (CPSIA)" - Total Lead content	Pass
01	European Directive 91/338/EEC – Total Cadmium Content	Pass
01	European Directive 2005/84/EC - Phthalates content	Pass
01	US "Consumer Product Safety Improvement Act 2008 (CPSIA)" - Phthalates content	Pass
		
01	Regulation (EC) No.1907/2006 (REACH) – Substances of very High Concern (SVHC) candidate list updated on Dec. 15, 2010. Testing of the 46 SVHC was performed by currently available analytical techniques	

Please see the next page(s) for details.

Signed for and on behalf of **LCTECH**

Approved by


Robert Luo
Technical ManagerThis test report shall  approval of **LCTECH**.


1 TEST RESULT
1.1 Pb, Cd, Hg, Cr(VI) and PBBs & PBDEs contents - European directive 2002/95/EC (RoHS) and it's amendment directives

Test item	Test result (mg/kg)	Maximum Limit (mg/kg)
	01	
Cadmium (Cd)	ND	100
Lead (Pb)	ND	1000
Mercury (Hg)	ND	1000
Chromium (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	--
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.

This test report shall be valid without written approval of LCTECH.

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 (Cr ⁶⁺) (VI)	IEC 62321 :2008, determined by UV-VIS	5 mg/kg
PBBs	IEC 62321 :2008, determined by GC-MS	5 mg/kg
PBDEs	IEC 62321 :2008, determined by GC-MS	5 mg/kg

1.2 Total Lead content – US “Consumer Product Safety Improvement Act 2008(CPSIA)”

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
	01	
Total Lead (Pb)	ND	See remark

Remark:

- ND = Not Detected (less than Report Limit).
- Report Limit = 10mg/kg.
- mg/kg = 0.0001% = ppm = parts per million.
- The maximum limit is quoted from US “Consumer Product Safety Improvement Act 2008 (CPSIA) ”:
 - 90 mg/kg (0.009%) for total Lead content in surface coating, Aug.14, 2009.
 - 300 mg/kg (0.03%) for total Lead content in non-surface coating since Aug. 14, 2009.

This test report shall not be reproduced except in full, without written approval of LCTECH.

1.3 Total Cadmium Content - European Directive 91/338/EEC

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	
Total Cadmium (Cd)	ND	100

Remark:

- ND = Not Detected (less than Report Limit).
- Report Limit = 10mg/kg.
- mg/kg = 0.0001% = ppm = parts per million.

1.4 Phthalates content - European Directive 2005/84/EC

Spectrometric (GC-MS).

Test item	Test result (mg/kg)	Maximum Limit (mg/kg)
	01	
Dibutyl Phthalate (DBP)	ND	—
Diethyl Hexyl 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 **Directive 2005/84/EC**.

This test report shall not be reproduced except in full, without written approval of LCTECH.

1.7 SVHC content- Regulation (EC) No.1907/2006

No.	SVHC	Chemical testing item	Result (%)
			01
1	Anthracene	Anthracene [*]	ND
2	4, 4' -Diaminodiphenylmethane	4, 4' -Diaminodiphenylmethane	ND
3	Dibutyl Phthalate (DBP)	Dibutyl Phthalate (DBP) [*]	ND
4	Cobalt Dichloride	Cobalt (Co)	ND
5	Diarsenic Pentaoxide	Arsenic (As) [*]	ND
6	Diarsenic Trioxide	Arsenic (As) [*]	ND
7	Sodium Dichromate, Dihydrate	Hexavalent Chromium (Cr ⁶⁺) [*]	ND
8	5-Tert-Butyl-2,4,6-Trinitro-M-Xylene (Musk-Xylene)	5-Tert-Butyl-2,4,6-Trinitro-M-Xylene (Musk-Xylene)	ND
10	Hexabromocyclododecane (HBCDD) #1	Hexabromocyclododecane (HBCDD)	ND
11	Short Chain Chlorinated Paraffin (C10-C13)	Short Chain Chlorinated Paraffin (C10-C13)	ND
12	Bis (Tributyltin) Oxide	Bis (Tributyltin) Oxide	ND
13	Lead Hydrogen Arsenate	Arsenic (As) and Lead (Pb) [*]	ND
14	Triethyl Arsenate	Arsenic (As) [*]	ND
15	Benzyl Butyl Phthalate (BBP)	Benzyl Butyl Phthalate (BBP) [*]	ND
16	Anthracene oil	Anthracene [*]	ND
17	Anthracene oil, anthracene paste, distn.Lights	Anthracene [*]	ND
18	Anthracene oil, anthracene paste, anthracene fraction	Anthracene [*]	ND
19	Anthracene oil, anthracene-low	Anthracene [*]	ND
20	Anthracene oil, anthracene paste	Anthracene [*]	ND
21	Pitch, coal tar, high-temp	Anthracene [*]	ND
22	Aluminosilicate, Refractory Ceramic Fibres #2	Silicon (Si) and Aluminium (Al)	ND
23	Zirconia Aluminosilicate, Refractory Ceramic Fibres #3	Zirconium (Zr) , Silicon (Si) and Aluminium (Al)	ND
24	Di-isobutylphthalate (DIBP)	Di-isobutylphthalate (DIBP) [*]	ND

This test report shall not be reproduced except in full, without written approval of LCTECH.

Science Technology and Enterprise Development

<http://www.lccert.com>

No.	SVHC	Chemical testing item	Result (%)
			01
25	2,4-Dinitrotoluene	2,4-Dinitrotoluene	ND
26	Tris(2-chloroethyl) phosphate	Tris(2-chloroethyl) phosphate	ND
27	Lead chromate	Hexavalent Chromium (Cr^{6+})*, Lead (Pb)	ND
28	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	Hexavalent Chromium (Cr^{6+})*, Lead (Pb)*, molybdenum (Mo)	ND
29	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	Hexavalent Chromium (Cr^{6+})*, Lead (Pb)*	ND
30	Acrylamide	Acrylamide	ND
31	Trichloroethylene	Trichloroethylene	ND
32	Boric acid	Boron (B)	ND
33	Disodium tetraborate, anhydrous	Boron (B)	ND
34	Tetraboron disodium heptaoxide, hydrate	Boron (B)	ND
35	Sodium chromate	Hexavalent Chromium (Cr^{6+})*	ND
36	Potassium chromate	Hexavalent Chromium (Cr^{6+})*	ND
37	Ammonium dichromate	Hexavalent Chromium (Cr^{6+})*	ND
38	Potassium dichromate	Hexavalent Chromium (Cr^{6+})*	ND
39	Cobalt(II) sulphate	Cobalt (Co)	ND
40	Cobalt(II) dinitrate	Cobalt (Co)	ND
41	Cobalt(II) carbonate	Cobalt (Co)	ND
42	Cobalt(II) diacetate	Cobalt (Co)	ND
43	2-Methoxyethanol	2-Methoxyethanol	ND
44	2-Ethoxyethanol	2-Ethoxyethanol	ND
45	Chromium trioxide	Hexavalent Chromium (Cr^{6+})*	ND
46	Oligomers of chromic acid and dichromic acid	Hexavalent Chromium (Cr^{6+})*	ND

Remark:

- ND = Not Detected (less than Report Limit).
- Report limit =0.005%.
- % = percentage by weight.
- SVHC = Substance Of Very High Concern.

This test report shall not be reproduced except in full, without written approval of LCTECH.

- ※ = Only the testing item marked with ※ is accredited by the CNAS.
- #1 Hexabromocyclododecane(HBCDD), and all major diastereoisomers identified:(α , β , γ - HBCDD).

part 3, table 3.2 of Regulation (EC) No 1272/2008, and fulfil the two following conditions:

a) Al_2O_3 and SiO_2 are present within the following concentration ranges:

- Al_2O_3 : 43.5 ~ 47 % w/w, and SiO_2 : 49.5 ~ 53.5 % w/w, or
- Al_2O_3 : 45.5 ~ 50.5 % w/w, and SiO_2 : 48.5 ~ 54 % w/w,

b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometers (μm).

Annex VI, part 3, table 3.2 of Regulation (EC) No 1272/2008, and fulfil the two following conditions:

a) Al_2O_3 , SiO_2 and ZrO_2 are present within the following concentration ranges:

- Al_2O_3 : 35 ~ 36 % w/w, and SiO_2 : 47.5 ~ 50 % w/w, and ZrO_2 : 15 ~ 17 % w/w,

b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometers (μm).

- 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

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

above a concentration of 0,1%weight by weight (w/w).

= According to the supporting documents for identification of SVHC published by ECHA and in-house risk assessment evaluation, the risk for the articles to contain > 0,1% w/w of this SVHC is considered.

Referenced Test Method:

- 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).

This test report shall not be reproduced except in full, without written approval of LCTECH.

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).

2 TESTED COMPONENTS

01 Semitransparent soft plastic

Photo of the Sample



***LCZC11020212**

End of Report

This test report shall not be reproduced except in full, without written approval of LCTECH.

com