



# TEST REPORT

Report No.: STRD1601023S

Date: 2016-01-11

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Applicant : Shenzhen Honcell Energy Co., Ltd.

Applicant Address : 612, Bldg. A, Weidonglong Industrial Zone, Meilong Ave.194#, Longhua New District, Shenzhen, 518109, China.

The following sample was submitted by the client as:

Manufacturer : Shenzhen Honcell Energy Co., Ltd.  
Address : 612, Bldg. A, Weidonglong Industrial Zone, Meilong Ave.194#, Longhua New District, Shenzhen, 518109, China.  
Sample Description : Lithium-ion polymer battery  
Style/Item No. : HCP402025W  
Brand Name : N/A  
Sample Receiving Date : Jan. 04, 2016  
Test Period : Jan. 04, 2016 to Jan. 11, 2016

### Test Requested:

As requested by the applicant, test(s) was/were performed as below:

Test Summary	Conclusion
1   European Regulation (EC) No.1907/2006 (REACH) Article 59(10) on the candidate list of Substances of Very High Concern (SVHC) for authorization (168 items till 17/12/2015)	PASS*

\*Pass indicates the concentration of all listed SVHCs is less than 0.1%.

**Test Results:** Please refer to following page(s).

**Signed for and on behalf of  
Shenzhen SEM.Test Technology Co., Ltd.**

**Ailis Ma  
PSQ Executive**

Declaration:

- (1) The report shall not be reproduced partly without the written approval of the laboratory, except in full produced.
- (2) All the results shown in the report apply to the tested sample, any erasion on the report is invalid
- (3) All tested sample will be kept for one month, if there is any doubt about the test result, please inform within this period

Shenzhen SEM.Test Technology Co., Ltd.

1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road, Bao'an District, Shenzhen, P.R.C. (518101)



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## REACH SVHCs test

Test method used: acid digestion, solvent extraction, screening method

Instrument used for analysis: ICP-OES, GC-MS, LC-MS, HS-GC-MS, IC, UV-vis, XRF

No.	Test item(s)	Results (%)
		Whole product
1	Anthracene	ND
2	Benzyl butyl phthalate (BBP)	ND
3	Dibutyl phthalate (DBP)	ND
4	Bis (2-ethylhexyl) phthalate (DEHP)	ND
5	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified ( $\alpha$ -HBCDD, $\beta$ -HBCDD, $\gamma$ -HBCDD)	ND
6	4,4'-Diaminodiphenylmethane	ND
7	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	ND
8	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	ND
9	Triethyl arsenate $\Delta$	ND
10	Bis(tributyltin)oxide (TBTO) $\Delta$	ND
11	Cobalt dichloride $\Delta$	ND
12	Diarsenic pentaoxide $\Delta$	ND
13	Diarsenic trioxide $\Delta$	ND
14	Sodium dichromate $\Delta$	ND
15	Lead hydrogen arsenate $\Delta$	ND
16	2,4-dinitrotoluene	ND
17	Anthracene oil	ND
18	Anthracene oil, anthracene paste	ND
19	Anthracene oil, anthracene paste, anthracene fraction	ND
20	Anthracene oil, anthracene paste, distn. lights	ND
21	Anthracene oil, anthracene-low	ND
22	Di isobutyl phthalate	ND
23	Lead chromate $\Delta$	ND
24	Lead chromate molybdate sulphate red (C.I. Pigment Red 104) $\Delta$	ND
25	Lead sulfochromate yellow (C.I. Pigment Yellow 34) $\Delta$	ND
26	Pitch, coal tar, high temp	ND



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27	Tris(2-chloroethyl) phosphate	ND
28	Acrylamide	ND
29	Disodium tetraborate, anhydrous△	ND
30	Potassium chromate△	ND
31	Potassium dichromate△	ND
32	Sodium chromate△	ND
33	Tetraboron disodium heptaoxide, hydrate△	ND
34	Trichloroethylene	ND
35	Boric acid△	ND
36	Ammonium dichromate△	ND
37	2-Methoxyethanol	ND
38	2-Ethoxyethanol	ND
39	Chromic acid△	ND
40	Cobalt (II) diacetate△	ND
41	Cobalt (II) sulphate△	ND
42	Cobalt (II) dinitrate△	ND
43	Cobalt (II) carbonate△	ND
44	Chromium trioxide△	ND
45	2-ethoxyethyl acetate	ND
46	Strontium chromate△	ND
47	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	ND
48	Hydrazine	ND
49	1-methyl-2-pyrrolidone	ND
50	1,2,3-trichloropropane	ND
51	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	ND
52	Dichromium tris(chromate) △	ND
53	Potassium hydroxyoctaoxidizincate di-chromate△	ND
54	Pentazinc chromate octahydroxide△	ND
55	Aluminosilicate Refractory Ceramic Fibres (RCF) △	ND
56	Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) △	ND
57	Formaldehyde, oligomeric reaction products with aniline (technical MDA)	ND
58	Bis(2-methoxyethyl) phthalate (DMEP)	ND
59	2-Methoxyaniline; o-Anisidine	ND



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60	4-(1,1,3,3-tetramethylbutyl) phenol	ND
61	1,2-Dichloroethane	ND
62	Bis(2-methoxyethyl) ether	ND
63	Arsenic acid△	ND
64	Calcium arsenate△	ND
65	Trilead diarsenate△	ND
66	N,N-dimethylacetamide (DMAC)	ND
67	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	ND
68	Phenolphthalein	ND
69	Lead azide; Lead diazide△	ND
70	Lead styphnate△	ND
71	Lead dipicrate△	ND
72	α,α-Bis[4-(dimethylamino)phenyl]-4(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	ND
73	N,N,N',N'-tetramethyl-4,4'-methylenedianiline	ND
74	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl] -1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	ND
75	Diboron trioxide△	ND
76	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	ND
77	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	ND
78	Lead(II) bis(methanesulfonate) △	ND
79	Formamide	ND
80	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	ND
81	1,2-dimethoxyethane; ethylene glycol dimethyl ether(EGDME)	ND
82	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	ND
83	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	ND
84	4,4'-bis(dimethylamino)benzophenone	ND
85	Pyrochlore, antimony lead yellow△	ND
86	6-methoxy-m-toluidine (p-cresidine)	ND
87	Henicosfluoroundecanoic acid	ND
88	Hexahydromethylphthalic anhydride , Hexahydro-4-methylphthalic anhydride ,	ND



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	Hexahydro-1-methylphthalic anhydride , Hexahydro-3-methylphthalic anhydride	
89	Cyclohexane-1,2-dicarboxylic anhydride , cis-cyclohexane-1,2-dicarboxylic anhydride, trans- cyclohexane-1,2-dicarboxylic anhydride	ND
90	Dibutyltin dichloride (DBTC)	ND
91	Lead bis(tetrafluoroborate) $\Delta$	ND
92	Lead dinitrate $\Delta$	ND
93	Silicic acid, lead salt $\Delta$	ND
94	4-Aminoazobenzene	ND
95	Lead titanium zirconium oxide $\Delta$	ND
96	Lead monoxide (lead oxide) $\Delta$	ND
97	o-Toluidine	ND
98	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	ND
99	Silicic acid ( $H_2Si_2O_5$ ), barium salt (1:1), lead-doped $\Delta$	ND
100	Trilead bis(carbonate)dihydroxide $\Delta$	ND
101	Furan	ND
102	N,N-dimethylformamide	ND
103	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	ND
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	ND
106	Diethyl sulphate	ND
107	Dimethyl sulphate	ND
108	Lead oxide sulfate $\Delta$	ND
109	Lead titanium trioxide $\Delta$	ND
110	Acetic acid, lead salt, basic $\Delta$	ND
111	[Phthalato(2-)]dioxotrilead $\Delta$	ND
112	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	ND
113	N-methylacetamide	ND
114	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	ND
115	1,2-Diethoxyethane	ND
116	Tetralead trioxide sulphate $\Delta$	ND



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117	N-pentyl-isopentylphthalate	ND
118	Dioxobis(stearato)trilead $\Delta$	ND
119	Tetraethyllead $\Delta$	ND
120	Pentalead tetraoxide sulphate $\Delta$	ND
121	Pentacosafuorotridecanoic acid	ND
122	Tricosafuorododecanoic acid	ND
123	Heptacosafuorotetradecanoic acid	ND
124	1-bromopropane (n-propyl bromide)	ND
125	Methoxyacetic acid	ND
126	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	ND
127	Methyloxirane (Propylene oxide)	ND
128	Trilead dioxide phosphonate $\Delta$	ND
129	o-aminoazotoluene	ND
130	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	ND
131	4,4'-oxydianiline and its salts	ND
132	Orange lead (lead tetroxide) $\Delta$	ND
133	Biphenyl-4-ylamine	ND
134	Diisopentylphthalate	ND
135	Fatty acids, C16-18, lead salts $\Delta$	ND
136	Diazene-1,2-dicarboxamide(C,C'-azodi(formamide))	ND
137	Sulfurous acid, lead salt, dibasic $\Delta$	ND
138	Lead cyanamidate $\Delta$	ND
139	Cadmium	ND
140	Cadmium oxide $\Delta$	ND
141	Dipentyl phthalate (DPP)	ND
142	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>	ND
143	Ammonium pentadecafluorooctanoate (APFO)	ND
144	Pentadecafluorooctanoic acid (PFOA)	ND
145	Cadmium sulphide $\Delta$	ND
146	Direct Red 28	ND
147	Direct Black 38	ND



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148	Dihexyl phthalate	ND
149	Imidazolidine-2-thione (2-imidazoline-2-thiol)	ND
150	Lead di(acetate) $\Delta$	ND
151	Trixylyl phosphate	ND
152	Cadmium chloride $\Delta$	ND
153	Sodium peroxometaborate $\Delta$	ND
154	Sodium perborate; perboric acid, sodium salt $\Delta$	ND
155	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	ND
156	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)	ND
157	Cadmium sulphate $\Delta$	ND
158	Cadmium fluoride $\Delta$	ND
159	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	ND
160	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	ND
161	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	ND
162	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]	ND
163	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)	ND
164	1,3-propanesultone	ND
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	ND
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	ND
167	Nitrobenzene	ND
168	Perfluorononan-1-oiic-acid and its sodium and ammonium salts	ND

Remark:

1. % = percentage



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2. Method Detection Limit (MDL) :0.050% for whole product, 0.010% for component/material testing
3. ND = not detected
4.  $\Delta$  indicates determination was based on elemental analysis. The content was calculated based on assumption of worst-case.

Note:

1. If the imported or manufactured volume of each individual SVHC in article is more than 0.1% (w/w) and if it exceeds 1 tonne per year across all product ranges, then importer or manufacturer require notification to the European Chemical Agency (ECHA). For substances included in the Candidate List on or after 1 December 2010, the notifications have to be submitted no later than 6 months after the inclusion.
2. As per article 33(1) of regulation (EC) No. 1907/2006 (REACH), recipients of product must be provided with information of safe use if any of the tested substances (SVHC) exceeded 0.1% (w/w). A product meets the requirement of article 33(1) by default when no SVHC exceeds 0.1% (w/w).



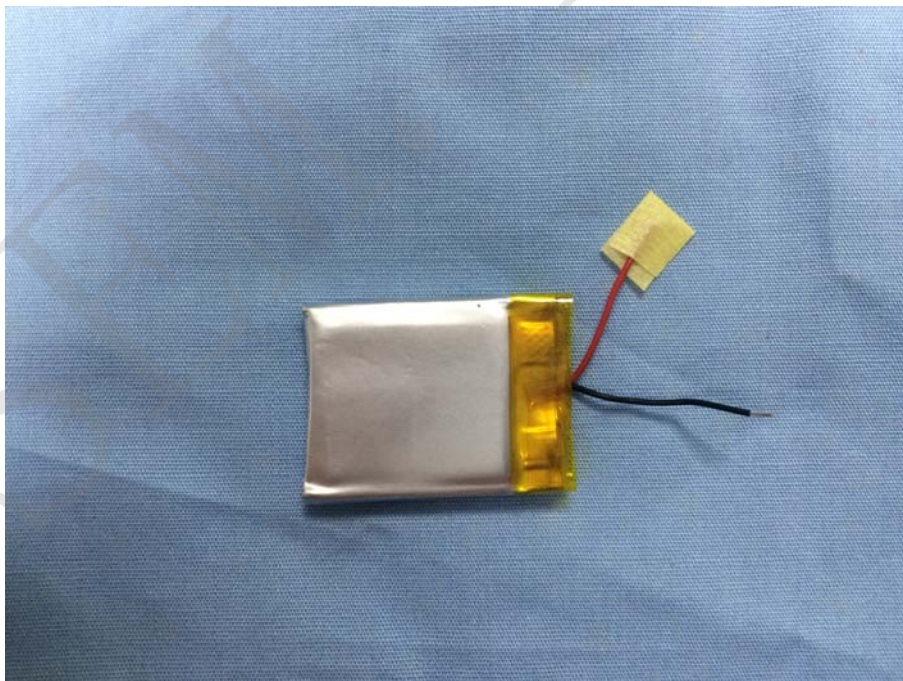
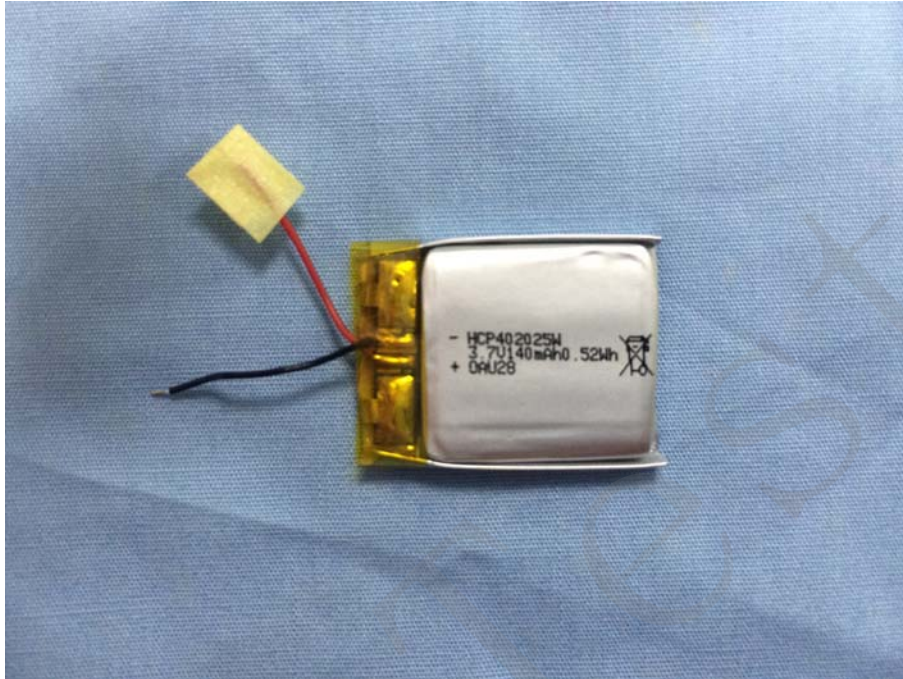
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Tested sample photo:



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