

Page 1 of 18

Applicant(Code: DGB508) : I.R.I.S.S.A. Image Recognition Integrated Systems

Rue Du Bosquet 10, 1348 Louvain La Neuve, Belguim

Description of Sample(s)

Sample(s) received is/are stated to be:

Digital highlighter .supporting BLE and USB

Supplier: GLOBAL BRANDS MANUFACTURE LIMITED

Buyer: IRISPen 7 Air

Style No.: 2.0

Date Sample(s) Received

: 2015-07-03

Date Tested

: 2015-07-03 to 2015-07-14

Result Summary:

No	Test Requested	Conclusion	Remark
. 1	Semi-quantitative testing of one hundred and sixty-three (163)		
	substances in the candidate list of substances of very high	No SVHCs with	
	concern (SVHC) for authorization published by european	concentration > 0.1%	i=0
	chemicals agency (ECHA) on 15 June 2015 regarding to	was found	
	Regulation (EC) No 1907/2006 concerning the REACH		

Yan Liang, Sky Authorized Signatory

Chemical, Food and Pharmaceutical Department For and on behalf of

STC (Dongguan) Company Ltd.



Page 2 of 18

RESULT(S):

SEMI-QUANTITATIVE TESTING OF ONE HUNDRED AND SIXTY-THREE (163)
SUBSTANCES IN THE CANDIDATE LIST OF SUBSTANCES OF VERY HIGH CONCERN
(SVHC) FOR AUTHORIZATION PUBLISHED BY EUROPEAN CHEMICALS AGENCY
(ECHA) ON 15 JUNE 2015 REGARDING TO REGULATION (EC) NO 1907/2006
CONCERNING THE REACH

Method Used: In-House method, analyzed by Inductively Coupled Argon Plasma Atomic Emission Spectrophotometer (ICP-AES), UV-VIS, HPLC or Gas Chromatography with Mass Selective Detector

Test Item(s)	Article / Material Description	Style
1	Digital highlighter .supporting BLE and USB	

T4 [4(-)	Result(s)	
Test Item(s)	Detected Analyte(s)	Conc.	Unit
1	ND	ND	%

Note(s):

- ND = Not Detected
- Results reported in percentage% (w/w)
- Detection limit: please refer to Annex
- Conc. = Concentration

Remark(s):

- If a SVHC is found over the reporting limit, client is suggested to identify the component which contains the SVHC and the exact concentration of the SVHC by requesting further quantitative analysis and/or investigation from the laboratory (for organic substance).
- Please notice that the identified SVHC substance(s) is based on the calculation from the result of selected ions. The concentration that identified is based on the worst case scenario. Further investigation is required for confirmation of the presence of SVHC substance(s).
- The list of Candidate List of Substances of Very High Concern (SVHC) for authorization published by European Chemicals Agency (ECHA) Regarding to Regulation (EC) No 1907/2006 concerning the REACH is summarized in table of Annex.
- Client may have legal obligations resulting from the inclusion of SVHC in the product. These obligations are linked to the listed SVHC on their own, in preparations and in articles. Please see Appendix B for detail.



Page 3 of 18

ANNEX

<u>List of one hundred and sixty- three (163) substances in the candidate list of substances of very high concern (SVHC) for authorization published by european chemicals agency (ECHA) on 15 June 2015 regarding to Regulation (EC) No 1907/2006 concerning the REACH</u>

No.	Substance Name	CAS No.	For componen t detection limit,%	For material detection limit,%	Basis for identification as a SVHC
1	Anthracene	120-12-7	0.05	0.005	PBT
2	Benzyl butyl phthalate (BBP)	85-68-7	0.05	0.005	Toxic for Reproduction;
3	Dibutyl phthalate (DBP)	84-74-2	0.05	0.005	Toxic for Reproduction;
4	Bis (2-ethylhexyl) phthalate (DEHP)	117-81-7	0.05	0.005	Toxic for Reproduction; Equivalent level of concern having probable serious effects to human health and the environment
5	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α-HBCDD, β-HBCDD, γ-HBCDD)	25637-99-4 / 3194-55-6 (134237-51 -7,134237- 50-6,13423 7-52-8)	0.05	0.005	PBT
6	4,4'-Diaminodiphenylmethane	101-77-9	0.05	0.005	Carcinogen
7	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	0.05	0.01	PBT
8	5-tert-butyl-2,4,6-trinitro-m-xyle ne (musk xylene)	81-15-2	0.05	0.005	vPvB
9	Triethyl arsenate*	15606-95-8	0.05	0.01	Carcinogen
10	Bis(tributyltin)oxide (TBTO)*	56-35-9	0.05	0.005	PBT
11	Cobalt dichloride*	7646-79-9	0.05	0.01	Carcinogen; Toxic for reproduction
12	Diarsenic pentaoxide*	1303-28-2	0.05	0.01	Carcinogen
13	Diarsenic trioxide*	1327-53-3	0.05	0.01	Carcinogen



Page 4 of 18

No.	Substance Name	CAS No.	For componen t detection limit,%	For material detection limit,%	Basis for identification as a SVHC
14	Sodium dichromate*	7789-12-0, 10588-01-9	0.05	0.01	Carcinogen; Mutagen; Toxic for Reproduction
15	Lead hydrogen arsenate*	7784-40-9	0.05	0.01	Carcinogen; Toxic for Reproduction
16	2,4-dinitrotoluene	121-14-2	0.05	0.005	Carcinogen
17	Anthracene oil	90640-80-5	0.1	0.01	Carcinogen; PBT ;vPvB
18	Anthracene oil,anthracene paste	90640-81-6	0.1	0.01	Carcinogen; Mutagen; PBT;vPvB
19	Anthracene oil,anthracene paste,anthracene fraction	91995-15-2	0.1	0.01	Carcinogen; Mutagen; PBT;vPvB
20	Anthracene oil,anthracene paste,distn. lights	91995-17-4	0.1	0.01	Carcinogen; Mutagen; PBT ;vPvB
21	Anthracene oil, anthracene-low	90640-82-7	0.1	0.01	Carcinogen; Mutagen; PBT;vPvB
22	Di isobutyl phthalate(DIBP)	84-69-5	0.05	0.005	Toxic for Reproduction;
23	Lead chromate*	7758-97-6	0.05	0.01	Carcinogen; Toxic for Reproduction
24	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)*	12656-85-8	0.05	0.01	Carcinogen
25	Lead sulfochromate yellow (C.I. Pigment Yellow 34)*	1344-37-2	0.05	0.01	Carcinogen
26	Pitch, coal tar, high temp.	65996-93-2	0.1	0.01	Carcinogen; PBT;vPvB
27	Tris(2-chloroethyl) phosphate	115-96-8	0.05	0.005	Toxic for Reproduction
28	Acrylamide	79-06-1	0.05	0.005	Carcinogen; Mutagen



5-07-14 | 85110DM **Page 5 of 18**

No.	Substance Name	CAS No.	For componen t detection limit,%	For material detection limit,%	Basis for identification as a SVHC
29	Disodium tetraborate, anhydrous*	1303-96-4, 1330-43-4, 12179-04-3	0.05	0.01	Toxic for Reproduction
30	Potassium chromate*	7789-00-6	0.05	0.01	Carcinogen; Mutagen
31	Potassium dichromate*	7778-50-9	0.05	0.01	Carcinogen; Mutagen;Toxic for Reproduction
32	Sodium chromate*	7775-11-3	0.05	0.01	Carcinogen; Mutagen; Toxic for Reproduction
33	Tetraboron disodium heptaoxide, hydrate*	12267-73-1	0.05	0.01	Toxic for Reproduction
34	Trichloroethylene	79-01-6	0.05	0.005	Carcinogen
35	Boric acid*	10043-35-3 /11113-50- 1	0.05	0.01	Toxic for Reproduction
36	Ammonium dichromate*	7789-09-5	0.05	0.01	Carcinogen; Mutagen; Toxic for Reproduction
37	2-Methoxyethanol	109-86-4	0.05	0.005	Toxic for Reproduction
38	2-Ethoxyethanol	110-80-5	0.05	0.005	Toxic for Reproduction
39	Chromic acid*	7738-94-5, 13530-68-2	0.05	0.01	Carcinogen
40	Cobalt (II) diacetate*	71-48-7	0.05	0.01	Carcinogen; Mutagen
41	Cobalt (II) sulphate*	10124-43-3	0.05	0.01	Carcinogen; Mutagen
42	Cobalt (II) dinitrate*	10141-05-6	0.05	0.01	Carcinogen; Mutagen
43	Cobalt (II) carbonate*	513-79-1	0.05	0.01	Carcinogen; Mutagen



Page 6 of 18

No.	Substance Name	CAS No.	For componen t detection limit,%	For material detection limit,%	Basis for identification as a SVHC
44	Chromium trioxide*	1333-82-0	0.05	0.01	Carcinogen; Mutagen
45	2-ethoxyethyl acetate	111-15-9	0.05	0.005	Toxic for Reproduction
46	Strontium chromate*	7789-06-2	0.05	0.01	Carcinogen
47	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	0.05	0.005	Toxic for Reproduction
48	Hydrazine	7803-57-8 302-01-2	0.05	0.005	Carcinogen
49	1-methyl-2-pyrrolidone	872-50-4	0.05	0.005	Carcinogen
50	1,2,3-trichloropropane	96-18-4	0.05	0.005	Carcinogen; Toxic for Reproduction
51	1,2-Benzenedicarboxylicacid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	0.05	0.005	Toxic for Reproduction
52	Dichromium tris(chromate)*	24613-89-6	0.05	0.01	Carcinogen
53	Potassium hydroxyoctaoxodizincate di-chromate*	11103-86-9	0.05	0.01	Carcinogen
54	Pentazinc chromate octahydroxide*	49663-84-5	0.05	0.01	Carcinogen
55	Aluminosilicate Refractory Ceramic Fibres (RCF)*	*	0.05	0.01	Carcinogen
56	Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF)*	*	0.05	0.01	Carcinogen
57	Formaldehyde, oligomeric reaction products with aniline (technical MDA)	25214-70-4	0.05	0.005	Carcinogen
58	Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	0.05	0.005	Toxic for Reproduction
59	2-Methoxyaniline; o-Anisidine	90-04-0	0.05	0.005	Carcinogen
60	4-(1,1,3,3-tetramethylbutyl) phenol,	140-66-9	0.05	0.005	Carcinogen



Page 7 of 18

No.	Substance Name	CAS No.	For componen t detection limit,%	For material detection limit,%	Basis for identification as a SVHC
61	1,2-Dichloroethane	107-06-2	0.05	0.005	Carcinogen
62	Bis(2-methoxyethyl) ether	111-96-6	0.05	0.005	Toxic for Reproduction
63	Arsenic acid*	7778-39-4	0.1	0.01	Carcinogen
64	Calcium arsenate*	7778-44-1	0.05	0.01	Carcinogen
65	Trilead diarsenate*	3687-31-8	0.05	0.01	Toxic for Reproduction
66	N,N-dimethylacetamide (DMAC)	127-19-5	0.05	0.005	Toxic for Reproduction
67	2,2'-dichloro-4,4'-methylenedian iline (MOCA)	101-14-4	0.05	0.005	Carcinogen
68	Phenolphthalein	77-09-8	0.05	0.005	Carcinogen
69	Lead azide; Lead diazide*	13424-46-9	0.05	0.01	Toxic for Reproduction
70	Lead styphnate*	15245-44-0	0.05	0.01	Toxic for Reproduction
71	Lead dipicrate*	6477-64-1	0.05	0.01	Toxic for Reproduction
72	α,α-Bis[4-(dimethylamino)phen yl]-4(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	0.1	0.01	Carcinogen
73	N,N,N',N'-tetramethyl-4,4'-meth ylenedianiline	101-61-1	0.05	0.005	Carcinogen
74	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-tria zine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	59653-74-6	0.05	0.005	Mutagen
75	Diboron trioxide*	1303-86-2	0.05	0.01	Toxic for Reproduction
76	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	0.05	0.005	Toxic for Reproduction
77	4,4'-bis(dimethylamino)-4"-(met hylamino)trityl alcohol [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	561-41-1	0.05	0.005	Carcinogen
78	Lead(II) bis(methanesulfonate)*	17570-76-2	0.05	0.01	Toxic for Reproduction



Page 8 of 18

No.	Substance Name	CAS No.	For componen t detection limit,%	For material detection limit,%	Basis for identification as a SVHC
79	Formamide	75-12-7	0.05	0.005	Toxic for Reproduction
80	[4-[4,4'-bis(dimethylamino)benz hydrylidene]cyclohexa-2,5-dien- 1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9	0.05	0.005	Carcinogen
81	1,2-dimethoxyethane; ethylene glycol dimethyl ether(EGDME)	110-71-4	0.05	0.005	Toxic for Reproduction
82	[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	0.1	0.01	Carcinogen
83	1,3,5-Tris(oxiran-2-ylmethyl)-1, 3,5-triazinane-2,4,6-trione (TGIC)	2451-62-9	0.05	0.005	Mutagen
84	4,4'-bis(dimethylamino)benzoph enone	90-94-8	0.05	0.005	Carcinogen
85	Pyrochlore, antimony lead yellow*	8012-00-8	0.05	0.01	Toxic for Reproduction
86	6-methoxy-m-toluidine (p-cresidine)	120-71-8	0.05	0.005	Carcinogen
87	Henicosafluoroundecanoic acid	2058-94-8	0.05	0.005	PBT ;vPvB
0.0	Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride,	25550-51-0 19438-60-9	0.1	0.01	Equivalent level
88	Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride	48122-14-1 57110-29-9	0.1	0.01	of concern
89	Cyclohexane-1,2-dicarboxylic anhydride, cis-cyclohexane-1,2-dicarboxyli c anhydride, trans-cyclohexane-1,2-dicarboxy lic anhydride	85-42-7, 13149-00-3 14166-21-3	0.1	0.01	Equivalent level of concern
90	Dibutyltin dichloride (DBTC)	683-18-1	0.05	0.01	Toxic for Reproduction



Page 9 of 18

No.	Substance Name	CAS No.	For componen t detection limit,%	For material detection limit,%	Basis for identification as a SVHC
91	Lead bis(tetrafluoroborate)*	13814-96-5	0.05	0.01	Toxic for Reproduction
92	Lead dinitrate *	10099-74-8	0.05	0.01	Toxic for Reproduction
93	Silicic acid, lead salt *	11120-22-2	0.05	0.01	Toxic for Reproduction
94	4-Aminoazobenzene	60-09-3	0.05	0.005	Carcinogen
95	Lead titanium zirconium oxide*	12626-81-2	0.05	0.01	Toxic for Reproduction
96	Lead monoxide (lead oxide)*	1317-36-8	0.05	0.01	Toxic for Reproduction
97	o-Toluidine	95-53-4	0.05	0.005	Carcinogen
98	3-ethyl-2-methyl-2-(3-methylbut yl)-1,3-oxazolidine	143860-04- 2	0.1	0.01	Toxic for Reproduction
99	Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped	68784-75-8	0.05	0.01	Toxic for Reproduction
100	Trilead bis(carbonate)dihydroxide*	1319-46-6	0.05	0.01	Toxic for Reproduction
101	Furan	110-00-9	0.1	0.01	Carcinogen
102	N,N-dimethylformamide	68-12-2	0.05	0.005	Toxic for Reproduction
103	4-(1,1,3,3-tetramethylbutyl)phen ol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	-	0.05	0.005	Equivalent level of concern
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]	S=	0.05	0.005	Equivalent level of concern
105	4,4'-methylenedi-o-toluidine	838-88-0	0.05	0.005	Carcinogen



Page 10 of 18

No.	Substance Name	CAS No.	For componen t detection limit,%	For material detection limit,%	Basis for identification as a SVHC
106	Diethyl sulphate	64-67-5	0.05	0.005	Carcinogen; Mutagen
107	Dimethyl sulphate	77-78-1	0.1	0.01	Carcinogen
108	Lead oxide sulfate*	12036-76-9	0.05	0.01	Toxic for Reproduction
109	Lead titanium trioxide*	12060-00-3	0.05	0.01	Toxic for Reproduction
110	Acetic acid, lead salt, basic*	51404-69-4	0.05	0.01	Toxic for Reproduction
111	[Phthalato(2-)]dioxotrilead *	69011-06-9	0.05	0.01	Toxic for Reproduction
112	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	1163-19-5	0.05	0.005	PBT;vPvB
113	N-methylacetamide	79-16-3	0.05	0.005	Toxic for Reproduction
114	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	0.1	0.01	Toxic for Reproduction
115	1,2-Diethoxyethane	629-14-1	0.05	0.005	Toxic for Reproduction
116	Tetralead trioxide sulphate*	12202-17-4	0.05	0.01	Toxic for Reproduction
117	N-pentyl-isopentylphthalate	776297-69- 9	0.05	0.005	Toxic for Reproduction
118	Dioxobis(stearato)trilead *	12578-12-0	0.05	0.01	Toxic for Reproduction
119	Tetraethyllead*	78-00-2	0.05	0.01	Toxic for Reproduction
120	Pentalead tetraoxide sulphate *	12065-90-6	0.05	0.01	Toxic for Reproduction
121	Pentacosafluorotridecanoic acid	72629-94-8	0.05	0.005	vPvB
122		307-55-1	0.05	0.005	vPvB
123	Heptacosafluorotetradecanoic acid	376-06-7	0.05	0.005	vPvB
124	1-bromopropane (n-propyl bromide)	106-94-5	0.1	0.01	Toxic for Reproduction
125	Methoxyacetic acid	625-45-6	0.05	0.005	Toxic for Reproduction



Page 11 of 18

No.	Substance Name	CAS No.	For componen t detection limit,%	For material detection limit,%	Basis for identification as a SVHC
126	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	0.05	0.005	Carcinogen
127	Methyloxirane (Propylene oxide)	75-56-9	0.1	0.01	Carcinogen; Mutagen
128	Trilead dioxide phosphonate	12141-20-7	0.05	0.01	Toxic for Reproduction
129	o-aminoazotoluene	97-56-3	0.05	0.005	Carcinogen
130	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	0.05	0.005	Toxic for Reproduction
131	4,4'-oxydianiline and its salts	101-80-4	0.05	0.005	Carcinogen; Mutagen
132	Orange lead (lead tetroxide)*	1314-41-6	0.05	0.01	Toxic for Reproduction
133	Biphenyl-4-ylamine	92-67-1	0.05	0.005	Carcinogen
134	Diisopentylphthalate	605-50-5	0.05	0.005	Toxic for Reproduction
135	Fatty acids, C16-18, lead salts	91031-62-8	0.05	0.01	Toxic for Reproduction
136	Diazene-1,2-dicarboxamide(C,C '-azodi(formamide))	123-77-3	0.1	0.01	Equivalent level of concern
137	Sulfurous acid, lead salt, dibasic	62229-08-7	0.05	0.01	Toxic for Reproduction
138	Lead cyanamidate*	20837-86-9	0.05	0.01	Toxic for Reproduction
139	Cadmium	7440-43-9	0.05	0.005	Carcinogenic; Equivalent level of concern having probable serious effects to human health
140	Cadmium oxide*	1306-19-0	0.05	0.005	Carcinogenic; Equivalent level of concern having probable serious effects to human health



Page 12 of 18

No.	Substance Name	CAS No.	For componen t detection limit,%	For material detection limit,%	Basis for identification as a SVHC
141	Dipentyl phthalate (DPP)	131-18-0	0.05	0.005	Toxic for reproduction
142	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]	-	0.05	0.01	Equivalent level of concern having probable serious effects to the environment
143	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	0.05	0.01	Toxic for reproduction; PBT
144	Pentadecafluorooctanoic acid (PFOA)	335-67-1	0.05	0.01	Toxic for reproduction; PBT
145	Cadmium sulphide*	1306-23-6	0.05	0.005	Carcinogenic; Equivalent level of concern having probable serious effects to human health
146	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1- sulphonate) (C.I. Direct Red 28)	573-58-0	0.1	0.01	Carcinogenic
147	Disodium 4-amino-3-[[4'-[(2,4-diaminophe nyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)napht halene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7	0.05	0.01	Carcinogenic
148	Dihexyl phthalate	84-75-3	0.05	0.01	Carcinogenic
149	Imidazolidine-2-thione (2-imidazoline-2-thiol)	96-45-7	0.05	0.01	Toxic for reproduction



Date: 2015-07-14

Page 13 of 18 No. : DC185119DM

No.	Substance Name	CAS No.	For componen t detection limit,%	For material detection limit,%	Basis for identification as a SVHC
150	Lead di(acetate)*	301-04-2	0.05	0.01	Toxic for reproduction
151	Trixylyl phosphate	25155-23-1	0.05	0.01	Toxic for reproduction
152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear (DIHP)	68515-50-4	0.05	0.01	Toxic for reproduction
153	Cadmium chloride	10108-64-2	0.05	0.01	Carcinogenic; Equivalent level of concern having probable serious effects to human health
154	Sodium perborate; perboric acid, sodium salt	æ	0.05	0.01	Toxic for reproduction
155	Sodium peroxometaborate	7632-04-4	0.05	0.01	Toxic for reproduction
156	2-(2H-benzotriazol-2-yl)-4,6-dit ertpentylphenol (UV-328)	25973-55-1	0.1	0.05	vPvB, PBT
157	2-benzotriazol-2-yl-4,6-di-tert-b utylphenol (UV-320)	3846-71-7	0.1	0.05	vPvB, PBT
158	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-ox a-3,5-dithia-4-stannatetradecano ate (DOTE)	15571-58-1	0.1	0.05	Toxic for Reproduction
159	Cadmium fluoride	7790-79-6	0.05	0.01	Carcinogenic; Mutagen Equivalent level of concern having probable serious effects to human health



Page 14 of 18

No.	Substance Name	CAS No.	For componen t detection limit,%	For material detection limit,%	Basis for identification as a SVHC
160	Cadmium sulphate	10124-36-4 31119-53-6	0.05	0.01	Carcinogenic; Mutagen Equivalent level of concern having probable serious effects to human health
161	Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-ox a-3,5-dithia-4-stannatetradecano ate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)ox y]-2-oxoethyl]thio]-4-octyl-7-ox o-8-oxa-3,5-dithia-4-stannatetra decanoate (reaction mass of DOTE and MOTE)		0.1	0.05	Toxic for Reproduction
162	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	68515-51-5 68648-93-	0.05	0.01	Toxic for Reproduction
163	5-sec-butyl-2-(2,4-dimethylcycl ohex-3-en-1-yl)-5-methyl-1,3-di oxane [1], 5-secbutyl-2-(4,6-dimethylcyclo hex-3-en-1-yl)-5-methyl-1,3-dio xane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof	:(●)	0.1	0.1	vPvB



Page 15 of 18

Remark(s):

- The chemical analysis of 163 SVHC candidates for authorization published by ECHA On 15 June 2015 (http://www.echa.europa.eu/web/guest/candidate-list-table) is performed by in-house test methods. The candidate list of SVHC for authorization is under evaluation by ECHA and is summarized in table of Annex.
- Definition of classification is listed on Appendix A of this report in accordance with 67/548/EEC and Regulation (EC) No 1907/2006.
- * Test results are calculated as per selected ion(s) including cadmium, cobalt, sodium, lead, arsenic, chloride, calcium, strontium, chromate, aluminum, zirconium, boron, nitrogen, and arsenate. Concentration as per compound is calculated from the test result as per selected ion. Further confirmation and quantization techniques including Ion Chromatography, UV-Vis spectrometry and Thin Layer Chromatography would be adopted whenever a positive result is found over the reporting limit.



Page 16 of 18

APPENDIX A

Definition under 67/548/EEC AND Regulation (EC) No 1907/2006

Carcinogen Category 1 Carcinogen Category 2 Substances known to be carcinogenic to man. There is sufficient evidence to establish a causal association between human exposure to a substance and the development of cancer.

Substances which should be regarded as if they are carcinogenic to man. There is sufficient evidence to provide a strong presumption that human exposure to a substance may result in the development of cancer. Generally on the basis of:

-appropriate long-term animal studies

-other relevant information.

Mutagen Category 1 Mutagen

Category 2

Substances known to be mutagenic to man. There is sufficient evidence to establish a causal

association between human exposure to a substance and heritable genetic damage.

Substances which should be regarded as if they are mutagenic to man. There is sufficient

evidence to provide a strong presumption that human exposure to the substance may result in the development of heritable genetic damage, generally on the basis of:

-appropriate animal studies -other relevant information.

Toxic to Reproduction Category 1 Substances known to impair fertility in humans. There is sufficient evidence to establish a causal relationship between human exposure to the substance and impaired fertility. Substances known to cause developmental toxicity in humans. There is sufficient evidence to establish a causal relationship between human exposure to the substance and subsequent developmental toxic effects in the progeny.

Toxic to Reproduction Category 2 Substances which should be regarded as if they impair fertility in humans.

There is sufficient evidence to provide a strong presumption that human exposure to the substance may result in impaired fertility in the basis of:

-clear evidence in animal studies of impaired fertility in the absence of toxic effects, or, evidence of impaired fertility occurring at around the same dose levels as other toxic effects but which is not a secondary nonspecific consequence of the other toxic effects,-other relevant information.

Substances which should be regarded as if they cause developmental toxicity to humans. There is sufficient evidence to provide a strong presumption that human exposure to the substance may result in developmental toxicity, generally on the basis of:

-clear results in appropriate animal studies where effects have been observed in the absence of signs of marked maternal toxicity, or at around the same dose levels as other toxic effects but which are not a secondary non-specific consequence of the other toxic effects,

-other relevant information.

PBT & vPvB

: Substances which are persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) pose a particular challenge to the chemicals safety management. For these substances a "safe" concentration in the environment cannot be established with sufficient reliability.



Page 17 of 18

APPENDIX B

Obligations: Articles

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 tone 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.

Authorization may be required if it contains SVHC listed in Annex XIV of the Regulation.

Obligations: Packaging Materials and Containers

Packaging materials may be produced or imported separately as packaging of imported goods. "Guidance for Articles" published by ECHA (May 2008) revealed that the packaging material or container is always a separate 'article' and to be assessed separately from any object it contains. The obligations for articles also apply to packaging materials.

Obligations: Preparations

For preparation that is intended to be used in the manufacture of article and will be imported into EU in the form of an article, the obligations for articles will be applied.

For preparation that is directly imported into EU, Article 31 of Regulation (EU) No 1907/2006 requires supplier of a preparation to provide a safety data sheet to the recipients at their request if the preparation contains at least one of SVHCs and its individual concentration is at least 0.1% weight by weight (w/w) for non gaseous preparations and at least 0.2% by volume for gaseous preparations.

Authorization may be required if it contains SVHC listed in Annex XIV of the Regulation. However, authorization is not required if the SVHC meets one of the following criteria: a) for substances referred to in Article 57 (d), (e), (f), below a concentration limit of 0.1% weight by weight (w/w); b) for all other substances, below the lowest of the concentration limits specified in Directive 1999/45/EC or in Annex I to Directive 67/548/EEC which result in the classification of the preparation as dangerous.

Obligations: Substances

- For substance that is intended to be used in the manufacture of article and will be imported into EU in the form of an article, the obligations for articles will be applied.
- For substance that is directly imported into EU, Article 31 of Regulation (EU) No 1907/2006 requires supplier of a SVHC to provide a safety data sheet to their customers.
- Authorization may be required if the substance is included in Annex XIV of the Regulation.

STC (Dongguan) Company Limited

For Conditions of Issuance of this test report, please refer to the overleaf or Website.



Page 18 of 18

PHOTO(S):



**** END OF TEST REPORT *****