

ASSESSMENT REPORT PROPOSAL IN COMPLIANCE WITH REACH

We have been commissioned by the client to conduct REACH compliance assessment on their products (Contract No.: TR20152481). We have assessed the client's product under the European Regulation (EC) No 1907/2006 (hereinafter referred as REACH Regulation), including product categories, substances list, SVHC (Substances of Very High Concern) as well as the client's responsibilities and obligations for this product under REACH Regulation. The results of the assessment and our proposals are described as follows:

1. Client's Information

Name:	Hangzhou Todaytec Digital Co., Ltd.
Address:	Room 3-305 Hongshulin Huayuan, 207-233 Tiancheng Rd., Jianggan District, Hangzhou, China
Name of the contact person:	Ms Chen
Tel:	+86-571-85771625
E-mail:	cindy@todaytec.com.cn

2. Product Identification

Product name:	Barcode ribbon
Type/ model:	N/ A
Physical appearance/colour:	Solid/ Black
Product type:	Article

3. Product Substances Information

3.1 Substance on its own or in mixtures

Index	Substance name	CAS No.	EC No.	Tone
N/A	N/A	N/A	N/A	N/A

3.2 Substance in article intended to be released

Index	Substance name	CAS No.	EC No.	Tone
N/A	N/A	N/A	N/A	N/A

3.3 SVHC (Substance of Very High Concern) in article (Details see Annex 1)

4. Responsibilities and Obligations

4.1 Registration

- **4.1.1** According to the definition in Article 3(3), Chapter 2, Title I, the client's product, Barcode ribbon is regarded as "Article" under REACH Regulation.
- **4.1.2** According to Article 7(1), Chapter 2, Title 2 of REACH Regulation, there is no substance intended to be released under normal or reasonably foreseeable conditions of use in the client's product. Therefore,



registration is not required.

4.2 Notification

As the concentrations of the SVHCs defined in Article 57 of REACH Regulation in the client's products are less than 0.1% weight by weight (w/w), the obligation of notification is not required according to Article 7(2) under REACH Regulation.

Note: ECHA states that the 0.1% w/w limit applies to the average concentration of any SVHC on candidate list present in the entire article as produced or imported and not the individual components. However, six European countries (Belgium, Germany, Denmark, France, Norway and Sweden) who adhere to the view that the 0.1% threshold for reporting candidate list substances, which are also known as substances of very high concern (SVHCs), should be applied to major components within complex products, rather than to the final product itself. Following cooperation between the authorities responsible for REACH in six European countries, guidance has been published offering advice for suppliers of articles on performing their legal duties to inform about contents of chemical substances on the candidate list.

In this report, we adopt the opinions from these Member States that the 0.1% threshold should relate to individual articles, parts or materials that a complex article consists of.

4.3 Information Communication down the Supply Chain

As the concentrations of the SVHCs in the client's product are less than 0.1% weight by weight (w/w), the obligation of communicating information down the supply chain is not required in accordance with Article 33 of REACH Regulation.

4.4 Others

4.4.1 Authorisation

Since the manufacture of this product is based outside the EU, and the lifecycle of related substances outside EU is irrelevant with respect to REACH Regulation, there is no obligation of authorisation required for the client's product.

4.4.2 Restriction

The directive on marketing and use of dangerous substances 76/769/EEC have been repealed since 1 June 2009, and the client should follow the restriction conditions outlined in Annex XVII in REACH Regulation from then on.

As we haven't received any testing request of Restricted Substance from our client, the detail of restricted substance in the product is unknown.

5. Assessment Conclusions

According to the product information provided by the client and related Articles of REACH Regulation, we draw the conclusion that:

The products supplied by the client comply with REACH Regulation about SVHC as it currently stands.



6. Proposal for REACH Compliance

- **6.1** The client should inform his downstream users that the products mentioned above comply with REACH Regulation as soon as possible.
- **6.2** The client should pay constant attention to the SVHCs in the candidate list and the restricted substance in the annex XVII, Also need to fulfil related obligations if necessary. This list may be updated regularly and it is important to monitor any changes to it.
- **6.3** The client should ensure the products are consistent with the sample provided to Chemical Inspection & Regulation Service Limited.

If you want to verify the authenticity of the report, please login the report verification system according to the operating instruction: http://www.cirs-ck.com/dvs/. If you have any question about the report, please contact us.

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No.: TR20152481 Date: July 7, 2015

<u>STATEMENT</u>

First: Instruction for the assessment conclusion

The above assessment conclusions that we have made is based on the understanding and analysis of the consignor's product and REACH regulation and only applies to the situation described in the report. This conclusion does not apply to any enterprise or product that fails to meet the description.

As parts of REACH regulation (for example Annex XIV) are still under modification, the above conclusion only applies to REACH regulation as it currently stands.

This report is only used to assist the consignor to know his own responsibility and obligation under REACH Regulation, and provide the actors in his supply chain with evidence that his products are in compliance with REACH regulation.

The consignor should study this report carefully. If there is any doubt or suggestion, please contact us and we will do our best to clarify and include any necessary amendments.

Second: Disclaimer Statement

We undertake no responsibility and no obligation to verify the authenticity of information supplied by the consignor.

The client should ensure the exported products are consistent with the sample provided to our company in material, vendors and production process. We can't be held responsible or bear any consequence which may result from differences between the sample products provided to us and the exported products.

We have completed this report with all professional competence, responsibility and reasonable due diligence, however due to the limited approach to the consignor, the products and the market we can't guarantee that the content of the report is fully accurate.

Consignor should make a cautious decision to adopt the assessment conclusion of this report. We assume no liability for any loss incurred as a result of the use of the conclusion.

Third: Privacy statement and others

This report has been completed by us independently. We guarantee that we shall not disclose information in the above report to any third party (except with the express written permission of consignor). We shall assume no responsibility for any loss caused by disclosure of the report.

We suggest that before offering the report the consignor should sign a security agreement with the third party in order to keep the information of consignor and products in the report from disclosure.

Chemical Inspection & Regulation Service Limited



ANNEX 1 TEST RESULTS OF SVHC (SUBSTANCE OF VERY HIGH CONCERNED)

Sample Description:

Name:	Barcode ribbon
Description:	Black solid
Date of receiving sample:	July 3, 2015
Date of test:	July 3, 2015 –July 7, 2015
Test requested:	One hundred and sixty three (163) Substances of Very High Concern (SVHC) analysis. SVHC list is based on the publication by European Chemical Agency (ECHA) on 28 October 2008, 13 January 2010, 30 March 2010, 18 June 2010, 15 December 2010, 20 June 2011, 19 December 2011, 18 June 2012, 19 December 2012, 20 June 2013, 16 December 2013, 16 June 2014, 17 December 2014 and 15 June 2015 regarding regulation (EC) No 1907/2006 concerning the REACH.



1. Test parts and photos:

No.	Parts Name
1 2500 1500	Barcode ribbon

Remark:

- 1. As per client's request, the test results of 1-155 SVHCs are quoted from test report TR20142276.
- 2. As per client's request, the test results of 156-161 SVHCs are quoted from test report TR20150161.

Sample Photo:



1

Reference Photo:



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2. Test results:

No.	Test Item	CAS No.	MDL	Results(mg/kg)	
NO.	iest item	CAS NO.	IVIDL	1	
1	Anthracene	120-12-7	100	N.D.	
2	4,4'- Diaminodiphenylmethane(MDA)	101-77-9	100	N.D.	
3	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	100	N.D.	
4	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane	25637-99-4, 3194-55-6 (134237-50-6) (134237-51-7) (134237-52-8)	100	N.D.	
5	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	100	N.D.	
6	Dibutyl phthalate(DBP)	84-74-2	10	N.D.	
7	Bis (2-ethyl(hexyl)phthalate) (DEHP)	117-81-7	10	N.D.	
8	Benzyl butyl phthalate(BBP)	85-68-7	10	N.D.	
9	Cobalt dichloride	7646-79-9	100	N.D.	
10	Bis(tributyltin)oxide(TBTO)	56-35-9	100	N.D.	
11	Sodium dichromate	7789-12-0, 10588-01-9	100	N.D.	
12	Lead hydrogen arsenate	7784-40-9	100	N.D.	
13	Diarsenic trioxide	1327-53-3	100	N.D.	
14	Diarsenic pentaoxide	1303-28-2	100	N.D.	
15	Triethyl arsenate	15606-95-8	100	N.D.	
16	Anthracene oil	90640-80-5	100	N.D.	
17	Anthracene oil, anthracene paste, distn. lights	91995-17-4	100	N.D.	
18	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	100	N.D.	
19	Anthracene oil, anthracene-low	90640-82-7	100	N.D.	
20	Anthracene oil, anthracene paste	90640-81-6	100	N.D.	
21	Pitch, coal tar, high temp.	65996-93-2	100	N.D.	
22	Acrylamide	79-06-1	100	N.D.	
23	2,4-Dinitrotoluene	121-14-2	100	N.D.	
24	Diisobutyl phthalate	84-69-5	10	N.D.	
25	tris(2-chloroethyl)phosphate	115-96-8	100	N.D.	



No.	Test Item	CACNO	MDI	Results(mg/kg)
No.	iest item	CAS No.	MDL	1
26	Lead chromate	7758-97-6	100	N.D.
27	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	12656-85-8	100	N.D.
28	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2	100	N.D.
29	Trichloroethylene	79-01-6	100	N.D.
30	Boric acid	10043-35-3, 11113-50-1	100	N.D.
31	Disodium tetraborate, anhydrous	1303-96-4, 1330-43-4, 12179-04-3	100	N.D.
32	Tetraboron disodium heptaoxide, hydrate	12267-73-1	100	N.D.
33	Sodium chromate	7775-11-3	100	N.D.
34	Potassium chromate	7789-00-6	100	N.D.
35	Ammonium dichromate	7789-09-5	100	N.D.
36	Potassium dichromate	7778-50-9	100	N.D.
37	Chromium trioxide	1333-82-0	100	N.D.
38	2-Ethoxyethanol	110-80-5	100	N.D.
39	2-Methoxyethanol	109-86-4	100	N.D.
40	Cobalt(II) diacetate	71-48-7	100	N.D.
41	Cobalt (II) carbonate	513-79-1	100	N.D.
42	Cobalt dinitrate	10141-05-6	100	N.D.
43	Cobalt (II) sulphate	10124-43-3	100	N.D.
44	Acids generated from chromium trioxide and their oligomers. Group containing: Chromic acid, Dichromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid	7738-94-5, 13530-68-2	100	N.D.
45	2-Ethoxyethyl acetate	111-15-9	100	N.D.
46	Strontium chromate	7789-06-2	100	N.D.
47	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	100	N.D.
48	Hydrazine	7803-57-8 302-01-2	100	N.D.
49	N-methyl-2-pyrrolidone; 1-methyl-2-pyrrolid one	872-50-4	100	N.D.



u.	Test Item	CACNA	MADI	Results(mg/kg)	
No.	lest item	CAS No.	MDL	1	
50	1,2,3-trichloropropane	96-18-4	100	N.D.	
51	1, 2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	100	N.D.	
52	Calcium arsenate	7778-44-1	100	N.D.	
53	Bis(2-methoxyethyl) ether	111-96-6	100	N.D.	
54	Potassium hydroxyoctaoxodizincatedichromate	11103-86-9	100	N.D.	
55	Lead dipicrate	6477-64-1	100	N.D.	
56	N,N-dimethylacetamide	127-19-5	100	N.D.	
57	Arsenic acid	7778-39-4	100	N.D.	
58	2-Methoxyaniline; o-Anisidine	90-04-0	100	N.D.	
59	Trilead diarsenate	3687-31-8	100	N.D.	
60	1,2-dichloroethane	107-06-2	100	N.D.	
61	Pentazinc chromate octahydroxide	49663-84-5	100	N.D.	
62	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	100	N.D.	
63	Formaldehyde, oligomeric reaction products with aniline	25214-70-4	100	N.D.	
64	Bis(2-methoxyethyl) phthalate	117-82-8	100	N.D.	
65	Lead diazide, Lead azide	13424-46-9	100	N.D.	
66	Lead styphnate	15245-44-0	100	N.D.	
67	2,2'-dichloro-4,4'-methylenedianiline	101-14-4	100	N.D.	
68	Phenolphthalein	77-09-8	100	N.D.	
69	Dichromium tris(chromate)	24613-89-6	100	N.D.	
70*	Aluminosilicate Refractory Ceramic Fibres	65, -Me	100	N.D.	
71*	Zirconia Aluminosilicate, Refractory Ceramic Fibres	15 15 15 15 15 15 15 15 15 15 15 15 15 1	100	N.D.	
72	1,2-bis (2-methoxyethoxy) ethane (TEGDME; triglyme)	112-49-2	100	N.D.	
73	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	100	N.D.	
74	Diboron trioxide	1303-86-2	100	N.D.	
75	Formamide	75-12-7	100	N.D.	
76	Lead (II) bis (methanesulfonate)	17570-76-2	100	N.D.	



No.	Test Item	CAS No.	MDL	Results(mg/kg)
IVO.	iest itelli	CAS NO.	IVIDL	1
77	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane- 2,4,6-trione (TGIC)	2451-62-9	100	N.D.
	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-			
78	1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	59653-74-6	100	N.D.
79	4,4'-bis (dimethylamino) benzophenone (Michler's ketone)	90-94-8	100	N.D.
80	N, N, N',N'-tetramethyl- 4,4'-methylenedianiline (Michler's base)	101-61-1	100	N.D.
	[4-[4,4'-bis (dimethylamino) benzhydrylidene]			
81**	cyclohexa-2, 5- dien-1- ylidene] dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9	100	N.D.
	[4-[[4-anilino-1-naphthyl][4-(dimethylamino) phenyl]methylene]		C. E. S. E. E.	
82**	cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	2580-56-5	100	N.D.
83**	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	100	N.D.
84**	4,4'-bis(dimethylamino)-4"- (methylamino)trityl alcohol	561-41-1	100	N.D.
85	Bis(pentabromophenyl) ether (decabromodiphenylether; DecaBDE)	1163-19-5	100	N.D.
86	Pentacosafluorotridecanoic acid	72629-94-8	100	N.D.
87	Tricosafluorododecanoic acid	307-55-1	100	N.D.
88	Henicosafluoroundecanoic acid	2058-94-8	100	N.D.
89	Heptacosafluorotetradecanoic acid	376-06-7	100	N.D.
90	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	100	N.D.
	Cyclohexane-1,2-dicarboxylic anhydride	85-42-7,	J- 14	
91	cis-cyclohexane-1,2-dicarboxylic anhydride	13149-00-3,	100	N.D.
	trans-cyclohexane-1,2-dicarboxylic anhydride	14166-21-3	350	
	Hexahydromethylphthalic anhydride,	25550-51-0,		
92	Hexahydro-4-methylphthalic anhydride,	19438-60-9,	100	N.D.
	Hexahydro-1-methylphthalic anhydride,	48122-14-1,	đ	
	Hexahydro-3-methylphthalic anhydride	57110-29-9		



lo.	Test Item	CAS No.	MDI	Results(mg/kg)	
No.	iest item	CAS NO.	MDL	1	
93	4-Nonylphenol, branched and linear	A SECTION AND A	100	N.D.	
94	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	-5/1/20	100	N.D.	
95	Methoxyacetic acid	625-45-6	100	N.D.	
96	N,N-dimethylformamide	68-12-2	100	N.D.	
97	Dibutyltin dichloride (DBTC)	683-18-1	100	N.D.	
98	Lead monoxide (Lead oxide)	1317-36-8	100	N.D.	
99	Orange lead (Lead tetroxide)	1314-41-6	100	N.D.	
.00	Lead bis(tetrafluoroborate)	13814-96-5	100	N.D.	
.01	Trilead bis(carbonate)dihydroxide	1319-46-6	100	N.D.	
L02	Lead titanium trioxide	12060-00-3	100	N.D.	
103	Lead titanium zirconium oxide	12626-81-2	100	N.D.	
L04	Silicic acid, lead salt	11120-22-2	100	N.D.	
.05	Silicic acid $(H_2Si_2O_5)$, barium salt $(1:1)$, lead-doped	68784-75-8	100	N.D.	
106	1-bromopropane (n-propyl bromide)	106-94-5	100	N.D.	
L07	Methyloxirane (Propylene oxide)	75-56-9	100	N.D.	
108	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	100	N.D.	
109	Diisopentylphthalate (DIPP)	605-50-5	100	N.D.	
L10	N-pentyl-isopentylphthalate	776297-69-9	100	N.D.	
11	1,2-diethoxyethane	629-14-1	100	N.D.	
112	Acetic acid, lead salt, basic	51404-69-4	100	N.D.	
113	Lead oxide sulfate	12036-76-9	100	N.D.	
14	[Phthalato(2-)]dioxotrilead	69011-06-9	100	N.D.	
15	Dioxobis(stearato)trilead	12578-12-0	100	N.D.	
116	Fatty acids, C16-18, lead salts	91031-62-8	100	N.D.	
L17	Lead cynamidate	20837-86-9	100	N.D.	
18	Lead dinitrate	10099-74-8	100	N.D.	
19	Pentalead tetraoxide sulphate	12065-90-6	100	N.D.	
20	Pyrochlore, antimony lead yellow	8012-00-8	100	N.D.	
.21	Sulfurous acid, lead salt, dibasic	62229-08-7	100	N.D.	
22	Tetraethyllead	78-00-2	100	N.D.	
23	Tetralead trioxide sulphate	12202-17-4	100	N.D.	



No.	Test Item	CAS No.	MDL	Results(mg/kg)	
				1	
124	Trilead dioxide phosphonate	12141-20-7	100	N.D.	
125	Furan	110-00-9	100	N.D.	
126	Diethyl sulphate	64-67-5	100	N.D.	
127	Dimethyl sulphate	77-78-1	100	N.D.	
128	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazol idine	143860-04-2	100	N.D.	
129	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	100	N.D.	
L30	4,4'-methylenedi-o-toluidine	838-88-0	100	N.D.	
131	4,4'-oxydianiline and its salts	101-80-4	100	N.D.	
132	4-aminoazobenzene	60-09-3	100	N.D.	
133	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	100	N.D.	
L34	6-methoxy-m-toluidine (p-cresidine)	120-71-8	100	N.D.	
135	Biphenyl-4-ylamine	92-67-1	100	N.D.	
136	o-aminoazotoluene [(4-o-tolylazo-o-toluidine])	97-56-3	100	N.D.	
L37	o-toluidine	95-53-4	100	N.D.	
138	N-methylacetamide	79-16-3	100	N.D.	
139	Cadmium	7440-43-9	5	N.D.	
.40	Cadmium oxide	1306-19-0	100	N.D.	
L41	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	100	N.D.	
L42	Pentadecafluorooctanoic acid (PFOA)	335-67-1	100	N.D.	
L43	Dipentyl phthalate (DPP)	131-18-0	10	N.D.	
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]		100	N.D.	
145	Cadmium sulphide	1306-23-6	100	N.D.	
146	Dihexyl phthalate (DHXP)	84-75-3	10	N.D.	



Test Item Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28) 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) midazolidine-2-thione; 2-imidazoline-2-thiol Lead di(acetate) Trixylyl phosphate Cadmium chloride 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	96-45-7 301-04-2 25155-23-1 10108-64-2	100 100 100 100 50	N.D. N.D. N.D. N.D.
Azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28) 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) midazolidine-2-thione; 2-imidazoline-2-thiol Lead di(acetate) Trixylyl phosphate Cadmium chloride 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	1937-37-7 96-45-7 301-04-2 25155-23-1	100 100 100	N.D. N.D. N.D.
(C.I. Direct Red 28) 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) midazolidine-2-thione; 2-imidazoline-2-thiol Lead di(acetate) Trixylyl phosphate Cadmium chloride 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	1937-37-7 96-45-7 301-04-2 25155-23-1	100 100 100	N.D. N.D. N.D.
Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo]	96-45-7 301-04-2 25155-23-1	100 100	N.D. N.D.
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) midazolidine-2-thione; 2-imidazoline-2-thiol Lead di(acetate) Trixylyl phosphate Cadmium chloride 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	96-45-7 301-04-2 25155-23-1	100 100	N.D. N.D.
naphthalene-2,7-disulphonate(C.I. Direct Black 38) midazolidine-2-thione; 2-imidazoline-2-thiol Lead di(acetate) Trixylyl phosphate Cadmium chloride 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	301-04-2 25155-23-1	100	N.D.
Lead di(acetate) Trixylyl phosphate Cadmium chloride 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	301-04-2 25155-23-1	100	N.D.
Trixylyl phosphate Cadmium chloride 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	25155-23-1		
Cadmium chloride 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	550	50	
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	10108-64-2		N.D.
branched and linear	.00	100	N.D.
	68515-50-4	10	N.D.
Sodium peroxometaborate	7632-04-4	100	N.D.
Sodium perborate; perboric acid, sodium salt	19 St	100	N.D.
Cadmium fluoride	7790-79-6	100	N.D.
Cadmium sulphate	10124-36-4; 31119-53-6	100	N.D.
2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	100	N.D.
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphe nol (UV-328)	25973-55-1	100	N.D.
2-ethylhexyl			
0-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4- stannatetradecanoate (DOTE)	15571-58-1	100	N.D.
usestion mass of 2 sthells and			
reaction mass of 2-ethylhexyl 0-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4- stannatetradecanoate and 2-ethylhexyl			
O-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]t o]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannate tradecanoate (reaction mass of DOTE and	y - 6 ⁶⁶	100	N.D.
	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320) 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphe nol (UV-328) 2-ethylhexyl 0-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE) reaction mass of 2-ethylhexyl 0-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl -ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]t o]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannate	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320) 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphe nol (UV-328) 2-ethylhexyl 2-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE) reaction mass of 2-ethylhexyl 2-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 2-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]t o]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannate tradecanoate (reaction mass of DOTE and	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320) 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphe nol (UV-328) 2-ethylhexyl 2-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE) reaction mass of 2-ethylhexyl 2-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 2-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]t ol-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannate tradecanoate (reaction mass of DOTE and



No	Test Item	CAS No.	MDL	Results(mg/kg)	
No.				1	
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; 68648-93-1	100	N.D.	
163	5-sec-butyl-2-(2, 4-dimethylcyclohex-3en-1-yl)-5-methyl-1, 3-dioxane [1], 5-sec-butyl-2-(4, 6-dimethylcyclohex-3en-1-yl)-5-methyl-1, 3-dioxane [2] [covering any of the individual stereoisomers of [1]and[2] or any	THE THE CHAPTER	100	N.D.	

Remarks:

- 1. Test parts may be single material or a variety of materials which could not be divided by physical ways. Unless otherwise noted, components of base material, coating metal, coating paint and/or colouring pigment were no longer divided, but tested as one whole.
- 2. All results are applicable only to the test samples.
- 3. Unit: mg/kg. 1000mg/kg= 1000ppm= 0.1%
- 4. N.D. = Not detected (<MDL), MDL= Method Detection Limits, MCV= Maximum Concentration Values.
- 5. The substances are tested by in-house methods: CIRS-TC-SVHC001, CIRS-TC-SVHC002, CIRS-TC-SVHC003 CIRS-TC-SVHC004, CIRS-TC-SVHC005 and CIRS-TC-SVHC006 which refer to the methods listed below:
- 1) EN 14372:2004 Child use and care articles-Cutlery and feeding utensils-Safety requirements and tests
- 2) US EPA 8061A:1996 Phthalate Esters by Gas Chromatography with Electron Capture Detection (GC/ECD)
- 3) US EPA 3540C:1996 Soxhlet Extraction
- 4) US EPA 3550C:2007 Ultrasonic Extraction
- 5) US EPA 8270D:2007 Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry
- 6) EN 14362-1:2012 Textiles Methods for 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
- 7) EN 14362-3:2012 Textiles. Methods for determination of certain aromatic amines derived from Azo colorants. Part 3:Detection of the use of certain Azo colorants, which may release 4-aminoazobenzene
- 8) US EPA 8260C:2006 Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)
- 9) US EPA 5021:1996 Volatile Organic Compounds in Soils and Other Solid Matrices Using Equilibrium Headspace Analysis
- 10) ISO 17075:2007 Leather-Chemical tests-Determination of chromium(VI) content



- 11) US EPA 3060A:1996 Alkaline Digestion for Hexavalent Chromium
- 12) US EPA 7196A:1992 Chromium, Hexavalent (Colorimetric)
- 13) ISO 3613:2000C Test methods—Metallic and other inorganic coatings Chromate conversion coatings on zinc, cadmium, aluminium-zinc alloys and zincaluminium alloys
- 14) US EPA 3050B:1996 Acid Digestion of Sediments, Sludges, and Soils
- 15) US EPA 3051A:2007 Microwave Assisted Acid Digestion of Sediments, Sludges, Soils, and Oils
- 16) US EPA 3052:1996 Microwave Assisted Acid Digestion of Siliceous and Organically Based Matrices
- 17) US EPA 6010C:2007 Inductively Coupled Plasma-Atomic Emission Spectrometry
- 18) ASTM D7065:2006 Standard Test Method for Determination of Nonylphenol, Bisphenol A,p-tert-Octylphenol, Nonylphenol Monoethoxylate and Nonylphenol Diethoxylate in Environmental Waters by Gas Chromatography Mass Spectrometry
- EPA 8321B:2007 Solvent-extractable nonvolatile compounds by high-performance liquid chromatography/ thermospray/ mass spectrometry (HPLC/TS/MS) or ultraviolet(UV) detection
- 6. *: Be covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures:
 - (70*) Aluminosilicate Refractory Ceramic Fibres
 - a) oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges
 - b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm)
- c) alkaline oxide and alkali earth oxide (Na₂O+K₂O+CaO+MgO+BaO) content less or equal to 18% by weight (71*) Zirconia Aluminosilicate Refractory Ceramic Fibres
- a) oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges
- b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm).
- c) alkaline oxide and alkali earth oxide(Na₂O+K₂O+CaO+MgO+BaO) content less or equal to 18% by weight.
- 7. ** (Items 81, 82, 83, 84) [with \geq 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] is identified as a substance meeting the criteria of Article 57 (a) of Regulation (EC) 1907/2006 (REACH) owing to its classification as carcinogen category 1A or 1B
- 8. Because it is difficult to detect the substances CoCl₂, C₂₄H₅₄OSn₂, Na₂Cr₂O₇, PbAsHO₄, As₂O₃, As₂O₅, Triethyl arsenate PbCrO₄, Lead chromate molybdate sulphate red (C.I. Pigment Red 104), Lead sulfochromate yellow (C.I. Pigment Yellow 34), Triethyl arsenate, H₃BO₃, Na₂B₄O₇, Na₂B₄O₇·7H₂O, Na₂CrO₄, K₂CrO₄, (NH₄)₂Cr₂O₇, K₂Cr₂O₇, CrO₃, Co(CH₃COO)₂, CoCO₃, Co(NO₃)₂, CoSO₄, SrCrO₄, Calcium arsenate, Potassium hydroxyoctaoxodizincatedichromate, Lead dipicrate, Arsenic acid, Trilead diarsenate, Pentazinc chromate octahydroxide, Lead diazide, Lead azide, Lead styphnate, Diboron trioxide, Lead (II) bis (methanesulfonate), Aluminosilicate Refractory Ceramic Fibres, Zirconia Aluminosilicate, Refractory Ceramic Fibres,s Dichromium tris(chromate), Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid, Dibutyltin dichloride (DBTC), Lead monoxide (Lead oxide), Orange lead (Lead tetroxide), Lead bis(tetrafluoroborate), Trilead bis(carbonate)dihydroxide, Lead titanium trioxide, Lead titanium



zirconium oxide, Silicic acid, lead salt, (Silicic acid ($H_2Si_2O_5$), barium salt (1:1), lead-doped), (Acetic acid, lead salt, basic), Lead oxide sulfate, [Phthalato(2-)]dioxotrilead, Dioxobis(stearato)trilead, (Fatty acids, C16-18, lead salts), Lead cynamidate, Lead dinitrate, Pentalead tetraoxide sulphate, (Pyrochlore, antimony lead yellow), (Sulfurous acid, lead salt, dibasic), Tetraethyllead, Tetralead trioxide sulphate, Trilead dioxide phosphonate, Cadmium oxide, Cadmium sulphide, Lead di(acetate), Cadmium chloride, Sodium peroxometaborate, (Sodium perborate; perboric acid, sodium salt), Cadmium fluoride, Cadmium sulphate) via direct tests, but via converting them into detectable elements, we consider that all the relative elements exist in the form of their compounds when having the test.

9. Chemical Inspection & Regulation Service Limited reserves the right of final explanations.	
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