Test Report

Applicant DONGGUAN CHIEFDOM FLAME RETARDANT CO.,LTD
Address 15 KUANGWU ROAD,DALINGSHAN TOWN,DONGGUAN,GUANGDONG,CHINA

The following sample(s) and sample information was/were submitted and identified by/on the behalf of the client

SampleDescription	150D*150D－40T
Buyer	深圳史丹福东宏布业有限公司
Sample Color	19－3906TC 灰
Material Composition	阻燃剂 B－301，B－002，B－004
SUPPLIER	东莞市潮德阻燃材料有限公司
Sample Received Date	Jan. 10, 2017
Testing Period	Jan. 10, 2017 to Jan. 17, 2017

Test Conducted:
As requested by the applicant, for details refer to next page(s)

Tested by Moon Zhang Reviewed by Noelle Zhang

Approved by Yanna Cao Date Jan. 17, 2017

Yanna Cao
Lab Manager

No. S274901045

Test Report

Summary of Test Result(s)		
Test Item(s)	**Test Request**	**Test Result/ Conclusion**
Total lead content	The Lead content requirement in toys and child care articles according to the California Proposition 65 settlement of County of Alameda Consent Judgment Case No.BG07350969(consolidated with RG08378057).	PASS
Phthalates	The DEHP,BBP,DBP,DIDP,DNHP content requirement in toys and child care articles according to the California Proposition 65 settlement of County of Alameda Consent Judgment Case No.BG07350969(consolidated with RG08378057).	PASS
pH Value	ISO 3071: 2005	See Result In Page 3
Lead(Pb)	IEC 62321-5:2013 Ed.1.0	See Result In Page 3
Cadmium(Cd)	IEC 62321-5:2013 Ed.1.0	See Result In Page 3
Mercury(Hg)	IEC 62321-4:2013 Ed.1.0	See Result In Page 3
Hexavalent Chromium(Cr(VI))	IEC 62321:2008 Ed.1 Annex C	See Result In Page 3
Polybrominated Biphenyls(PBBs)	IEC 62321-6:2015	See Result In Page 4
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	See Result In Page 4
Formaldehyde Content	EN ISO 14184-1:2011	See Result In Page 4
Migration of certain elements	EN 71-3:2013+A1:2014	PASS
SVHC in REACH released by ECHA	As specified by client, to screen the 169 substances of very high concern(SVHC) under Regulation(EC) No 1907/2006 of REACH in the submitted sample(s).	<0.1%
********** For Further Details, Please Refer To the Following Page(s) **********		

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Tests Conducted (As Requested By The Client)

1 Total lead content (EPA 3050B:1996 & EPA6010C:2007)

Lead content in non-PVC components

Tested Item(s)	Result (mg/kg)	MDL (mg/kg)	Limit (mg/kg)
Lead (Pb)	N.D.	5	100

2 Phthalates(US EPA 3550C:2007 & US EPA 8270D:2007)

Tested Item(s)	Result (mg/kg)	MDL (mg/kg)	Limit (mg/kg)
Dibutyl Phthalate (DBP)	N.D.	30	1000
Butyl Benzyl Phthalate (BBP)	N.D.	30	1000
Di-2-ethylhexyl Phthalate (DEHP)	N.D.	30	1000
Diisodecyl Phthalate (DIDP)	N.D.	50	1000
Di-n-hexyl Phthalate (DNHP)	N.D.	50	1000

3 pH Value (ISO 3071: 2005)

Tested Item(s)	Result
pH Value	2.7

4 Lead(Pb) (IEC 62321-5:2013 Ed.1.0)

Tested Item(s)	Result (mg/kg)	MDL (mg/kg)
Lead(Pb)	N.D.	2

5 Cadmium(Cd)(IEC 62321-5:2013 Ed.1.0)

Tested Item(s)	Result (mg/kg)	MDL (mg/kg)
Cadmium(Cd)	N.D.	2

6 Mercury(Hg)(IEC 62321-4:2013 Ed.1.0)

Tested Item(s)	Result (mg/kg)	MDL (mg/kg)
Mercury(Hg)	N.D.	2

7 Hexavalent Chromium(Cr(VI))(IEC 62321:2008 Ed.1 Annex C)

Tested Item(s)	Result (mg/kg)	MDL (mg/kg)
Hexavalent Chromium(Cr(VI))	N.D.	2

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8 Polybrominated Biphenyls(PBBs) (IEC 62321-6:2015)

Tested Item(s)	Result (mg/kg)	MDL (mg/kg)
Monobromobiphenyl	N.D.	5
Dibromobiphenyl	N.D.	5
Tribromobiphenyl	N.D.	5
Tetrabromobiphenyl	N.D.	5
Pentabromobiphenyl	N.D.	5
Hexabromobiphenyl	N.D.	5
Heptabromobiphenyl	N.D.	5
Octabromobiphenyl	N.D.	5
Nonabromobiphenyl	N.D.	5
Decabromobiphenyl	N.D.	5

9 Polybrominated Diphenyl Ethers(PBDEs)(IEC 62321-6:2015)

Tested Item(s)	Result (mg/kg)	MDL (mg/kg)
Monobromodiphenyl ether	N.D.	5
Dibromodiphenyl ether	N.D.	5
Tribromodiphenyl ether	N.D.	5
Tetrabromodiphenyl ether	N.D.	5
Pentabromodiphenyl ether	N.D.	5
Hexabromodiphenyl ether	N.D.	5
Heptabromodiphenyl ether	N.D.	5
Octabromodiphenyl ether	N.D.	5
Nonabromodiphenyl ether	N.D.	5
Decabromodiphenyl ether	N.D.	5

10 Formaldehyde Content (EN ISO 14184-1:2011)

Test Item(s)	Result (mg/kg)	MDL (mg/kg)
Formaldehyde Content	67	16

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11 Migration of certain elements

Method(s) EN 71-3:2013+A1:2014 was/were used, and the item(s) was/were analyzed by ICP-OES, ICP-MS, HPLC-ICP-MS and/or GC-MS.

Category Ⅲ: scraped-off toy material

Tested Item(s)	Result (mg/kg)	MDL(mg/kg)	Limit(mg/kg)
Aluminium (Al)	N.D.	50	70000
Antimony (Sb)	N.D.	5	560
Arsenic (As)	N.D.	5	47
Barium (Ba)	N.D.	50	18750
Boron (B)	N.D.	50	15000
Cadmium (Cd)	N.D.	1	17
Chromium (III) #1	2.5	0.2	460
Chromium (VI)	N.D.	0.002	0.2
Cobalt (Co)	N.D.	5	130
Copper (Cu)	N.D.	50	7700
Lead (Pb)	N.D.	5	160
Manganese (Mn)	N.D.	50	15000
Mercury (Hg)	N.D.	5	94
Nickel (Ni)	N.D.	5	930
Selenium (Se)	N.D.	5	460
Strontium (Sr)	N.D.	50	56000
Tin (Sn) #2	N.D.	2	180000
Organic tin (TBT) #3	N.D.	0.05	12
Zinc (Zn)	N.D.	50	46000

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Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million
- Filter paper was used instead of membrane filter in lab testing.
- #1 Trivalent chromium (Cr (III)) = Chromium (Cr) - Hexavalent chromium (Cr (VI)), where the chromium content exceeded the limits of hexavalent chromium and/or trivalent chromium, then hexavalent chromium was analyzed by HPLC-ICP-MS and trivalent chromium content was calculated using the formula.
- #2 Tin(Sn) content can be used for screen test for organic tins analysis to show compliance with the requirement of EN 71-3:2013+A1:2014.
- #3 The migration of organic tin is expressed as tributyltin (TBT). where the tin content exceeded the limit of organic tin, ten organic tins listed in table were determined by GC-MS and the client should be noted there are other organic tins may be present in toy materials.

Organic tins tested under EN 71-3:2013+A1:2014
Methyl tin (MeT)
Butyl tin (BuT)
Dibutyl tin (DBT)
Tributyl tin (TBT)
Tetrabutyl tin (TeBT)
n-Octyl tin (MOT)
Di-n-octyl tin (DOT)
Di-n-propyl tin (DProT)
Diphenyl tin (DPhT)
Triphenyl tin (TPhT)

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12 SVHC in REACH released by ECHA

Test Result(s)

Batch	No.	Substance Name(s)	CAS No.	EC No.	Concentration (%)	Report Limit
I	1	Anthracene	120-12-7	204-371-1	N.D.	0.005%
I	2	4,4'- Diaminodiphenylmethane	101-77-9	202-974-4	N.D.	0.005%
I	3	Dibutyl phthalate(DBP)	84-74-2	201-557-4	N.D.	0.005%
I	4	Cobalt dichloride*	7646-79-9	231-589-4	N.D.	0.01%
I	5	Diarsenic pentaoxide*	1303-28-2	215-116-9	N.D.	0.01%
I	6	Diarsenic trioxide*	1327-53-3	215-481-4	N.D.	0.01%
I	7	Sodium dichromate*	7789-12-0, 10588-01-9	234-190-3	N.D.	0.01%
I	8	Musk xylene	81-15-2	201-329-4	N.D.	0.005%
I	9	Bis(2-ethyl(hexyl)phthalate)(DEHP)	117-81-7	204-211-0	N.D.	0.005%
I	10	Hexabromocyclododecane (HBCDD)	25637-99-4, 3194-55-6	247-148-4, 221-695-9	N.D.	0.005%
I	11	ShortChain Chlorinated Paraffins(SCCPs)	85535-84-8	287-476-5	N.D.	0.01%
I	12	Bis(tributyltin)oxide (TBTO)*	56-35-9	200-268-0	N.D.	0.005%
I	13	Lead hydrogen arsenate*	7784-40-9	232-064-2	N.D.	0.01%
I	14	Benzyl butyl phthalate(BBP)	85-68-7	201-622-7	N.D.	0.005%
I	15	Triethyl arsenate*	15606-95-8	427-700-2	N.D.	0.01%
II	16	①Anthracene oil	90640-80-5	292-602-7	N.D.	0.05%
II	17	①Anthracene oil, anthracene paste,distn.Lights ****	91995-17-4	295-278-5	N.D.	0.05%
II	18	①Anthracene oil, anthracene paste,anthracene fraction	91995-15-2	295-275-9	N.D.	0.05%
II	19	①Anthracene oil, anthracene-low	90640-82-7	292-604-8	N.D.	0.05%
II	20	①Anthracene oil, anthracene paste	90640-81-6	292-603-2	N.D.	0.05%
II	21	①Coal tar pitch, high temperature	65996-93-2	266-028-2	N.D.	0.05%
II	22	Acrylamide	79-06-1	201-173-7	N.D.	0.01%
II	23	2,4-Dinitrotoluene	121-14-2	204-450-0	N.D.	0.01%
II	24	Diisobutyl phthalate (DIBP)	84-69-5	201-553-2	N.D.	0.005%
II	25	②Lead chromate	7758-97-6	231-846-0	N.D.	0.05%
II	26	②Lead chromate molybdate sulphate red (C.I. Pigment Red 104)***	12656-85-8	235-759-9	N.D.	0.05%
II	27	②Lead sulfochromate yellow (C.I. Pigment Yellow 34)***	1344-37-2	215-693-7	N.D.	0.05%
II	28	Tris(2-chloroethyl)phosphate (TCEP)	115-96-8	204-118-5	N.D.	0.01%

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Test Result(s)

Batch	No.	Substance Name(s)	CAS No.	EC No.	Concentration (%)	Report Limit
III	29	Trichloroethylene	79-01-6	201-167-4	N.D.	0.005%
III	30	③Boric acid	10043-35-3 11113-50-1	233-139-2 234-343-4	N.D.	0.01%
III	31	③Disodium tetraborate, anhydrous*****	1330-43-4 12179-04-3 1303-96-4	215-540-4	N.D.	0.01%
III	32	③Tetraboron disodium heptaoxide, hydrate*****	12267-73-1	235-541-3	N.D.	0.01%
III	33	Sodium chromate*	7775-11-3	231-889-5	N.D.	0.01%
III	34	Potassium chromate*	7789-00-6	232-140-5	N.D.	0.01%
III	35	Ammonium dichromate*	7789-09-5	232-143-1	N.D.	0.01%
III	36	Potassium dichromate*	7778-50-9	231-906-6	N.D.	0.01%
IV	37	Cobalt(Ⅱ) sulphate*	10124-43-3	233-334-2	N.D.	0.01%
IV	38	Cobalt(Ⅱ) dinitrate*	10141-05-6	233-402-1	N.D.	0.01%
IV	39	Cobalt(Ⅱ) carbonate*	513-79-1	208-169-4	N.D.	0.01%
IV	40	Cobalt(Ⅱ) diacetate*	71-48-7	200-755-8	N.D.	0.01%
IV	41	2-Methoxyethanol	109-86-4	203-713-7	N.D.	0.005%
IV	42	2-Ethoxyethanol	110-80-5	203-804-1	N.D.	0.005%
IV	43	Chromium trioxide*	1333-82-0	215-607-8	N.D.	0.01%
IV	44	①Acids generated from chromium trioxide and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid*	7738-94-5 13530-68-2	231-801-5 236-881-5	N.D.	0.01%
V	45	2-ethoxyethyl acetate	111-15-9	203-839-2	N.D.	0.01%
V	46	Strontium chromate*	7789-06-2	232-142-6	N.D.	0.01%
V	47	①1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	271-084-6	N.D.	0.01%
V	48	Hydrazine	7803-57-8 302-01-2	206-114-9	N.D.	0.01%
V	49	1-methyl-2-pyrrolidone	872-50-4	212-828-1	N.D.	0.01%
V	50	1,2,3-trichloropropane	96-18-4	202-486-1	N.D.	0.01%
V	51	①1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	276-158-1	N.D.	0.01%

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Test Result(s)

Batch	No.	Substance Name(s)	CAS No.	EC No.	Concentration (%)	Report Limit
VI	52	Dichromium tris(chromate)*	24613-89-6	246-356-2	N.D.	0.01%
VI	53	Potassium hydroxyoctaoxodizincatedichromate*	11103-86-9	234-329-8	N.D.	0.01%
VI	54	Pentazinc chromate octahydroxide*	49663-84-5	256-418-0	N.D.	0.01%
VI	55	②Aluminosilicate Refractory Ceramic Fibres (RCF) **	-	-	N.D.	0.05%
VI	56	②Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) **	-	-	N.D.	0.05%
VI	57	①Formaldehyde, oligomeric reaction products with aniline (technical MDA)▲	25214-70-4	500-036-1	N.D.	0.01%
VI	58	Bis(2-methoxyethyl) phthalate	117-82-8	204-212-6	N.D.	0.005%
VI	59	2-Methoxyaniline(o-Anisidine)	90-04-0	201-963-1	N.D.	0.005%
VI	60	4-(1,1,3,3-tetramethylbutyl)phenol (4-tert-Octylphenol)	140-66-9	205-426-2	N.D.	0.005%
VI	61	1,2-Dichloroethane	107-06-2	203-458-1	N.D.	0.005%
VI	62	Bis(2-methoxyethyl) ether	111-96-6	203-924-4	N.D.	0.005%
VI	63	Arsenic acid*	7778-39-4	231-901-9	N.D.	0.01%
VI	64	Calcium arsenate*	7778-44-1	231-904-5	N.D.	0.01%
VI	65	Trilead diarsenate*	3687-31-8	222-979-5	N.D.	0.01%
VI	66	N,N-dimethylacetamide (DMAC)	127-19-5	204-826-4	N.D.	0.005%
VI	67	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	202-918-9	N.D.	0.005%
VI	68	Phenolphthalein	77-9-8	201-004-7	N.D.	0.005%
VI	69	Lead diazide*	13424-46-9	236-542-1	N.D.	0.01%
VI	70	Lead 2,4,6-trinitro-m-phenylene dioxide (Lead styphnate)*	15245-44-0	239-290-0	N.D.	0.01%
VI	71	Lead dipicrate*	6477-64-1	229-335-2	N.D.	0.01%

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Test Result(s)

Batch	No.	Substance Name(s)	CAS No.	EC No.	Concentration (%)	Report Limit
VII	72	1,2-bis(2-methoxyethoxy) ethane (TEGDME; triglyme)	112-49-2	203-977-3	N.D.	0.01%
VII	73	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	203-794-9	N.D.	0.01%
VII	74	③Diboron trioxide	1303-86-2	215-125-8	N.D.	0.01%
VII	75	Formamide	75-12-7	200-842-0	N.D.	0.01%
VII	76	Lead(II) bis methanesulfonate*	17570-76-2	401-750-5	N.D.	0.01%
VII	77	TGIC(1,3,5-tris(oxiranylmethyl)-1, 3,5-triazine-2,4,6(1H,3H,5H)-trione)	2451-62-9	219-514-3	N.D.	0.01%
VII	78	β-TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6- (1H,3H,5H)-trione)	59653-74-6	423-400-0	N.D.	0.01%
VII	79	4,4'-bis(dimethylamino) benzophenone (Michler's ketone)	90-94-8	202-027-5	N.D.	0.01%
VII	80	N,N,N',N'-tetramethyl-4,4'-methylene dianiline (Michler's base)	101-61-1	202-959-2	N.D.	0.01%
VII	81	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride(C.I. Basic Violet 3)***	548-62-9	208-953-6	N.D.	0.01%
VII	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	219-943-6	N.D.	0.01%
VII	83	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)***	6786-83-0	229-851-8	N.D.	0.01%
VII	84	4,4'-bis(dimethylamino)-4"-(methylamino)trityl alcohol	561-41-1	209-218-2	N.D.	0.01%

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Test Result(s)

Batch	No.	Substance Name(s)	CAS No.	EC No.	Concentration (%)	Report Limit
VIII	85	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	1163-19-5	214-604-9	N.D.	0.05%
VIII	86	①4-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]*	-	-	N.D.	0.05%
VIII	87	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	204-650-8	N.D.	0.05%
VIII	88	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated *[covering well-defined substances and UVCB substances, polymers and homologues]*	-	-	N.D.	0.05%
VIII	89	Henicosafluoroundecanoic acid	2058-94-8	218-165-4	N.D.	0.05%
VIII	90	Pentacosafluorotridecanoic acid	72629-94-8	276-745-2	N.D.	0.05%
VIII	91	Cyclohexane-1,2-dicarboxylic anhydride, cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride	85-42-7, 13149-00-3, 14166-21-3	201-604-9, 236-086-3, 238-009-9	N.D.	0.05%
VIII	92	Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	247-094-1, 243-072-0, 256-356-4, 260-566-1	N.D.	0.05%
VIII	93	Heptacosafluorotetradecanoic acid	376-06-7	206-803-4	N.D.	0.05%
VIII	94	Diisopentylphthalate(DIPP)	605-50-5	210-088-4	N.D.	0.05%

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Batch	No.	Substance Name(s)	CAS No.	EC No.	Concentration (%)	Report Limit
VIII	95	①1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	284-032-2	N.D.	0.05%
VIII	96	N-pentyl-isopentylphthalate	776297-69-9	-	N.D.	0.05%
VIII	97	Methoxyacetic acid	625-45-6	210-894-6	N.D.	0.05%
VIII	98	Tricosafluorododecanoic acid	307-55-1	206-203-2	N.D.	0.05%
VIII	99	1,2-Diethoxyethane	629-14-1	211-076-1	N.D.	0.05%
VIII	100	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	421-150-7	N.D.	0.05%
VIII	101	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	202-453-1	N.D.	0.05%
VIII	102	N-methylacetamide	79-16-3	201-182-6	N.D.	0.05%
VIII	103	Pentalead tetraoxide sulphate*	12065-90-6	235-067-7	N.D.	0.01%
VIII	104	Biphenyl-4-ylamine	92-67-1	202-177-1	N.D.	0.05%
VIII	105	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	201-861-7	N.D.	0.05%
VIII	106	Dioxobis(stearato)trilead*	12578-12-0	235-702-8	N.D.	0.01%
VIII	107	Lead dinitrate*	10099-74-8	233-245-9	N.D.	0.01%
VIII	108	Tetralead trioxide sulphate*	12202-17-4	235-380-9	N.D.	0.01%
VIII	109	Lead monoxide (lead oxide)*	1317-36-8	215-267-0	N.D.	0.01%
VIII	110	Lead titanium trioxide*	12060-00-3	235-038-9	N.D.	0.01%
VIII	111	4,4'-methylenedi-o-toluidine	838-88-0	212-658-8	N.D.	0.05%
VIII	112	Acetic acid, lead salt, basic*	51404-69-4	257-175-3	N.D.	0.01%
VIII	113	Dimethyl sulphate	77-78-1	201-058-1	N.D.	0.05%
VIII	114	Furan	110-00-9	203-727-3	N.D.	0.05%
VIII	115	Pyrochlore, antimony lead yellow*	8012-00-8	232-382-1	N.D.	0.01%
VIII	116	Tetraethyllead*	78-00-2	201-075-4	N.D.	0.01%
VIII	117	[Phthalato(2-)]dioxotrilead*	69011-06-9	273-688-5	N.D.	0.01%
VIII	118	Diethyl sulphate	64-67-5	200-589-6	N.D.	0.05%
VIII	119	Lead cyanamidate*	20837-86-9	244-073-9	N.D.	0.01%
VIII	120	Silicic acid ($H_2Si_2O_5$), barium salt (1:1), lead-doped*	68784-75-8	272-271-5	N.D.	0.01%
VIII	121	Trilead dioxide phosphonate*	12141-20-7	235-252-2	N.D.	0.01%
VIII	122	*o*-Toluidine	95-53-4	202-429-0	N.D.	0.05%

Test Report

Test Result(s)

Batch	No.	Substance Name(s)	CAS No.	EC No.	Concentration (%)	Report Limit
VIII	123	*o*-aminoazotoluene	97-56-3	202-591-2	N.D.	0.05%
VIII	124	4-aminoazobenzene	60-09-3	200-453-6	N.D.	0.05%
VIII	125	6-methoxy-*m*-toluidine (*p*-cresidine)	120-71-8	204-419-1	N.D.	0.05%
VIII	126	Dibutyltin dichloride (DBTC)	683-18-1	211-670-0	N.D.	0.05%
VIII	127	Lead titanium zirconium oxide*	12626-81-2	235-727-4	N.D.	0.01%
VIII	128	Methyloxirane (Propylene oxide)	75-56-9	200-879-2	N.D.	0.05%
VIII	129	1-bromopropane (n-propyl bromide)	106-94-5	203-445-0	N.D.	0.05%
VIII	130	Trilead bis(carbonate)dihydroxide*	1319-46-6	215-290-6	N.D.	0.01%
VIII	131	Fatty acids, C16-18, lead salts*	91031-62-8	292-966-7	N.D.	0.01%
VIII	132	Orange lead (lead tetroxide)*	1314-41-6	215-235-6	N.D.	0.01%
VIII	133	Sulfurous acid, lead salt, dibasic*	62229-08-7	263-467-1	N.D.	0.01%
VIII	134	4,4'-oxydianiline and its salts	101-80-4	202-977-0	N.D.	0.05%
VIII	135	Lead oxide sulfate*	12036-76-9	234-853-7	N.D.	0.01%
VIII	136	Lead bis(tetrafluoroborate)*	13814-96-5	237-486-0	N.D.	0.01%
VIII	137	Silicic acid, lead salt*	11120-22-2	234-363-3	N.D.	0.01%
VIII	138	N,N-dimethylformamide	68-12-2	200-679-5	N.D.	0.05%
IX	139	Cadmium	7440-43-9	231-152-8	N.D.	0.01%
IX	140	Cadmium oxide*	1306-19-0	215-146-2	N.D.	0.01%
IX	141	Dipentyl phthalate (DPP)	131-18-0	205-017-9	N.D.	0.01%
IX	142	①4-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]*	-	-	N.D.	0.05%
IX	143	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	223-320-4	N.D.	0.01%
IX	144	Pentadecafluorooctanoic acid (PFOA)	335-67-1	206-397-9	N.D.	0.01%

Test Report

Test Result(s)

Batch	No.	Substance Name(s)	CAS No.	EC No.	Concentration (%)	Report Limit
X	145	①Trixylyl phosphate	25155-23-1	246-677-8	N.D.	0.01%
X	146	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	217-710-3	N.D.	0.01%
X	147	Dihexyl phthalate	84-75-3	201-559-5	N.D.	0.01%
X	148	Cadmium sulphide*	1306-23-6	215-147-8	N.D.	0.01%
X	149	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)***	573-58-0	209-358-4	N.D.	0.01%
X	150	Lead di(acetate)*	301-04-2	206-104-4	N.D.	0.01%
X	151	Imidazolidine-2-thione; 2-imidazoline-2-thiol	96-45-7	202-506-9	N.D.	0.01%
XI	152	①1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	271-093-5	N.D.	0.01%
XI	153	Cadmium chloride*	10108-64-2	233-296-7	N.D.	0.01%
XI	154	③Sodium perborate; perboric acid, sodium salt*****	-	239-172-9, 234-390-0	N.D.	0.01%
XI	155	③Sodium peroxometaborate*****	7632-04-4	231-556-4	N.D.	0.01%
XII	156	2-(2H-Benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	247-384-8	N.D.	0.01%
XII	157	2-Benzotriazol-2-yl-4,6-di-tert-butyl phenol (UV-320)	3846-71-7	223-346-6	N.D.	0.01%
XII	158	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)*	15571-58-1	239-622-4	N.D.	0.05%
XII	159	Cadmium fluoride*	7790-79-6	232-222-0	N.D.	0.01%
XII	160	Cadmium sulphate*	10124-36-4, 31119-53-6	233-331-6	N.D.	0.01%

Test Report

Test Result(s)

Batch	No.	Substance Name(s)	CAS No.	EC No.	Concentration (%)	Report Limit
XII	161	①Reaction 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)*	-	-	N.D.	0.05%
XIII	162	①1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201- 559-5)	68515-51-5, 68648-93-1	271-094-0, 272-013-1	N.D.	0.05%
XIII	163	①5-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]	-	-	N.D.	0.05%
XIV	164	Nitrobenzene	98-95-3	202-716-0	N.D.	0.01%
XIV	165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	223-383-8	N.D.	0.01%
XIV	166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	253-037-1	N.D.	0.01%
XIV	167	1,3-propanesultone	1120-71-4	214-317-9	N.D.	0.01%
XIV	168	Perfluorononan-1-oic-acid and its sodium and ammonium salts	375-95-1 21049-39-8 4149-60-4	206-801-3	N.D.	0.01%
XV	169	Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	200-028-5	N.D.	0.01%

Test Report

Note:

1. w/w = weight by weight; 0.1%= 1000 mg/kg =1000 ppm
2. N.D. = Not Detected (<report limit)
3. *: Concentration value of the substance by the conversion from the test results of certain elements. Concentration value of Bis(tributyltin)oxide(TBTO), 2-ethylhexyl 10-ethyl-4,4-dioctyl-7- oxo-8- oxa-3,5-dithia-4-stannatetradecanoate (DOTE), 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 DOTEand MOTE)by the conversion from the test results of certain compounds(Tributyl Tins(TBT), Dioctyl Tins(DOT), Monooctyl Tins(MOT)).
4. **: All refractory ceramic fibres are covered by index number 650-017-00-8 in Annex VI of the Regulation on Classification, Labeling and Packaging of chemical substances and mixtures, the so called CLP Regulation (Regulation (EC) No 1272/2008).
5. ***:C.I.: Colour Index
6. ****:Light fractions from distillation
7. *****: Concentration value of Disodiumtetraborate,anhydrous and Tetraboron disodium heptaoxide,hydrate is evaluated by Disodiumtetraborate, with no consider of the hydrate. Concentration value of Sodium perborate; perboric acid, sodium salt; Sodium peroxometaborate is evaluated by Sodium perborate, with no consider of the hydrate.
8. ▲:Concentration value of Formaldehyde, oligomeric reaction products with aniline(technical MDA)by the conversion from the test results of certain compounds(2,4-Diaminodiphenylmethane,4,4'-Diaminodiphenylmethane, 2,6-Diaminodiphenylmethane).
9. ①: In view of the substances are established as UVCB substances (substances of unknown or variable composition, complex reaction products or biological materials) consisting of different and variable constituents, the test results are calculated based on the main constituents of the representative compounds for substances.
10. ②: In view of the substance contain variable substances, the test results are calculated based on main constituents of the representative compounds for the substances, and the test results of the representative compounds are calculated based on the result of specified heavy metal elements.
11. ③: Concentration value of Boricacid; Disodiumtetraborate,anhydrous; Tetraboron disodium heptaoxide,hydrate; Diboron trioxide; Sodium perborate; perboric acid, sodium salt; Sodium peroxometaborateis calculated by the conversion from the test results of certain elements and confirmed by appropriate solvent extraction, meanwhile the book of materials is suggested to be checked for further confirmation.
12. #: Converted concentration of substance equal to or higher than report limit, the presence of the substance in the sample need further to be confirmed by checking MSDS or requesting from suppliers.

Test Report

Appendix:

1. Any supplier of an article containing a substance that is included in the Candidate List in a concentration above

0.1 % weight by weight (w/w) has the duty to communicate information in accordance with Article 33 of European Union regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals

(REACH).

1）Any supplier shall provide the recipient of the article with sufficient information to allow safe use of the article

including, as a minimum, the name of that substance.

2）On request by a consumer any supplier shall provide the consumer with sufficient information to allow safe use of the article including, as a minimum, the name of that substance within 45 days of receipt of the request,

free of charge.

2. The supplier of a substance that is included in the Candidate List on their own shall provide the recipient of the

substance with a safety data sheet for free compiled in accordance with Article 3 and Annex II of REACH.

3. The supplier of a mixture that containing a substance that is included in the Candidate List shall exchange information in accordance with Article 31, Article 32, and Annex II of REACH.

1) Any supplier shall provide the recipient of the mixture with a safety data sheet for free where a preparation meets the criteria for classification as dangerous in accordance with Directives 1999/45/EC.

2) Any supplier shall provide the recipient of the mixture with a safety data sheet for free where a preparation

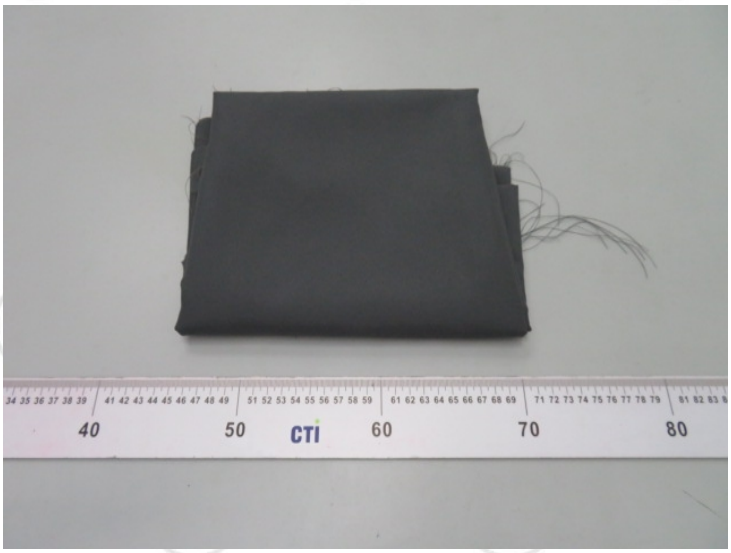
does not meet the criteria for classification as dangerous in accordance with Directive 1999/45/EC, but contains any substance that is included in the Candidate List in an individual concentration of ≥ 0.1 % by weight for non-gaseous mixtures or ≥ 0.2 % by volume for gaseous mixtures.

Test Report

Tested Sample/Part Description

Grey woven fabric

Photo(s) of the sample(s)



*** End of Report ***

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