

Test Report

Number: SHAH01460785

Applicant:

MINDIAN ELECTRIC CO., LTD.
MALUJIAO INDUSTRIAL ZONE, BEIBAIXIANG
TOWN, YUEQING, ZHEJIANG PROVINCE, CHINA
325603

Date: 08 Jul, 2022

Attn: KEN

Sample Description:

One(1) group of submitted sample said to be :

Item Name : **DC Panel Connector**
Item No. : **MD-MC4;MD-MC4-T;MD-MC4-Y**
Country Of Origin : **China**

Tests Conducted:

As requested by the applicant, for details refer to attached page(s).

Conclusion:

<u>Tested Sample</u>	<u>Standard</u>	<u>Result</u>
Screened components of Submitted Sample	Restriction of the use of certain hazardous substance in electrical and electronic equipment(RoHS Directive 2011/65/EU and (EU) 2015/863)	Pass
Tested component(s) of submitted sample(s)	EU REACH Regulation No 1907/2006 Article 33(1) Obligation to provide information of safe use (see REACH and Waste Framework Directive (WFD) requirement in report for details)	See test conducted

to be continued

Authorized By:
Intertek Testing Services Ltd. Zhejiang



Peter Chen
General Manager



Test Report

Number: SHAH01460785

Tests Conducted

1. Certain Hazardous Substance in Electrical and Electronic Equipment

Cadmium (Cd), Lead (Pb), Mercury (Hg), Chromium (Cr) and bromine (Br) content were measured with reference to IEC 62321-3-1 Edition 1.0:2013 by XRF spectroscopy and chemical confirmation test for RoHS restricted substances. And Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs) and Phthalates content were determined by Gas Chromatographic-Mass Spectrometric (GC-MS).

(A) RESULTS:

Part No.	Screened COMPONENTS	REFER INFORMATION	ITEMS	XRF RESULTS	Screened RESULTS (PHTHALATES)	CHEMICAL CONFIRMATION RESULT (MG/KG)	CONCLUSION ON ROHS
1	BLACK WIRE SHEATH	/	Cd	P	NA	/	PASS
			Pb	P		/	
			Hg	P		/	
			Cr	P		/	
			Br	P		/	
			DEHP	NA	P	/	
			BBP		P	/	
			DBP		P	/	
			DIBP		P	/	
2	BLACK PLASTIC FRAME	/	Cd	P	NA	/	PASS
			Pb	P		/	
			Hg	P		/	
			Cr	P		/	
			Br	P		/	
			DEHP	NA	P	/	
			BBP		P	/	
			DBP		P	/	
			DIBP		P	/	
3	BLACK PLASTIC	/	Cd	P	NA	/	PASS
			Pb	P		/	
			Hg	P		/	
			Cr	P		/	
			Br	P		/	
			DEHP	NA	P	/	
			BBP		P	/	



Test Report

Number: SHAH01460785

Tests Conducted

			DBP		P	/	
			DIBP		P	/	
4	BLACK PLASTIC	/	Cd	P	NA	/	PASS
			Pb	P		/	
			Hg	P		/	
			Cr	P		/	
			Br	P		/	
			DEHP	NA	P	/	
			BBP		P	/	
			DBP		P	/	
			DIBP		P	/	
			5	WHITE RUBBER RING	/	Cd	
Pb	P	/					
Hg	P	/					
Cr	P	/					
Br	P	/					
DEHP	NA	P				/	
BBP		P				/	
DBP		P				/	
DIBP		P				/	
6	BROWN RUBBER RING	/				Cd	P
			Pb	P	/		
			Hg	P	/		
			Cr	P	/		
			Br	P	/		
			DEHP	NA	P	/	
			BBP		P	/	
			DBP		P	/	
			DIBP		P	/	
			7	BLACK PLASTIC	/	Cd	P
Pb	P	/					
Hg	P	/					
Cr	P	/					
Br	P	/					



Test Report

Number: SHAH01460785

Tests Conducted

			DEHP	NA	P	/	
			BBP		P	/	
			DBP		P	/	
			DIBP		P	/	
8	BLACK PLASTIC	/	Cd	P	NA	/	PASS
			Pb	P		/	
			Hg	P		/	
			Cr	P		/	
			Br	P		/	
			DEHP	NA	P	/	
			BBP		P	/	
			DBP		P	/	
DIBP	P	/					
9	COPPERY METAL	/	Cd	P	NA	/	PASS
			Pb	P		/	
			Hg	P		/	
			Cr	P		/	
			Br	NA		/	
			DEHP	NA	NA	/	
			BBP		NA	/	
			DBP		NA	/	
DIBP	NA	/					
10	SILVERY METAL WIRE	/	Cd	P	NA	/	PASS
			Pb	P		/	
			Hg	P		/	
			Cr	P		/	
			Br	NA		/	
			DEHP	NA	NA	/	
			BBP		NA	/	
			DBP		NA	/	
DIBP	NA	/					
11	SILVERY METAL	/	Cd	P	NA	/	PASS
			Pb	P		/	
			Hg	P		/	



Test Report

Number: SHAH01460785

Tests Conducted

			Cr	P		/	
			Br	NA		/	
			DEHP	NA	NA	/	
			BBP		NA	/	
			DBP		NA	/	
			DIBP		NA	/	
12	SILVERY METAL	/	Cd	P	NA	/	PASS
			Pb	P		/	
			Hg	P		/	
			Cr	P		/	
			Br	NA	/		
			DEHP	NA	NA	/	
			BBP		NA	/	
			DBP		NA	/	
DIBP	NA	/					
13	SILVERY METAL	/	Cd	P	NA	/	PASS
			Pb	P		/	
			Hg	P		/	
			Cr	P		/	
			Br	NA	/		
			DEHP	NA	NA	/	
			BBP		NA	/	
			DBP		NA	/	
DIBP	NA	/					
14	SILVERY METAL	/	Cd	P	NA	/	PASS
			Pb	P		/	
			Hg	P		/	
			Cr	P		/	
			Br	NA	/		
			DEHP	NA	NA	/	
			BBP		NA	/	
			DBP		NA	/	
DIBP	NA	/					
15	GOLDEN METAL	/	Cd	P	NA	/	PASS#1



Test Report

Number: SHAH01460785

Tests Conducted

			Pb	X		1.79*10 ⁴ ppm	
			Hg	P		/	
			Cr	P		/	
			Br	NA		/	
			DEHP	NA	NA	/	
			BBP		NA	/	
			DBP		NA	/	
			DIBP		NA	/	
16	METAL (SET SCREW)	/	Cd	P	NA	/	PASS
			Pb	P		/	
			Hg	P		/	
			Cr	X		Negative	
			Br	NA	/		
			DEHP	NA	NA	/	
			BBP		NA	/	
			DBP		NA	/	
			DIBP		NA	/	
17	GOLDEN METAL	/	Cd	P	NA	/	PASS#1
			Pb	X		1.83*10 ⁴ ppm	
			Hg	P		/	
			Cr	P		/	
			Br	NA	/		
			DEHP	NA	NA	/	
			BBP		NA	/	
			DBP		NA	/	
			DIBP		NA	/	
18	GOLDEN METAL	/	Cd	P	NA	/	PASS#1
			Pb	X		2.36*10 ⁴ ppm	
			Hg	P		/	
			Cr	P		/	
			Br	NA	/		
			DEHP	NA	NA	/	
			BBP		NA	/	
			DBP		NA	/	
			DIBP		NA	/	



Test Report

Number: SHAH01460785

Tests Conducted

			DIBP		NA	/	
--	--	--	------	--	----	---	--

P = Pass (Below the lower screening limits of table (B1 or B2))

X = Inconclusive result (Further chemical test was suggested (see table (B1 or B2).)

F = Fail (Exceeded the upper screening limits of table (B1))

NA = Not applicable

ND = Not detected

µg/cm² = Microgram per square centimeter

NT = Not tested

Negative = The Cr (VI) concentration is less than 0.10 µg/cm². The sample is negative for Cr (VI).

Inconclusive = The Cr (VI) concentration is between 0.10 µg/cm² and 0.13 µg/cm². The result is considered to be inconclusive. Unavoidable coating variations may influence the determination.

Positive = The sample is positive for Cr (VI) is based on visual comparison only. Sample solution is significantly more intense than the 0.13 µg/cm² equivalent comparison standard. No colorimetric measurement was performed.

Remark:

(#1) = As claimed by the declaration submitted from the applicant / supplier of applicant, the Lead content of the component comes from Copper alloy only. According to EU RoHS Directive (2011/65/EU), Lead in Copper alloy containing up to 4% (40,000 mg/kg) Lead by weight can be exempted.

(B) Screening Limits

(B1) XRF Screening Limits in mg/kg for Regulated Elements in Various Matrices (mg/kg) :

Element	Polymer Materials	Metallic Materials	Composite Materials
Cd	P ≤ 70 < X < 130 ≤ F	P ≤ 70 < X < 130 ≤ F	P ≤ 70 < X < 150 ≤ F
Pb	P ≤ 700 < X < 1300 ≤ F	P ≤ 700 < X < 1300 ≤ F	P ≤ 500 < X < 1500 ≤ F
Hg	P ≤ 700 < X < 1300 ≤ F	P ≤ 700 < X < 1300 ≤ F	P ≤ 500 < X < 1500 ≤ F
Cr	P ≤ 700 < X	P ≤ 700 < X	P ≤ 500 < X
Br	P ≤ 300 < X	Not applicable	P ≤ 250 < X

(B2) Preliminary screening test will used for phthalates, if the results exceed the warning area in the following table, further chemical methods will conduct to confirm the exact content by GC/MS. (mg/kg)

Phthalates	Polymer
Bis(2-ethylhexyl)phthalate(DEHP)	P ≤ 600 < X
Butyl benzyl phthalate(BBP)	P ≤ 600 < X
Dibutyl phthalate(DBP)	P ≤ 600 < X
Diisobutyl phthalate(DIBP)	P ≤ 600 < X

(C) Estimated Detection Limits in mg/kg for Regulated Elements in Various Matrices (mg/kg):

Element	Polymer Materials	Metallic Materials	Composite Materials
Cd	50	70	70



Test Report

Number: SHAH01460785

Tests Conducted

Pb	100	200	200
Hg	100	200	200
Cr	100	200	200
Br	200	Not applicable	200

Disclaimers:

This XRF Screening and Chemical Confirmation Test Report is for reference purposes only. The applicant shall make its/his/her own judgment as to whether the information provided in this XRF Screening and Chemical Confirmation Test Report is sufficient for its/his/her purposes.

The results shown in this XRF Screening and Chemical Confirmation Test Report will differ based on various factors, including but not limited to, the sample size, thickness, area, surface flatness, equipment parameters and matrix effect (e.g. plastic, rubber, metal, glass, ceramic etc.). Further wet chemical pre-treatment with relevant chemical equipment analysis is required to obtain quantitative data.

(D) Chemical Test Methods:

Testing Item	Testing Method	Reporting Limit
Cadmium (Cd) Content	With reference to IEC 62321-5 Edition 1.0: 2013, by acid digestion and determined by ICP - OES	2 mg/kg
Lead (Pb) Content	With reference to IEC 62321-5 Edition 1.0: 2013, by acid digestion and determined by ICP - OES	2 mg/kg
Mercury (Hg) Content	With reference to IEC 62321-4 Edition 1.1: 2017, by acid digestion and determined by ICP - OES	2 mg/kg
Chromium (VI) (Cr ⁶⁺) Content	With reference to IEC 62321-7-1 Edition 1.0:2015, by boiling water extraction and determined by UV-VIS spectrophotometer	Positive(>0.13 µg/cm ²) / Negative(<0.10 µg/cm ²) / Inconclusive(0.10µg/cm ² --0.13 µg/cm ²)
Chromium (VI)(Cr ⁶⁺) Content	With reference to IEC 62321-7-2 Edition 1.0:2017, by alkaline digestion and determined by UV-VIS Spectrophotometer	10 mg/kg
Polybrominated Biphenyls (PBBs) & Polybrominated Diphenyl Ethers (PBDEs) Content	With reference to IEC 62321-6 Edition 1.0:2015, by solvent extraction and determined by GC/MS and further HPLC confirmation when necessary	5 mg/kg
Phthalates (DEHP, BBP, DBP, DIBP) Content	With reference to IEC 62321-8 Edition 1.0:2017,by solvent extraction and determined by GC/MS	100mg/kg

(E) RoHS Requirement:

Restricted Substances	Limits
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)
Chromium (VI) (Cr ⁶⁺)	0.1% (1000 mg/kg)
Polybrominated Biphenyls (PBBs)	0.1% (1000 mg/kg)
Polybrominated Diphenyl Ethers (PBDEs)	0.1% (1000 mg/kg)



Test Report

Number: SHAH01460785

Tests Conducted

Phthalates(DEHP, BBP, DBP, DIBP)	0.1% (1000 mg/kg)
----------------------------------	-------------------

The above limits were quoted from 2011/65/EU and (EU) 2015/863 for homogeneous material.

Screened Components: DC Panel Connector

Date sample received: May 30, 2022

Testing period: May 30, 2022 to Jun 28, 2022

2. (I) SVHC Testing Results

By a combination of Inductively Coupled Argon Plasma Spectrometry, Gas Chromatography – Mass Spectrometry, Liquid Chromatography - Mass Spectrometry, UV-VIS Spectrophotometer and High-Performance Liquid Chromatography.

No.	Chemical Substance	CAS No.	Results % (w/w)		
			GROUP 2		
185	Lead	7439-92-1	See individual test results		
--	Other tested SVHCs in Chemical list	--	ND		

No.	Chemical Substance	CAS No.	Results % (w/w)		
			GROUP 2		
			(9)	(10)	(11)
185	Lead	7439-92-1	ND	ND	ND

No.	Chemical Substance	CAS No.	Results % (w/w)		
			GROUP 2		
			(12)	(13)	(14)
185	Lead	7439-92-1	ND	ND	ND

No.	Chemical Substance	CAS No.	Results % (w/w)		
			GROUP 2		
			(15)	(16)	(17)
185	Lead	7439-92-1	1.79*	ND	1.83*

No.	Chemical Substance	CAS No.	Results % (w/w)		
			GROUP 2		
			(18)		
185	Lead	7439-92-1	2.36*		

No.	Chemical Substance	CAS No.	Results % (w/w)		
			GROUP 1		



Test Report

Number: SHAH01460785

Tests Conducted

--	Tested SVHCs in Chemical list	--	ND
----	-------------------------------	----	----

SVHC	=	Substance of very high concern
ND	=	Not Detected (less than reporting limit)
Reporting limit	=	0.010%(w/w)
*	=	Exceeded requirement

As applicant's requirement, materials were screened in composite testing.

(II) Tested groups: See component list in the last section of this report.

(III) Tested SVHC Chemical list:

No.	Chemical Substance	CAS No.	No.	Chemical Substance	CAS No.
1	Cobalt Dichloride Δ	7646-79-9	2	Diarsenic Pentaoxide Δ	1303-28-2
3	Diarsenic Trioxide Δ	1327-53-3	4	Lead Hydrogen Arsenate Δ	7784-40-9
5	Triethyl Arsenate Δ	15606-95-8	6	Sodium Dichromate Δ	7789-12-0, 10588-01-9
7	Bis (Tributyltin) Oxide (TBTO) Δ	56-35-9	8	Anthracene	120-12-7
9	4,4'-Diaminodiphenylmethane (MDA)	101-77-9	10	Hexabromocyclododecane (HBCDD) and All Major Diastereoisomers Identified (α-HBCDD, β-HBCDD, γ-HBCDD)	25637-99-4 and 3194-55-6 (134237-50-6, 134237-51-7, 134237-52-8)
11	5-Tert-Butyl-2,4,6-Trinitro-m-Xylene (Musk Xylene)	81-15-2	12	Bis (2-Ethylhexyl) Phthalate (DEHP)	117-81-7
13	Dibutyl Phthalate (DBP)	84-74-2	14	Benzyl Butyl Phthalate (BBP)	85-68-7
15	Short Chain Chlorinated Paraffins (C ₁₀₋₁₃)	85535-84-8	16	Lead Chromate Δ	7758-97-6
17	Lead Chromate Molybdate Sulphate Red (C.I. Pigment Red 104) Δ	12656-85-8	18	Lead Sulfochromate Yellow (C.I. Pigment Yellow 34) Δ	1344-37-2
19	Tris (2-Chloroethyl) Phosphate	115-96-8	20	2,4-Dinitrotoluene	121-14-2
21	Diisobutyl Phthalate (DIBP)	84-69-5	22	Coal Tar Pitch, High Temperature	65996-93-2
23	Anthracene Oil	90640-80-5	24	Anthracene Oil, Anthracene Paste, Distn. Lights	91995-17-4
25	Anthracene Oil, Anthracene Paste, Anthracene Fraction	91995-15-2	26	Anthracene Oil, Anthracene-low	90640-82-7
27	Anthracene Oil, Anthracene Paste	90640-81-6	28	Acrylamide	79-06-1
29	Boric Acid Δ	10043-35-3, 11113-50-1	30	Disodium Tetraborate, Anhydrous Δ	1330-43-4, 12179-04-3, 1303-96-4
31	Tetraboron Disodium Heptaoxide, Hydrate Δ	12267-73-1	32	Sodium Chromate Δ	7775-11-3
33	Potassium Chromate Δ	7789-00-6	34	Ammonium Dichromate Δ	7789-09-5
35	Potassium Dichromate Δ	7778-50-9	36	Trichloroethylene	79-01-6
37	2-Methoxyethanol	109-86-4	38	2-Ethoxyethanol	110-80-5
39	Cobalt Sulphate Δ	10124-43-3	40	Cobalt Dinitrate Δ	10141-05-6
41	Cobalt Carbonate Δ	513-79-1	42	Cobalt Diacetate Δ	71-48-7



Test Report

Number: SHAH01460785

Tests Conducted

43	Chromium Trioxide Δ	1333-82-0	44	Chromic Acid Δ Dichromic Acid Δ Oligomers of Chromic Acid and Dichromic Acid Δ	7738-94-5 13530-68-2 --
45	Strontium ChromateΔ	7789-06-2	46	2-ethoxyethyl acetate (2-EEA)	111-15-9
47	1,2-Benzenedicarboxylic acid, di-C ₇₋₁₁ -branched and linear alkyl esters (DHNUP)	68515-42-4	48	Hydrazine	7803-57-8 302-01-2
49	1-methyl-2-pyrrolidone	872-50-4	50	1,2,3-trichloropropane	96-18-4
51	1,2-Benzenedicarboxylic acid, di-C ₆₋₈ -branched alkyl esters, C ₇ -rich (DIHP)	71888-89-6	52	Lead dipicrateΔ	6477-64-1
53	Lead styphnateΔ	15245-44-0	54	Lead azide; Lead diazideΔ	13424-46-9
55	Phenolphthalein	77-09-8	56	2,2'-dichloro-4,4'- methylenedianiline (MOCA)	101-14-4
57	N,N-dimethylacetamide (DMAC)	127-19-5	58	Trilead diarsenateΔ	3687-31-8
59	Calcium arsenateΔ	7778-44-1	60	Arsenic acidΔ	7778-39-4
61	Bis(2-methoxyethyl) ether	111-96-6	62	1,2-Dichloroethane	107-06-2
63	4-(1,1,3,3- tetramethylbutyl)phenol, (4-tert- Octylphenol)	140-66-9	64	2-Methoxyaniline; o-Anisidine	90-04-0
65	Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	66	Formaldehyde, oligomeric reaction products with aniline (technical MDA)	25214-70-4
67	Pentazinc chromate octahydroxideΔ	49663-84-5	68	Potassium hydroxyoctaoxodizincate di- chromateΔ	11103-86-9
69	Dichromium tris(chromate)Δ	24613-89-6	70	Aluminosilicate Refractory Ceramic Fibres Δ	(Index No. 650-017-00-8)
71	Zirconia Aluminosilicate Refractory Ceramic Fibres Δ	(Index No. 650-017- 00-8)	72	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2
73	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	74	Diboron trioxideΔ	1303-86-2
75	Formamide	75-12-7	76	Lead(II) bis(methanesulfonate) Δ	17570-76-2
77	TGIC (1,3,5- tris(oxiranylmethyl)-1,3,5- triazine-2,4,6(1H,3H,5H)- trione)	2451-62-9	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
79	4,4'- bis(dimethylamino)benzopheno ne (Michler's ketone)	90-94-8	80	N,N,N',N'-tetramethyl-4,4'- methylenedianiline (Michler's base)	101-61-1
81	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa- 2,5-dien-1- ylidene]dimethylammonium chloride (C.I. Basic Violet 3) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202- 959-2)]	548-62-9	82	[4-[[4-anilino-1-naphthyl][4- (dimethylamino)phenyl]methylen e]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) [with ≥ 0.1% of Michler's ketone (EC No. 202- 027-5) or Michler's base (EC No. 202-959-2)]	2580-56-5
83	α,α-Bis[4- (dimethylamino)phenyl]-4 (phenylamino)naphthalene-1- methanol (C.I. Solvent Blue 4)	6786-83-0	84	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	561-41-1



Test Report

Number: SHAH01460785

Tests Conducted

	[with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]			No. 202-959-2)]	
85	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	1163-19-5	86	Pentacosafuorotridecanoic acid	72629-94-8
87	Tricosafuorododecanoic acid	307-55-1	88	Henicosafuoroundecanoic acid	2058-94-8
89	Heptacosafuorotetradecanoic acid	376-06-7	90	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3
91	Cyclohexane-1,2-dicarboxylic anhydride [1] cis-cyclohexane-1,2-dicarboxylic anhydride [2] trans-cyclohexane-1,2-dicarboxylic anhydride [3] [The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry].	85-42-7 13149-00-3 14166-21-3	92	Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] [The individual isomers [2], [3] and [4] (including their cis- and trans- stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry]	25550-51-0 19438-60-9 48122-14-1 57110-29-9
93	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]	--	94	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	--
95	Methoxyacetic acid	625-45-6	96	N,N-dimethylformamide	68-12-2
97	Dibutyltin dichloride (DBTC) Δ	683-18-1	98	Lead monoxide (Lead oxide) Δ	1317-36-8
99	Orange lead (Lead tetroxide) Δ	1314-41-6	100	Lead bis(tetrafluoroborate) Δ	13814-96-5
101	Trilead bis(carbonate)dihydroxide Δ	1319-46-6	102	Lead titanium trioxide Δ	12060-00-3
103	Lead titanium zirconium oxide Δ	12626-81-2	104	Silicic acid, lead salt Δ	11120-22-2
105	Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped Δ [with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD); the substance is a member of the	68784-75-8	106	1-bromopropane (n-propyl bromide)	106-94-5



Test Report

Number: SHAH01460785

Tests Conducted

	group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008]				
107	Methyloxirane (Propylene oxide)	75-56-9	108	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0
109	Diisopentylphthalate (DIPP)	605-50-5	110	N-pentyl-isopentylphthalate	776297-69-9
111	1,2-diethoxyethane	629-14-1	112	Acetic acid, lead salt, basic Δ	51404-69-4
113	Lead oxide sulfate Δ	12036-76-9	114	[Phthalato(2-)]dioxotrilead Δ	69011-06-9
115	Dioxobis(stearato)trilead Δ	12578-12-0	116	Fatty acids, C16-18, lead salts Δ	91031-62-8
117	Lead cyanamide Δ	20837-86-9	118	Lead dinitrate Δ	10099-74-8
119	Pentalead tetraoxide sulphate Δ	12065-90-6	120	Pyrochlore, antimony lead yellow Δ	8012-00-8
121	Sulfurous acid, lead salt, dibasic Δ	62229-08-7	122	Tetraethyllead Δ	78-00-2
123	Tetralead trioxide sulphate Δ	12202-17-4	124	Trilead dioxide phosphonate Δ	12141-20-7
125	Furan	110-00-9	126	Diethyl sulphate	64-67-5
127	Dimethyl sulphate	77-78-1	128	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2
129	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	130	4,4'-methylenedi-o-toluidine	838-88-0
131	4,4'-oxydianiline and its salts	101-80-4	132	4-aminoazobenzene	60-09-3
133	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	134	6-methoxy-m-toluidine (p-cresidine)	120-71-8
135	Biphenyl-4-ylamine	92-67-1	136	o-aminoazotoluene [(4-o-tolylazo-o-toluidine)]	97-56-3
137	o-toluidine	95-53-4	138	N-methylacetamide	79-16-3
139	Cadmium Δ	7440-43-9	140	Cadmium oxide Δ	1306-19-0
141	Dipentyl phthalate (DPP)	131-18-0	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]	--
143	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	144	Pentadecafluorooctanoic acid (PFOA)	335-67-1
145	Cadmium sulphide Δ	1306-23-6	146	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0
147	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	148	Dihexyl phthalate (DnHP)	84-75-3
149	Imidazolidine-2-thione (2-imidazoline-2-thiol)	96-45-7	150	Lead di(acetate) Δ	301-04-2



Test Report

Number: SHAH01460785

Tests Conducted

151	Trixylyl phosphate	25155-23-1	152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear (Diisohexyl phthalate(DIHP))	68515-50-4
153	Cadmium chloride Δ	10108-64-2	154	Sodium perborate; perboric acid, sodium salt Δ	--
155	Sodium peroxometaborate Δ	7632-04-4	156	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1
157	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	158	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1
159	Cadmium fluoride Δ	7790-79-6	160	Cadmium sulphate Δ	10124-36-4; 31119-53-6
161	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)	15571-58-1; 27107-89-7	162	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)	68515-51-5 68648-93-1
163	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 isomers of [1] and [2] or any combination thereof]	117933-89-8	164	1,3-Propanesultone	1120-71-4
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl) phenol (UV-327)	3864-99-1	166	2-(2H-Benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3
167	Nitrobenzene	98-95-3	168	Perfluorononan-1-oiic-acid and its sodium and ammonium salts	375-95-1 21049-39-8 4149-60-4
169	Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	170	4,4'-isopropylidenediphenol (bisphenol A; BPA)	80-05-7
171	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	335-76-2 3830-45-3 3108-42-7	172	4-heptylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	--
173	p-(1,1 dimethylpropyl)phenol	80-46-6	174	Perfluorohexane-1-sulphonic acid and its salts (PFHxS)	355-46-4
175	Benz[a]anthracene	56-55-3	176	Cadmium nitrate Δ	10325-94-7
177	Cadmium carbonate Δ	513-78-0	178	Cadmium hydroxide Δ	21041-95-2
179	Chrysene	218-01-9	180	1,6,7,8,9,14,15,16,17,17,18,18-	--



Test Report

Number: SHAH01460785

Tests Conducted

				Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus"™) [covering any of its individual anti- and syn-isomers or any combination thereof]	
181	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) [with ≥0.1% w/w 4-heptylphenol, branched and linear]	--	182	Octamethylcyclotetrasiloxane (D4)	556-67-2
183	Decamethylcyclopentasiloxane (D5)	541-02-6	184	Dodecamethylcyclohexasiloxane (D6)	540-97-6
185	Lead	7439-92-1	186	Disodium octaborate Δ	12008-41-2
187	Benzo[ghi]perylene	191-24-2	188	Terphenyl hydrogenated	61788-32-7
189	Ethylenediamine (EDA)	107-15-3	190	Benzene-1,2,4-tricarboxylic acid 1,2-anhydride (Trimellitic anhydride) (TMA)	552-30-7
191	Dicyclohexyl phthalate (DCHP)	84-61-7	192	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6
193	Benzo[k]fluoranthene	207-08-9	194	Fluoranthene	206-44-0
195	Phenanthrene	85-01-8	196	Pyrene	129-00-0
197	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one (3-benzylidene camphor)	15087-24-8	198	4-tert-butylphenol (PTBP)	98-54-4
199	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof)	-	200	2-methoxyethyl acetate	110-49-6
201	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)	-	202	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1
203	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	204	Diisohexyl phthalate	71850-09-4
205	Perfluorobutane sulfonic acid (PFBS) and its salts	--	206	1-vinylimidazole	1072-63-5
207	2-methylimidazole	693-98-1	208	Butyl 4-hydroxybenzoate	94-26-8
209	Dibutylbis(pentane-2,4-dionato-O,O')tin	22673-19-4	210	bis(2-(2-methoxyethoxy)ethyl) ether	143-24-8
211	Dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety	-	212	1,4-dioxane	123-91-1



Test Report

Number: SHAH01460785

Tests Conducted

213	2,2-bis(bromomethyl)propane 1,3-diol (BMP); 2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA); 2,3-dibromo-1-propanol (2,3-DBPA)	3296-90-0 36483-57-5 1522-92-5 96-13-9	214	2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers	--
215	4,4'-(1-methylpropylidene)bisphenol; (bisphenol B)	77-40-7	216	Glutaral	111-30-8
217	Medium-chain chlorinated paraffins (MCCP) [UVCB substances consisting of more than or equal to 80% linear chloroalkanes with carbon chain lengths within the range from C14 to C17]	--	218	Orthoboric acid, sodium salt Δ	13840-56-7
219	Phenol, alkylation products (mainly in para position) with C12-rich branched or linear alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)	--	220	(\pm)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one covering any of the individual isomers and/or combinations thereof (4-MBC)	--
221	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol (DBMC)	119-47-1	222	S-(tricyclo(5.2.1.0 ² .6)deca-3-en-8(or 9)-yl O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate Δ	255881-94-8
223	Tris(2-methoxyethoxy)vinylsilane	1067-53-4			

(aa) Proposed SVHC in the draft Commission Implementing Decision of September 2021

No.	Chemical Substance	CAS No.	No.	Chemical Substance	CAS No.
1	Resorcinol	108-46-3			

Δ = Determination was based on elemental analysis. The content was calculated based on assumption of worst-case.

(IV) Tested groups: See component list in the last section of this report.

Notes:

1. Substances of very high concern (SVHC) are classified as:
 - (a) Carcinogenicity category 1A or 1B;
 - (b) Germ cell mutagenicity category 1A or 1B;
 - (c) Reproductive toxicity category 1A or 1B, adverse effects on sexual function and fertility or on development;
 - (d) Persistent, bioaccumulative and toxic (PBT)
 - (e) Very persistent and very bioaccumulative (vPvB)
 - (f) Other substances for which there is scientific evidence of probable serious effects to human health or the environment which give rise to an equivalent level of concern, such as endocrine disrupters

REACH requirement:

As per Article 7 of Regulation (EC) No 1907/2006 (REACH) as amended, if a substance of very high concern (SVHC) on the Candidate List for Authorisation is present in articles above a concentration of 0.1% weight by weight (w/w) and the substance is present in those



Test Report

Number: SHAH01460785

Tests Conducted

articles in quantities totalling over 1 tonne per producer or per importer per year, then the producer or importer shall notify the European Chemicals Agency (ECHA). The notifications have to be submitted no later than 6 months after the inclusion in the Candidate List. The information to be notified shall include the following:

- (a) Identity and contact details of the producer or importer;
- (b) Registration number(s), if available;
- (c) Identity of the substance;
- (d) Classification of the substance(s);
- (e) Brief description of the use(s) of the substance(s) in the article and of the uses of the article(s);
- (f) Tonnage range of the substance(s).

As per Article 31 of Regulation (EC) No 1907/2006 (REACH) as amended, the supplier of mixture not classified as hazardous according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP), shall provide the recipient at his request with a safety data sheet, where a mixture contains at least one substance on the SVHC list (Candidate List of substances of very high concern for Authorisation) and its individual concentration is of 0.1% or above by weight for non-gaseous mixtures.

As per Article 33(1) of Regulation (EC) No 1907/2006 (REACH) as amended, any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with information of safe use of the article. An article meets the requirement of Article 33(1) by default when no SVHC exceeds 0.1% weight by weight (w/w).

As per Article 33(2) of Regulation (EC) No 1907/2006 (REACH) as amended, any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) shall provide the consumer on request with information of safe use of the article, within 45 days of receipt of the request.

As per Court of Justice of the European Union Judgment in Case C-106/14, Press Release No 100/15 dated 10 September 2015, each of the articles incorporated as a component of a complex product is covered by the relevant duties to notify and provide information when they contain a substance of very high concern in a concentration above 0.1% of their mass.

Waste Framework Directive (WFD) Requirement:

As per Article 9(1)(i) of Directive 2008/98/EC on waste (WFD, Waste Framework Directive) as amended, Member States shall take measures to ensure that any supplier of an article as defined in point 33 of Article 3 of Regulation (EC) No 1907/2006 (REACH) provides the information pursuant to Article 33(1) of Regulation (EC) No 1907/2006 (REACH) to the European Chemicals Agency (ECHA) as from 5 January 2021. Any supplier of an article containing a substance of very high concern (SVHC) on the Candidate List for Authorisation in a concentration above 0.1% weight by weight (w/w) on the EU market is required to submit a SCIP Notification on that article to ECHA, as from 5 January 2021.

Date Sample Received: May 30, 2022
 Testing Period: May 30, 2022 to Jun 28, 2022

Component No.	Component Name	Material
1	BLACK WIRE SHEATH	7. Hard Plastic
2	BLACK PLASTIC FRAME	7. Hard Plastic
3	BLACK PLASTIC	7. Hard Plastic
4	BLACK PLASTIC	7. Hard Plastic
5	WHITE RUBBER RING	8. Soft Plastic/Silica Gel/Rubber
6	BROWN RUBBER RING	8. Soft Plastic/Silica Gel/Rubber
7	BLACK PLASTIC	7. Hard Plastic
8	BLACK PLASTIC	7. Hard Plastic



Test Report

Number: SHAH01460785

Tests Conducted

9	COPPERY METAL	1. Metal
10	SILVERY METAL WIRE	1. Metal
11	SILVERY METAL	1. Metal
12	SILVERY METAL	1. Metal
13	SILVERY METAL	1. Metal
14	SILVERY METAL	1. Metal
15	GOLDEN METAL	1. Metal
16	METAL (SET SCREW)	1. Metal
17	GOLDEN METAL	1. Metal
18	GOLDEN METAL	1. Metal

Group No.	No.	Component No.	Component Name	Material
GROUP 1	1	1	BLACK WIRE SHEATH	7. Hard Plastic
	2	2	BLACK PLASTIC FRAME	7. Hard Plastic
	3	3	BLACK PLASTIC	7. Hard Plastic
	4	4	BLACK PLASTIC	7. Hard Plastic
	5	5	WHITE RUBBER RING	8. Soft Plastic/Silica Gel/Rubber
	6	6	BROWN RUBBER RING	8. Soft Plastic/Silica Gel/Rubber
	7	7	BLACK PLASTIC	7. Hard Plastic
	8	8	BLACK PLASTIC	7. Hard Plastic
GROUP 2	1	9	COPPERY METAL	1. Metal
	2	10	SILVERY METAL WIRE	1. Metal
	3	11	SILVERY METAL	1. Metal
	4	12	SILVERY METAL	1. Metal
	5	13	SILVERY METAL	1. Metal
	6	14	SILVERY METAL	1. Metal
	7	15	GOLDEN METAL	1. Metal
	8	16	METAL (SET SCREW)	1. Metal
	9	17	GOLDEN METAL	1. Metal
	10	18	GOLDEN METAL	1. Metal

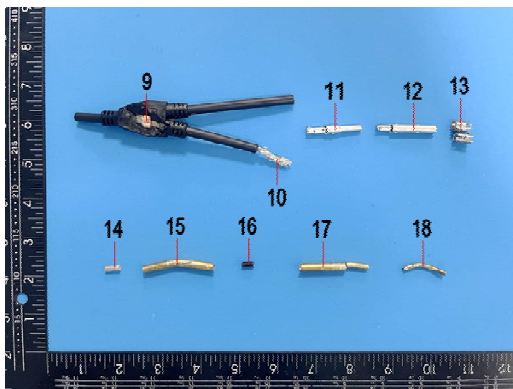
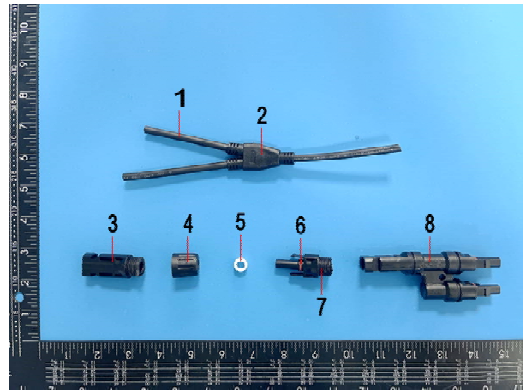
Remark: The item is accredited and subcontracted to the organization complied with ISO/IEC 17025.



Test Report

Number: SHAH01460785

Tests Conducted



End of report

This report is made solely on the basis of your instructions and/or information and materials supplied by you. It is not intended to be a recommendation for any particular course of action. Intertek does not accept a duty of care or any other responsibility to any person other than the Client in respect of this report and only accepts liability to the Client insofar as is expressly contained in the terms and conditions governing Intertek's provision of services to you. Intertek makes no warranties or representations either express or implied with respect to this report save as provided for in those terms and conditions. We have aimed to conduct the Review on a diligent and careful basis and we do not accept any liability to you for any loss arising out of or in connection with this report, in contract, tort, by statute or otherwise, except in the event of our gross negligence or wilful misconduct.

This report shall not be reproduced except in full, without written approval of the laboratory.

