Test Report (SVHC)

PINGHU JIZHAN PLASTIC TECH.CO.LTD.,
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The following sample(s) was/were submitted and identified on behalf of the clients as : DIFFUSER

SGS Job No. :	SP17-026420 - SH
Model No. :	PMMA512
Client Ref. Information :	512A,511,508,502,566,567,102,508A,125,518,905
Date of Sample Received :	08 Aug 2017
Testing Period :	08 Aug 2017 - 14 Aug 2017
Test Requested :	As requested by client, SVHC screening is performed according to: (i) One hundred and seventy four (174) substances in the Candidate List of Substances of Very High Concern (SVHC) for authorization published by European Chemicals Agency (ECHA) on and before Jul 7, 2017 regarding Regulation (EC) No 1907/2006 concerning the REACH.
Test Results :	Please refer to next page(s).

Summary :

According to the specified scope and evaluation screening, the test results of SVHC are ≤ 0.1% (w/w) in the submitted sample.	PASS

Signed for and on behalf of
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Marry Ma

Marry Ma
Approved Signatory

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Remark :

(1) The chemical analysis of specified SVHC is performed by means of currently available analytical techniques against the following SVHC related documents published by ECHA: http://echa.europa.eu/web/guest/candidate-list-table
These lists are under evaluation by ECHA and may subject to change in the future.

(2) Concerning article(s):
In accordance with Regulation (EC) No 1907/2006, any EU 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 in the Candidate List is present in those articles in quantities totaling over one tonne per producer or importer per year; and (b) the substance in the Candidate List 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 in the Candidate List.

SGS adopts the ruling of the Court of Justice of the European Union on the definition of an article under REACH unless indicated otherwise. Detail explanation is available at the following link:
http://www.sgs.com/-/media/global/documents/technical-documents/technical-bulletins/sgs-crs-position-statement-on-svhc-in-articles-a4-en-16-06.pdf?la=en

(3) Concerning material(s):
Test results in this report are based on the tested sample. This report refers to testing result of tested sample submitted as homogenous material(s). In case such material is being used to compose an article, the results indicated in this report may not represent SVHC concentration in such article. If this report refers to testing result of composite material group by equal weight proportion, the material in each composite test group may come from more than one article.

If the sample is a substance or mixture, and it directly exports to EU, client has the obligation to comply with the supply chain communication obligation under Article 31 of Regulation (EC) No. 1907/2006 and the conditions of Authorization of substance of very high concern included in the Annex XIV of the Regulation (EC) No. 1907/2006.

(4) Concerning substance and preparation:
If a SVHC is found over 0.1% (w/w) and/or the specific concentration limit which is set in Regulation (EC) No 1272/2008 and No 790/2009, client is suggested to prepare a Safety Data Sheet (SDS) against the SVHC to comply with the supply chain communication obligation under Regulation (EC) No 1907/2006, in which:

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- a substance that is classified as hazardous under the CLP Regulation (EC) No 1272/2008.

- a mixture that is classified as dangerous according Dangerous Preparations Directive 1999/45/EC or classified as hazardous under the CLP Regulation (EC) No 1272/2008, when their concentrations are equal to, or greater than, those defined in the Article 3(3) of 1999/45/EC or the lower values given in Part 3 of Annex VI of Regulation (EC) No. 1272/2008; or

- a mixture is not classified as dangerous under Directive 1999/45/EC, but contains either:
(a) a substance posing human health or environmental hazards in an individual concentration of ≥ 1 % by weight for mixtures that are solid or liquids (i.e., non-gaseous mixtures) or ≥ 0.2 % by volume for gaseous mixtures; or
(b) a substance that is PBT, or vPvB in an individual concentration of ≥ 0.1 % by weight for mixtures that are solid or liquids (i.e., non-gaseous mixtures); or
(c) a substance on the SVHC candidate list (for reasons other than those listed above), in an individual concentration of ≥ 0.1 % by weight for non-gaseous mixtures; or
(d) a substance for which there are Europe-wide workplace exposure limits.

(5) 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 from the laboratory.

Test Sample :

Sample Description :

Specimen No.	SGS Sample ID	Description
SN1	SHA17-172848.002	White solid

Test Method :
SGS In-House method-SHTC-CHEM-SOP-97-T, SHTC-CHEM-SOP-302-T, Analyzed by ICP-OES, UV-VIS, GC-MS, HPLC-DAD/MS and Colorimetric Method.

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Test Result: (Substances in the Candidate List of SVHC)

Batch	Substance Name	CAS No.	002 Concentration (%)	RL (%)
-	All tested SVHC in candidate list	-	ND	-

Notes :

(1)The table above only shows detected SVHC, and SVHC that below RL are not reported. Please refer to Appendix for the full list of tested SVHC.

(2) RL = Reporting Limit. All RL are based on homogenous material
ND = Not detected (lower than RL), ND is denoted on the SVHC substance.

(3) ^CAS No. of diastereoisomers identified (α-HBCDD, β-HBCDD, γ-HBCDD): 134237-50-6, 134237-51-7, 134237-52-8
☆CAS No. of Hexahydromethylphathalic anhydride, Hexahydro-4-methylphathalic anhydride, Hexahydro-1-methylphathalic anhydride, Hexahydro-3-methylphathalic anhydride: 25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9; EC No. of those: 247-094-1, 243-072-0, 256-356-4, 260-566-1.

(4) * The test result is based on the calculation of selected element(s) and to the worst-case scenario.
** The test result is based on the calculation of selected marker(s) and to the worst-case scenario.
For detail information, please refer to the SGS REACH website:
www.reach.sgs.com/substance-of-very-high-concern-analysis-information-page.htm
Calculated concentration of boric compounds are based on the total boron for liquid, powder and paste samples and water extractive boron for other samples by ICP-OES.
RL = 0.005% is evaluated for element (i.e. cobalt, arsenic, lead, chromium (VI), aluminum, zirconium, boron, strontium, zinc, antimony, titanium, barium and cadmium respectively), except molybdenum RL=0.0005%, boron RL=0.0025% (only for Lead bis(tetrafluoroborate)).

(5) § The substance is proposed for the identification as SVHC only where it contains Michler's ketone (CAS Number: 90-94-8) or Michler's base (CAS Number: 101-61-1) ≥0.1% (w/w).

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Appendix
Full list of tested SVHC:

Batch	No.	Substance Name	CAS No.	RL (%)
I	1	4,4' -Diaminodiphenylmethane(MDA)	101-77-9	0.050
I	2	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	0.050
I	3	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	0.050
I	4	Anthracene	120-12-7	0.050
I	5	Benzyl butyl phthalate (BBP)	85-68-7	0.050
I	6	Bis (2-ethylhexyl)phthalate (DEHP)	117-81-7	0.050
I	7	Bis(tributyltin)oxide (TBTO)	56-35-9	0.050
I	8	Dibutyl phthalate (DBP)	84-74-2	0.050
I	9	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α-HBCDD, β-HBCDD, γ-HBCDD)^	25637-99-4, 3194- 55-6	0.050
II	10	2,4-Dinitrotoluene	121-14-2	0.050
II	11	Acrylamide	79-06-1	0.050
II	12	Anthracene oil**	90640-80-5	0.050
II	13	Anthracene oil, anthracene paste**	90640-81-6	0.050
II	14	Anthracene oil, anthracene paste, anthracene fraction**	91995-15-2	0.050
II	15	Anthracene oil, anthracene paste, distn. lights**	91995-17-4	0.050
II	16	Anthracene oil, anthracene-low**	90640-82-7	0.050
II	17	Diisobutyl phthalate	84-69-5	0.050
II	18	Pitch, coal tar, high temp.**	65996-93-2	0.050
II	19	Tris(2-chloroethyl)phosphate	115-96-8	0.050
III	20	Trichloroethylene	79-01-6	0.050

(SVHC)

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Batch	No.	Substance Name	CAS No.	RL (%)
IV	21	2-Ethoxyethanol	110-80-5	0.050
IV	22	2-Methoxyethanol	109-86-4	0.050
V	23	1,2,3-trichloropropane	96-18-4	0.050
V	24	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	0.050
V	25	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	0.050
V	26	1-methyl-2-pyrrolidone	872-50-4	0.050
V	27	2-ethoxyethyl acetate	111-15-9	0.050
V	28	Hydrazine	7803-57-8, 302-01-2	0.050
VI	29	1,2-Dichloroethane	107-06-2	0.050
VI	30	2,2'-dichloro-4,4'-methylenedianiline	101-14-4	0.050
VI	31	2-Methoxyaniline; o-Anisidine	90-04-0	0.050
VI	32	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	0.050
VI	33	Bis(2-methoxyethyl) ether	111-96-6	0.050
VI	34	Bis(2-methoxyethyl) phthalate	117-82-8	0.050
VI	35	Formaldehyde, oligomeric reaction products with aniline	25214-70-4	0.050
VI	36	N,N-dimethylacetamide	127-19-5	0.050
VI	37	Phenolphthalein	77-09-8	0.050
VII	38	[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	0.050
VII	39	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)§	548-62-9	0.050

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Batch	No.	Substance Name	CAS No.	RL (%)
VII	40	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	0.050
VII	41	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	0.050
VII	42	4,4'-bis(dimethylamino) benzophenone (Michler's Ketone)	90-94-8	0.050
VII	43	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol§	561-41-1	0.050
VII	44	Formamide	75-12-7	0.050
VII	45	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	0.050
VII	46	TGIC (1,3,5-tris (oxiranylmethyl) -1,3,5-triazine-2,4,6(1H,3H,5H)-trione)	2451-62-9	0.050
VII	47	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) §	6786-83-0	0.050
VII	48	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	0.050
VIII	49	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	0.050
VIII	50	1,2-Diethoxyethane	629-14-1	0.050
VIII	51	1-Bromopropane	106-94-5	0.050
VIII	52	3-Ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	0.050
VIII	53	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	-	0.050
VIII	54	4,4'-Methylenedi-o-toluidine	838-88-0	0.050
VIII	55	4,4'-Oxydianiline and its salts	101-80-4	0.050
VIII	56	4-Aminoazobenzene	60-09-3	0.050
VIII	57	4-Methyl-m-phenylenediamine	95-80-7	0.050
VIII	58	4-Nonylphenol, branched and linear	-	0.050

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Batch	No.	Substance Name	CAS No.	RL (%)
VIII	59	6-Methoxy-m-toluidine	120-71-8	0.050
VIII	60	Biphenyl-4-ylamine	92-67-1	0.050
VIII	61	Bis(pentabromophenyl) ether (DecaBDE)	1163-19-5	0.050
VIII	62	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	0.050
VIII	63	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	0.050
VIII	64	Dibutyltin dichloride (DBTC)	683-18-1	0.050
VIII	65	Diethyl sulphate	64-67-5	0.050
VIII	66	Diisopentylphthalate	605-50-5	0.050
VIII	67	Dimethyl sulphate	77-78-1	0.050
VIII	68	Dinoseb	88-85-7	0.050
VIII	69	Furan	110-00-9	0.050
VIII	70	Henicosafluoroundecanoic acid	2058-94-8	0.050
VIII	71	Heptacosafluorotetradecanoic acid	376-06-7	0.050
VIII	72	Hexahydromethylphathalic anhydride, Hexahydro-4-methylphathalic anhydride, Hexahydro-1-methylphathalic anhydride, Hexahydro-3-methylphathalic anhydride	☆	0.050
VIII	73	Methoxyacetic acid	625-45-6	0.050
VIII	74	Methyloxirane (Propylene oxide)	75-56-9	0.050
VIII	75	N,N-dimethylformamide	68-12-2	0.050
VIII	76	N-Methylacetamide	79-16-3	0.050
VIII	77	N-Pentyl-isopentylphthalate	776297-69-9	0.050

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