

No.: XMCCM160801199

Date: Sep.22, 2016

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BEILITAI (TIANJIN) TILE CO., LTD.

NO.9 FUSHENG ROAD, ZHONGBEI INDUSTRIAL ZONE, XIQING DISTRICT, TIANJIN, CHINA

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

Sample Name : CERAMIC TILE

SGS Ref. No. : TJHL1607003201BM, XMNMLC1601073301

Country of Original : CHINA

Intended Use : Internal wall tiles

Test Required : EN 14411:2012 CERAMIC TILE - Definitions, classification, characteristics

and marking

Annex K Requirements for dry-pressed CERAMIC TILE of Group BIII (E_b>10 %)

Date of Receipt : Aug.31, 2016

Test Period : Aug.31, 2016 to Sep.22, 2016

Test Result(s) : For further details, please refer to the following page(s)

****** To be continued******

Signed for

SGS-CSTC Standards Technical

Services Co., Ltd. XM Branch Testing Center

Civi Huang

Authorized Signatory



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Sample description:

Glazed CERAMIC TILE, 152mm×76mm×9.5mm, see the photograph

Test result(s):

Work size: 152mm×76mm×9.5mm

Work Size: 152mm×76				
Test item(s)	Test method(s)	Standard requirements EN 14411:2012 Annex K (Dry-pressed CERAMIC TILE E _b >10% Group BIII, N≥15cm)	Test result(s)	Conclusion
		Average value	152.17 mm	/
Length		The permissible deviation of the average size for each tile from the work size: ±0.5%,±2mm	+0.06%~+0.19% +0.09mm~+0.29mm	Pass
		Average value	76.26 mm	/
Width		The permissible deviation of the average size for each tile from the work size: ±0.5%, ±2mm	+0.25%~+0.50% +0.19mm~+0.38mm	Pass
		Average value	9.48 mm	/
Thickness	EN ISO 10545- 2:1997	The permissible deviation, of the average thickness of each tile from the work size thickness: ±10%, ±0.5mm	-1.05%~+1.26% -0.10mm~+0.12mm	Pass
Straightness of sides for 152mm	2.1997	The maximum permissible deviation from straightness, related to the	-0.03%~+0.04% -0.04mm~+0.06mm	Pass
Straightness of sides for 76mm		corresponding work sizes: ±0.3%, ±1.5mm	-0.04%~+0.05% -0.03mm~+0.04mm	Pass
Rectangularity of sides for 152mm		The maximum permissible deviation from rectangularity, related to the	-0.05%~+0.09% -0.08mm~+0.14mm	Pass
Rectangularity of sides for 76mm		corresponding work sizes: ±0.5%, ±2.0mm	-0.08%~+0.08% -0.06mm~+0.06mm	Pass

****** To be continued******



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Te	est item(s)	Test method(s)	Standard requirements Standard requirements EN 14411:2012 Annex K (Dry-pressed CERAMIC TILE E _b >10% Group BIII, N≥15cm)	Test result(s)	Conclusion
	Centre curvature		The maximum permissible deviation from centre curvature, related to diagonal calculated from the work sizes: -0.3%~+0.5%, -1.5mm~+2.0mm	+0.02%~+0.05% +0.04mm~+0.08mm	Pass
Surface flatness	Edge curvature of sides for 150mm	ENISO	The maximum permissible deviation from edge curvature, related to the	+0.01%~+0.08% +0.02mm~+0.12mm	Pass
	Edge curvature EN ISO		corresponding work sizes: -0.3%~+0.5%, -1.5mm~+2.0mm	-0.08%~-0.03% -0.06mm~-0.02mm	Pass
	Warpage		The maximum permissible deviation elated to diagonal calculated from the work sizes: ±0.5%, ±2.0mm	+0.07%~+0.11% +0.12mm~+0.19mm	Pass
Surface quality			A minimum of 95% of the tiles shall be free from visible defects that would impair the appearance of a major area of tiles	100% of the tiles were free from visible defects	Pass
Wate	er absorption	EN ISO 10545- 3:1997	Average > 10 % Individual minimum value 9 %	Average: 14.94% Minimum: 14.36%	Pass
Brea	king strength	EN ISO 10545-	Not less than 600 N (Thickness ≥ 7.5mm)	Average: 1280 N Minimum: 1184 N	Pass
Modu	llus of rupture	4:2014	Minimum 12 N/mm² (Thickness ≥ 7.5mm)	Average: 26 N/mm ² Minimum: 24 N/mm ²	Pass
	Coefficient of linear thermal expansion EN ISO 10545-8:2014		α₁: 4.3×10 ⁻⁶ /°C α₂: 4.2×10 ⁻⁶ /°C	/	
Thermal	nermal shock resistance EN ISO Pass according to EN ISO 10545-1			No visible defects	/
Crazi	ng resistance	EN ISO 10545- 11:1996	Pass according to EN ISO 10545-1	No crazing	/

****** To be continued*****



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	Test item(s)		Standard requirements Standard requirements EN 14411:2012 Annex K (Dry-pressed CERAMIC TILE E _b >10% Group BIII, N≥15cm)	Test result(s)	Conclusion
	Hydrochloric acid solution 3% (V/V)			GLA	/
	Citric acid solution (100g/L)		Declared value	GLA	/
Resistance to chemicals	Potassium hydroxide solution (30g/L)	EN ISO 10545-		GLA	/
	Household chemicals: Ammonium chloride solution (100g/L)	13:1997		GA	Pass
	Swimming pool salts:Sodium hypochlorite solution (20mg/L)		Minimum class GB	GA	Pass
	Lodine: 13 g/L solution in alcohol			Class 5	Pass
Resistance to staining	Green staining agent	EN ISO 10545- 14:2015	Minimum Class 3	Class 5	Pass
	Olive oil			Class 5	Pass
Lead and cadmium release		EN ISO 10545- 15:1997	Declared value	Lead given off: <0.01 mg/dm ² Cadmium given off: <0.002 mg/dm ²	/
	of danger substances C 169 substances)	SGS In-House method	Declared value	≤0.1%(w/w) Not detected	/

Note: 1. Lead and cadmium release were carried out by an external laboratory assessed as competent.



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1. Dimension and surface quality

Test method:

EN ISO 10545-2:1997 CERAMIC TILE — Part 2: Determination of dimensions and surface quality

Test result(s):

1). Length, width and thickness

Specimens: CERAMIC TILE, 152mm×76mm×9.5mm, 10pcs

Work size: 152mm×76mm×9.5mm

Specimens identification No.	Average Length (mm)	Deviation from work size (%)	Average Width (mm)	Deviation from work size (%)	Average Thickness (mm)	Deviation from work size (%)
1	152.09	0.06	76.38	0.50	9.46	-0.42
2	152.15	0.10	76.21	0.28	9.40	-1.05
3	152.19	0.12	76.29	0.38	9.47	-0.32
4	152.29	0.19	76.32	0.42	9.51	0.11
5	152.20	0.13	76.19	0.25	9.41	-0.95
6	152.12	0.08	76.25	0.33	9.60	1.05
7	152.17	0.11	76.28	0.37	9.44	-0.63
8	152.16	0.11	76.27	0.36	9.43	-0.74
9	152.20	0.13	76.24	0.32	9.62	1.26
10	152.12	0.08	76.22	0.29	9.43	-0.74

****** To be continued******



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2). Straightness of sides, rectangularity and surface flatness Specimens: CERAMIC TILE, 152mm×76mm×9.5mm, 10pcs

Work size: 152mm×76mm×9.5mm

		aightnes					gularity				S	Surface	flatnes	s		
No	`	deviatio correspo size	onding		`	(max deviation related to the corresponding work sizes)		curva (m devia	curvature (max d		Edge curvature deviation related to corresponding work sizes)			Warpage (max deviation related to		
	(152	2mm)	(761	mm)	(152	mm)	(76r	mm)	related to diagonal)		(152	mm)	(76	mm)	diagonal)	
	mm	%	mm	%	mm	%	mm	%	mm	%	mm	%	mm	%	mm	%
1	0.03	0.02	0.02	0.03	-0.08	-0.05	-0.02	-0.03	0.08	0.05	0.04	0.03	-0.04	-0.05	0.18	0.11
2	0.02	0.01	0.02	0.03	-0.08	-0.05	0.02	0.03	0.06	0.04	0.04	0.03	-0.04	-0.05	0.18	0.11
3	-0.03	-0.02	-0.03	-0.04	-0.02	-0.01	-0.04	-0.05	0.04	0.02	0.02	0.01	-0.06	-0.08	0.19	0.11
4	0.03	0.02	0.03	0.04	-0.04	-0.03	0.04	0.05	0.08	0.05	0.04	0.03	-0.03	-0.04	0.19	0.11
5	0.02	0.01	0.04	0.05	-0.04	-0.03	0.04	0.05	0.06	0.04	0.04	0.03	-0.04	-0.05	0.16	0.09
6	0.04	0.03	0.00	0.00	0.14	0.09	-0.06	-0.08	0.08	0.05	0.09	0.06	-0.04	-0.05	0.16	0.09
7	-0.04	-0.03	0.02	0.03	0.04	0.03	-0.02	-0.03	0.04	0.02	0.04	0.03	-0.02	-0.03	0.17	0.10
8	0.02	0.01	0.00	0.00	-0.04	-0.03	0.02	0.03	0.08	0.05	0.12	0.08	-0.04	-0.05	0.17	0.10
9	0.04	0.03	0.02	0.03	-0.08	-0.05	0.04	0.05	0.06	0.04	0.08	0.05	-0.04	-0.05	0.19	0.11
10	0.06	0.04	0.04	0.05	-0.08	-0.05	0.06	0.08	0.08	0.05	0.08	0.05	-0.06	-0.08	0.19	0.11

3). Surface quality

30 pcs of samples for test, 100% of the tiles were free from visible defects ****** To be continued******



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2. Water absorption (boiling method)

Test method:

EN ISO 10545-3:1997 CERAMIC TILE — Part 3: Determination of water absorption, apparent porosity,

apparent relative density and bulk density

Specimens: CERAMIC TILE, 152mm×76mm×9.5mm, 10pcs

Test result(s):

Specimens identification No.	1	2	3	4	5	6	7	8	9	10
Water absorption (%)	15.47	15.32	15.43	14.55	14.81	14.36	14.92	15.05	14.81	14.66
Mean value (%)		14.94								

3. Modulus of rupture and Breaking strength

Test method:

EN ISO 10545-4:2014 CERAMIC TILE — Part 4: Determination of Modulus of rupture and Breaking strength Specimens: CERAMIC TILE, 152mm×76mm×9.5mm, 7pcs

Test result(s):

Specimens identification No.	1	2	3	4	5	6	7		
Breaking strength (N)	1341	1331	1241	1377	1280	1207	1184		
Mean value (N)		1280							
Modulus of rupture (N/mm ²)	27	27	25	27	26	24	24		
Mean value (N/mm²)				26					

****** To be continued******



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4. Coefficient of linear thermal expansion

Test method:

EN ISO 10545-8:2014 CERAMIC TILE — Part 8: Determination of linear thermal expansion

Specimens: CERAMIC TILE, 50mm×9mm×9.5mm, 2pcs, vertical cut from 1pcs 152mm×76mm×9.5mm

Test result(s):

Heating rate: 5 °C /min

Specimens identification No.	1	2
Coefficient of linear thermal expansion (×10 ⁻⁶ /°C)	4.3	4.2

5. Thermal shock resistance

Test method:

EN ISO 10545-9:2013 CERAMIC TILE — Part 9: Determination of resistance to thermal shock

Specimens: CERAMIC TILE, 152mm×76mm×9.5mm, 5pcs

The type of the test performed: without immersion

Test result(s):

Specimens identification No.	1	2	3	4	5
Description of damage	No visible defects				

6. Crazing resistance

Test method:

EN ISO 10545-11:1996 CERAMIC TILE — Part 11: Determination of crazing resistance for glazed tiles

Specimens: CERAMIC TILE, 152mm×76mm×9.5mm, 5pcs

Test result(s):

Specimens identification No.	1	2	3	4	5
Description of damage	No crazing				

****** To be continued******



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7. Chemicals resistance

Test method:

EN ISO 10545-13:1997 CERAMIC TILE — Part 13: Determination of chemical resistance Specimens: CERAMIC TILE, 76mm×76mm×9.5mm, 25pcs, cut from 13pcs 152mm×76mm×9.5mm

Test result(s):

Specin	Specimens identification No.		2	3	4	5
Chemicals agents House Amme solu Swimr Sodiu	Hydrochloric acid solution 3% (V/V)	GLA	GLA	GLA	GLA	GLA
	Citric acid solution (100g/L)	GLA	GLA	GLA	GLA	GLA
	Potassium hydroxide solution (30g/L)	GLA	GLA	GLA	GLA	GLA
	Household chemicals: Ammonium chloride solution (100g/L)	GA	GA	GA	GA	GA
	Swimming pool salts: Sodium hypochlorite solution (20mg/L)	GA	GA	GA	GA	GA

8. Resistance to stains

Test method:

EN ISO 10545-14:2015 CERAMIC TILE — Part 14: Determination of resistance to stains

Specimens: CERAMIC TILE, 76mm×76mm×9.5mm, 15pcs, cut from 8pcs 152mm×76mm×9.5mm

Test result(s):

Specimens identification No.		1	2	3	4	5
	Lodine: 13 g/L solution in alcohol	Class 5				
Staining agents	Green staining agent	Class 5				
	Olive oil	Class 5				

******* To be continued******



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9. Lead and Cadmium given off by glazed tiles

Test method:

EN ISO 10545-15:1997 CERAMIC TILE — Part 15: Determination of lead and cadmium given off by glazed

Specimens: CERAMIC TILE, 152mm×76mm×9.5mm, 3pcs

Test result(s):

Test item(s)	Test result(s)
Lead given off by glazed tiles	<0.01 mg/dm ²
Cadmium given off by glazed tiles	<0.002 mg/dm ²

****** To be continued******



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10. Release of danger substances (SVHC 169 substances)

Test method:

SGS In-House method- XMTC CHEM-TOP-022-01, XMTC-CHEM-TOP-022-02, XMTC CHEM-TOP-022-03, Analyzed by ICP-OES, UV-VIS, GC-MS, HPLC-DAD/MS and Colorimetric Method.

Specimens: CERAMIC TILE, see the photos

Test requested:

As requested by client, SVHC screening is performed according to:

One hundred and sixty nine (169) substances in the Candidate List of Substances of Very High Concern (SVHC) for authorization published by European Chemicals Agency (ECHA) on and before Jun 20, 2016 regarding Regulation (EC) No 1907/2006 concerning the REACH..

Summary:

According to the specified scope and analytical techniques, concentrations of tested PASS SVHC are $\leq 0.1\%$ (w/w) in the submitted sample.

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).



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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 interpretation of ECHA for SVHC in article unless indicated otherwise. Detail explanation is available at the following link:

http://webstage.contribute.sgs.net/corpreach/documents/SGS-CTS_SVHC-paper-EN-11.pdf (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:

- 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;

- 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

****** To be continued******



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

Batch	Substance Name	CAS No.	Result 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.*The test result is based on the calculation of selected element(s) / 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.

- 4. RL = 0.005% is evaluated for element (i.e. cobalt, arsenic, lead, chromium (VI), aluminum, zirconium, boron, strontium, zinc, antimony, cadmium, titanium and barium respectively), except molybdenum RL=0.0005%, boron RL=0.0025% (only for Lead bis(tetrafluoroborate)).
- 5. Calculated concentration of boric compounds are based on the water extractive boron by ICP-OES.
- 6. Δ CAS No. of diastereoisomers identified (α-HBCDD, β-HBCDD, γ-HBCDD): 134237-50-6, 134237-51-7, 134237-52-8.
- 7. ☆ CAS No. of 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; EC No. of those: 247-094-1, 243-072-0, 256-356-4, 260-566-1.
- 8. § 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).

****** To be continued***



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Appendix

Full list of tested SVHC:

Batch	No.	Substance Name	CAS No.	RL (%)
ı	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	Cobalt dichloride*	7646-79-9	0.005
I	9	Diarsenic pentaoxide*	1303-28-2	0.005
1	10	Diarsenic trioxide*	1327-53-3	0.005
I	11	Dibutyl phthalate (DBP)	84-74-2	0.050
I	12	Hexabromocyclododecane (HBCDD) and all major	25637-99-4,	0.050
		diastereoisomers identified (α -HBCDD, β -HBCDD, γ -HBCDD) \triangle	3194- 55-6	
ı	13	Lead hydrogen arsenate*	7784-40-9	0.005
İ	14	Sodium dichromate*	7789-12-0,	0.005
			10588-01-9	
ı	15	Triethyl arsenate*	15606-95-8	0.005
П	16	2,4-Dinitrotoluene	121-14-2	0.050
II	17	Acrylamide	79-06-1	0.050
II	18	Anthracene oil*	90640-80-5	0.050
II	19	Anthracene oil, anthracene paste*	90640-81-6	0.050
II	20	Anthracene oil, anthracene paste, anthracene fraction*	91995-15-2	0.050
П	21	Anthracene oil, anthracene paste, distn. lights*	91995-17-4	0.050
II	22	Anthracene oil, anthracene-low*	90640-82-7	0.050
П	23	Diisobutyl phthalate	84-69-5	0.050
II	24	Lead chromate*	7758-97-6	0.005
II	25	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)*	12656-85-8	0.005
П	26	Lead sulfochromate yellow (C.I. Pigment Yellow 34)*	1344-37-2	0.005
II	27	Pitch, coal tar, high temp.*	65996-93-2	0.050
		******* To be continued******		



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Appendix

Full list of tested SVHC:

Batch	No.	Substance Name	CAS No.	RL (%)
Ш	28	Tris(2-chloroethyl)phosphate	115-96-8	0.050
Ш	29	Ammonium dichromate*	7789-09-5	0.005
Ш	30	Boric acid*	10043-35-3,	0.005
			11113-50-1	
Ш	31	Disodium tetraborate, anhydrous*	1303-96-4,	0.005
			1330-43-4,	
			12179-04-3	
Ш	32	Potassium chromate*	7789-00-6	0.005
Ш	33	Potassium dichromate*	7778-50-9	0.005
Ш	34	Sodium chromate*	7775-11-3	0.005
Ш	35	Tetraboron disodium heptaoxide, hydrate*	12267-73-1	0.005
Ш	36	Trichloroethylene	79-01-6	0.050
IV	37	2-Ethoxyethanol	110-80-5	0.050
IV	38	2-Methoxyethanol	109-86-4	0.050
IV	39	Chromic acid,	7738-94-5	0.005
		Oligomers of chromic acid and dichromic acid,	-	
		Dichromic acid*	13530-68-2	
IV	40	Chromium trioxide*	1333-82-0	0.005
IV	41	Cobalt(II) carbonate*	513-79-1	0.005
IV	42	Cobalt(II) diacetate*	71-48-7	0.005
IV	43	Cobalt(II) dinitrate*	10141-05-6	0.005
IV	44	Cobalt(II) sulphate*	10124-43-3	0.005
V	45	1,2,3-trichloropropane	96-18-4	0.050
V	46	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters,	71888-89-6	0.050
W	47	C7-rich	C0E1E 40 4	0.050
V	47	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	0.050
V	48	1-methyl-2-pyrrolidone	872-50-4	0.050
V	49	2-ethoxyethyl acetate	111-15-9	0.050
V	50	Hydrazine	7803-57-8,	0.050
		•	302-01-2	
V	51	Strontium chromate*	7789-06-2	0.005

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Appendix Full list of tested SVHC:

Batch	No.	Substance Name	CAS No.	RL (%)
VI	52	1,2-Dichloroethane	107-06-2	0.050
VI	53	2,2'-dichloro-4,4'-methylenedianiline	101-14-4	0.050
VI	54	2-Methoxyaniline; o-Anisidine	90-04-0	0.050
VI	55	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	0.050
VI	56	Aluminosilicate Refractory Ceramic Fibres *	650-017-00-8 (Index	0.005
			no.)	
VI	57	Arsenic acid*	7778-39-4	0.005
VI	58	Bis(2-methoxyethyl) ether	111-96-6	0.050
VI	59	Bis(2-methoxyethyl) phthalate	117-82-8	0.050
VI	60	Calcium arsenate*	7778-44-1	0.005
VI	61	Dichromium tris(chromate) *	24613-89-6	0.005
VI	62	Formaldehyde, oligomeric reaction products with aniline	25214-70-4	0.050
VI	63	Lead diazide, Lead azide*	13424-46-9	0.005
VI	64	Lead dipicrate*	6477-64-1	0.005
VI	65	Lead styphnate*	15245-44-0	0.005
VI	66	N,N-dimethylacetamide	127-19-5	0.050
VI	67	Pentazinc chromate octahydroxide*	49663-84-5	0.005
VI	68	Phenolphthalein	77-09-8	0.050
VI	69	Potassium hydroxyoctaoxodizincatedichromate*	11103-86-9	0.005
VI	70	Trilead diarsenate*	3687-31-8	0.005
VI	71	Zirconia Aluminosilicate Refractory Ceramic Fibres*	650-017-00-8 (Index no.)	0.005
VII	72	[4-[[4-anilino-1-naphthyl][4-	2580-56-5	0.050
		(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylide		
		ne] dimethylammonium chloride (C.I. Basic Blue 26)§		
VII	73	[4-[4,4'-bis(dimethylamino)	548-62-9	0.050
		benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylamm		
		onium chloride (C.I. Basic Violet 3)§		
VII	74	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	0.050
VII	75	1,2-dimethoxyethane; ethylene glycol dimethyl ether	110-71-4	0.050
		(EGDME)		
VII	76	4,4'-bis(dimethylamino) benzophenone (Michler's Ketone) ********* To be continued**********	90-94-8	0.050



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Appendix

Full list of tested SVHC:

Batch	No.	Substance Name	CAS No.	RL (%)
VII	77	4,4'-bis(dimethylamino)-4"-(methylamino)trityl alcohol§	561-41-1	0.050
VII	78	Diboron trioxide*	1303-86-2	0.005
VII	79	Formamide	75-12-7	0.050
VII	80	Lead(II) bis(methanesulfonate)*	17570-76-2	0.005
VII	81	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	0.050
VII	82	TGIC	2451-62-9	0.050
		(1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trio ne)		
VII	83	α,α -Bis[4-(dimethylamino)phenyl]-4	6786-83-0	0.050
		(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) §		
VII	84	β-TGIC (1,3,5-tris[(2S and	59653-74-6	0.050
		2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)		
VIII	85	[Phthalato(2-)]dioxotrilead*	69011-06-9	0.005
VIII	86	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	0.050
VIII	87	1,2-Diethoxyethane	629-14-1	0.050
VIII	88	1-Bromopropane	106-94-5	0.050
VIII	89	3-Ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	0.050
VIII	90	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	-	0.050
VIII	91	4,4'-Methylenedi-o-toluidine	838-88-0	0.050
VIII	92	4,4'-Oxydianiline and its salts	101-80-4	0.050
VIII	93	4-Aminoazobenzene	60-09-3	0.050
VIII	94	4-Methyl-m-phenylenediamine	95-80-7	0.050
VIII	95	4-Nonylphenol, branched and linear	-	0.050
VIII	96	6-Methoxy-m-toluidine	120-71-8	0.050
VIII	97	Acetic acid, lead salt, basic*	51404-69-4	0.005
VIII	98	Biphenyl-4-ylamine	92-67-1	0.050
VIII	99	Bis(pentabromophenyl) ether (DecaBDE)	1163-19-5	0.050

******* To be continued*******



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Appendix

Full list of tested SVHC:

Batch	No.	Substance Name	CAS No.	RL (%)
VIII	100	Cyclohexane-1,2-dicarboxylic anhydride,	85-42-7,	0.050
		cis-cyclohexane-1,2-dicarboxylic anhydride,	13149-00-3,	
		trans-cyclohexane-1,2-dicarboxylic anhydride	14166-21-3	
VIII	101	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	0.050
VIII	102	Dibutyltin dichloride (DBTC)	683-18-1	0.050
VIII	103	Diethyl sulphate	64-67-5	0.050
VIII	104	Diisopentylphthalate	605-50-5	0.050
VIII	105	Dimethyl sulphate	77-78-1	0.050
VIII	106	Dinoseb	88-85-7	0.050
VIII	107	Dioxobis(stearato)trilead*	12578-12-0	0.005
VIII	108	Fatty acids, C16-18, lead salts*	91031-62-8	0.005
VIII	109	Furan	110-00-9	0.050
VIII	110	Henicosafluoroundecanoic acid	2058-94-8	0.050
VIII	111	Heptacosafluorotetradecanoic acid	376-06-7	0.050
VIII	112	Hexahydromethylphathalic anhydride,	$\stackrel{\leftarrow}{\sim}$	0.050
		Hexahydro-4-methylphathalic anhydride,		
		Hexahydro-1-methylphathalic anhydride,		
		Hexahydro-3-methylphathalic anhydride		
VIII	113	Lead bis(tetrafluoroborate)*	13814-96-5	0.005
VIII	114	Lead cyanamidate*	20837-86-9	0.005
VIII	115	Lead dinitrate*	10099-74-8	0.005
VIII	116	Lead monoxide*	1317-36-8	0.005
VIII	117	Lead oxide sulfate*	12036-76-9	0.005
VIII	118	Lead tetroxide (orange lead)*	1314-41-6	0.005
VIII	119	Lead titanium trioxide*	12060-00-3	0.005
VIII	120	Lead titanium zirconium oxide*	12626-81-2	0.005
VIII	121	Methoxyacetic acid	625-45-6	0.050
VIII	122	Methyloxirane (Propylene oxide)	75-56-9	0.050
VIII	123	N,N-dimethylformamide	68-12-2	0.050
VIII	124	N-Methylacetamide	79-16-3	0.050
VIII	125	N-Pentyl-isopentylphthalate	776297-69-9	0.050
VIII	126	o-Aminoazotoluene	97-56-3	0.050

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Full list of tested SVHC:

Batch	No.	Substance Name	CAS No.	RL (%)
VIII	127	o-Toluidine	95-53-4	0.050
VIII	128	Pentacosafluorotridecanoic acid	72629-94-8	0.050
VIII	129	Pentalead tetraoxide sulphate*	12065-90-6	0.005
VIII	130	Pyrochlore, antimony lead yellow*	8012-00-8	0.005
VIII	131	Silicic acid, barium salt, lead-doped*	68784-75-8	0.005
VIII	132	Silicic acid, lead salt*	11120-22-2	0.005
VIII	133	Sulfurous acid, lead salt, dibasic*	62229-08-7	0.005
VIII	134	Tetraethyllead*	78-00-2	0.005
VIII	135	Tetralead trioxide sulphate*	12202-17-4	0.005
VIII	136	Tricosafluorododecanoic acid	307-55-1	0.050
VIII	137	Trilead bis(carbonate)dihydroxide (basic lead carbonate)*	1319-46-6	0.005
VIII	138	Trilead dioxide phosphonate*	12141-20-7	0.005
IX	139	4-Nonylphenol, branched and linear, ethoxylated	-	0.050
IX	140	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	0.050
IX	141	Cadmium oxide*	1306-19-0	0.005
IX	142	Cadmium*	7440-43-9	0.005
IX	143	Dipentyl phthalate (DPP)	131-18-0	0.050
IX	144	Pentadecafluorooctanoic acid (PFOA)	335-67-1	0.050
Χ	145	Cadmium sulphide*	1306-23-6	0.005
Χ	146	Dihexyl phthalate	84-75-3	0.050
Χ	147	Disodium 3,3'-	573-58-0	0.050
		[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-su lphonate) (C.I. Direct Red 28)		
Χ	148	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo]	1937-37-7	0.050
		[1,1'-biphenyl]-4-yl]azo] -5-hydroxy-6-		
		(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)		
Χ	149	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7	0.050
Χ	150	Lead di(acetate)*	301-04-2	0.005
Χ	151	Trixylyl phosphate	25155-23-1	0.050
ΧI	152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	0.050

******* To be continued*******



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Full list of tested SVHC:

Batch	No.	Substance Name	CAS No.	RL (%)
ΧI	153	Cadmium chloride*	10108-64-2	0.005
ΧI	154	Sodium perborate; perboric acid, sodium salt*	-	0.005
ΧI	155	Sodium peroxometaborate*	7632-04-4	0.005
XII	156	2-(2H-Benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	0.050
XII	157	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	0.050
XII	158	2-Ethylhexyl	15571-58-1	0.050
		10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradeca noate; DOTE		
XII	159	Reaction mass of 2-ethylhexyl	-	0.050
		10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradeca noate & 2-ethylhexyl 10-ethyl-4-[[2-		
		[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-di thia-4-stannatetradecanoate (reaction mass of DOTE &		
		MOTE)		
XII	160	Cadmium fluoride*	7790-79-6	0.005
XII	161	Cadmium sulphate*	10124-36-4,	0.005
			31119-53-6	
XIII	162	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters;	68515-51-5,	0.050
		1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate	68648-93-1	
XIII	163	5-sec-butyl-2-	-	0.050
		(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]		
XIV	164	1,3-propanesultone	1120-71-4	0.050
XIV	165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	0.050
XIV	166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	0.050
XIV	167	Nitrobenzene	98-95-3	0.050
XIV	168	Perfluorononan-1-oic-acid and its sodium and ammonium	375-95-1, 21049-39-8,	
		salts	4149-60-4	
XV	169	Benzo[def]chrysene (Benzo[a]pyrene) ********* To be continued*********	50-32-8	0.050



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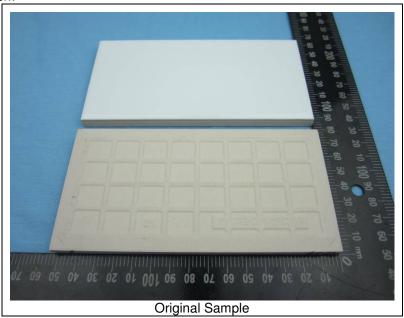


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Specimen photograph:





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