

TEST REPORT

No. : XMCCM150600684

Date : Aug.03, 2015

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LANLING JINZHAO NEW MATERIAL CO., LTD

LINYI CITY SHANDONG PROVINCE LANLING COUNTRY ECONOMIC DEVELOPMENT ZONE YINGBIN AVENUE.

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

Sample Name : HE FENG QUARTZ STONE

SGS Refer No. : QDHG1506002508BM

Trade Mark : 

Intended use : Internal flooring and stairs

Test required : EN 15285:2008 Agglomerated stone – Modular tiles for flooring and stairs (internal)

Date of receipt : Jun.26, 2015

Test period : Jun.26, 2015 to Jul.29, 2015

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

Note: Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



SGS-CSTC Standards Technical Services Co., Ltd.
Xiamen Branch Testing Center Materials Laboratory

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Summary of test results:

Clause	Test items	Test methods	Test results	Page
1	Water absorption	EN 14617-1:2013	0.01 % Classification: W ₄	3
	Apparent density		2420 kg/m ³	
2	Flexural strength	EN 14617-2:2008	42.2 MPa Classification: F ₄	3
3	Thermal shock resistance	EN 14617-6:2012	Mass loss:0.02% Flexural strength after thermal shock: 42.7 MPa Flexural strength loss: -1.2%	4
4	Slip resistance (polished)	EN 14231:2003	SRV "dry": 74 SRV "wet": 13	5
5	Abrasion resistance (polished)	EN 14617-4:2012	24.1 mm Classification: A ₄	5
6	Impact resistance	EN 14617-9:2005	3.99 J	6
7	Chemical resistance	EN 14617-10:2012	Classification: C ₄	7
8	Linear thermal expansion coefficient	EN 14617-11:2005	22.3×10 ⁻⁶ /°C	8
9	Dimensional stability	EN 14617-12:2012	Class: A Vertical displacement: 0.01mm	8
10	Dimensions, geometric characteristics and surface quality	EN 14617-16:2005	Tolerance: see the following Surface quality: No defects	9
11	Release of danger substances (SVHC 163 substances)	SGS In-House method	≤0.1%(w/w) Not detected	10

Note: Release of danger substances(SVHC 161 substances) was carried out by a SGS laboratory.

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



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1. Apparent density and water absorption

Test Method:

EN 14617-1:2013 Agglomerated stone - Test methods - Part 1: Determination of apparent density and water absorption

Specimens: Agglomerated stone, 100mm×100mm×18mm, 6pcs, polished faces

Test Result:

Specimens identification No.	1	2	3	4	5	6
Water absorption (%)	0.01	0.02	0.01	0.01	0.01	0.01
Arithmetic mean of the water absorption (%)	0.01					
Apparent density (kg/m ³)	2420	2420	2420	2420	2420	2420
Arithmetic mean of the apparent density (kg/m ³)	2420					

Classification according to EN 15285:2008: W₄^{note}

Note: W₁>2.0%, 2.0%≥W₂>0.5%, 0.5%≥W₃>0.05%, W₄≤0.05%

2. Flexural Strength

Test Method:

EN 14617-2:2008 Agglomerated stone - Test methods - Part 2: Determination of flexural strength (bending)

Specimens: Agglomerated stone, 200mm×50mm×18mm, 6pcs, polished faces

Loading rate: (0.25±0.05)MPa/s

Test Result:

Specimens identification No.	1	2	3	4	5	6
Flexural strength (MPa)	42.5	42.2	40.7	41.7	43.1	43.0
Mean value (MPa)	42.2					
Standard deviation (MPa)	0.9					
Lower expected value (MPa)	40.1					

Classification according to EN 15285:2008: F₄^{note}

Note: F₁<12.0MPa, 12.0MPa≤F₂<25.0MPa, 25.0MPa≤F₃<40.0MPa, F₄≥40.0MPa

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



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3. Thermal shock resistance

Test Method:

EN 14617-6:2012 Agglomerated stone – Test methods – Part 6: Determination of thermal shock resistance

Specimens: Agglomerated stone, 200mm×50mm×18mm, 6pcs, polished faces

Test Result:

After 20 cycles of thermal shock:

For each specimen, there is no obvious change of colour, no obvious appearance of spots, no obvious swelling, no obvious cracking, no obvious scaling or exfoliation.

The change in mass:

Specimens identification NO.	1	2	3	4	5	6
Mass loss (%)	0.02	0.02	0.02	0.02	0.02	0.03
Mean mass loss (%)	0.02					

The flexural strength after 20 cycles thermal shock resistance: (Loading rate: (0.25±0.05) MPa/s)

Specimens identification No.	1	2	3	4	5	6
Flexural strength (MPa)	42.4	40.2	40.7	46.1	42.1	44.5
Mean value (MPa)	42.7					
Standard deviation (MPa)	2.3					
Lower expected value (MPa)	37.7					

The change in flexural strength: -1.2%

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



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4. Slip resistance

Test Method:

EN 14231:2003 Natural stone test methods - Determination of the slip resistance by means of the pendulum tester

Specimens: Agglomerated stone, 200mm×150mm×18mm, 6pcs, polished faces

Testing surface: polished

Test Result:

Specimens identification No.	1	2	3	4	5	6
Mean pendulum value (Dry condition)	74	74	74	74	73	73
Slip resistance value (SRV "dry")	74					
Mean pendulum value (Wet condition)	13	12	13	12	14	12
Slip resistance value (SRV "wet")	13					

5. Abrasion resistance

Test Method:

EN 14617-4:2012 Agglomerated stone - Test methods - Part 4: Determination of abrasion resistance

Specimens: Agglomerated stone, 150mm×100mm×18mm, 6pcs, polished faces

Testing surface: polished

Test Result:

Specimens identification No.	1	2	3	4	5	6
The length of the groove (mm)	24.0	23.5	24.5	24.0	24.0	24.5
Mean value (mm)	24.1					

Classification according to EN 15285:2008: A₄^{note}

Note: A₁>36.5mm, 36.5mm≥A₂>33.0mm, 33.0mm≥A₃>29.0mm, A₄≤29.0mm.

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



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6. Impact resistance

Test Method:

EN 14617-9:2005 Agglomerated stone - Test methods - Part 9: Determination of impact resistance

Specimens: Agglomerated stone, 200mm×200mm×18mm, 4pcs, one face polished

Testing surface: polished

Test Result:

Specimens identification No.	1	2	3	4
Drop height, h (m)	0.40	0.40	0.35	0.40
Fracture work, L (J)	4.12	4.12	3.60	4.12
Average value (J)	3.99			

Note:

The fracture work L in joule is expressed by the formula

$$L = M \times h \times g$$

Where

M is the sphere mass, 1.050kg,

h is the drop height in meters of the sphere which causes the sample to break,

g is the gravity acceleration equal to 9.806m/s^2 .

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



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7. Chemical resistance

Test Method:

EN 14617-10:2012 Agglomerated stone - Test methods - Part 10: Determination of chemical resistance

Specimens: Agglomerated stone, 200mm×200mm×30mm, 4pcs, polished faces

Water solutions preparation:

- 1) Hydrochloric acid solution, 50% (V/V), prepared from N hydrochloric acid solution
- 2) Sodium hydroxide solution, 50% (V/V), prepared from a normal water sodium hydroxide non-carbonated solution

Type of glossmeter used and the kind and intensity of the light source: Sheen 260, CIE D65

Reflection direction of the light: 60°

Test Result:

Chemical resistance	Sample NO.	Reference value	Classification
Hydrochloric acid solution (HCl)	1 (1h)	88.6%	C ₄ ^{note}
	2 (8h)	97.0%	
Sodium hydroxide solution (NaOH)	3 (1h)	84.6%	
	4 (8h)	80.0%	

Note:

C₁: Agglomerated stones which keep less than 60 % of the reference reflection values (see EN 14617-10) after 1 h ± 30 min of alkali and acid attack.

C₂: Agglomerated stones which keep between 60 % and 80 % of the reference reflection value (see EN 14617-10) after 1 h ± 30 min of alkali and acid attack.

C₃: Agglomerated stones which keep between 60 % and 80 % of the reference reflection value (see EN 14617-10) after 8 h ± 30 min of alkali and acid attack.

C₄: Agglomerated stones which keep at least 80 % of the reference reflection value (see EN 14617-10) after 8 h ± 30 min of acid and alkali attack (or if only in one specimen the attack is between 60 % and 80 %, see EN 14617-10).

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



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8. Linear thermal expansion coefficient

Test Method:

EN 14617-11:2005 Agglomerated stone - Test methods - Part 11: Determination of linear thermal expansion coefficient

Specimens: Agglomerated stone, 50mm×18mm×10mm, 3pcs, polished faces

Heating rate: 3℃/min

Test Result:

Temperature: range from 30℃ to 60℃.

Specimens identification No.	1	2	3
Linear thermal expansion coefficient ($10^{-6}/^{\circ}\text{C}$)	22.5	22.0	22.3
Mean value($10^{-6}/^{\circ}\text{C}$)	22.3		

9. Dimensional stability

Test Method:

EN 14617-12:2012 Agglomerated stone - Test methods - Part 12: Determination of dimensional stability

Specimens: Agglomerated stone, 300mm×300mm×18mm, 1pcs, polished faces

Test Result:

Vertical displacement: 0.01mm.

Classification: Class A^{note}

Note:

Vertical displacement after the test

Class A: ≤ 0.3 mm

Class B: > 0.3 mm and ≤ 0.6 mm

Class C: > 0.6 mm

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10. Dimensions, geometric characteristics and surface quality

Test Method:

EN 14617-16:2005 Agglomerated stone - Test methods - Part 16: Determination of dimensions, geometric characteristics and surface quality of modular tiles

Specimens: Agglomerated stone, 200mm×200mm×18mm, 10pcs, polished faces

Test Result:

Work size: 200mm×200mm×18mm

Test items		Requirements: EN 15285:2008	Test results
Length	Average dimension of 10 test specimens	200± 0.5 mm	199.88 mm
	Deviation, as a percentage, of the average size of each tile from work size	/	-0.14%~+0.03%
Thickness	Average thickness of 10 test specimens	18± 0.7 mm	17.65 mm
	The deviation, as a percentage, of the average thickness of each tile from the work size thickness	/	-3.11%~-0.28%
Straightness	Maximum deviation from straightness	± 0.3 mm	-0.06 mm~+0.07 mm
Rectangularity	Maximum deviation from rectangularity	± 0.9 mm	-0.36 mm~+0.42 mm
Flatness	Maximum centre curvature, as a percentage, related to the length	± 2 % referred to length	-0.06%~+0.03%
	Maximum edge curvature, as a percentage, related to the length	± 2 % referred to length	-0.05%~+0.04%
	Maximum warping, as a percentage, related to the length	± 2 % referred to length	-0.06%~+0.06%
Surface quality	Any visual variations are permissible provided that they are characteristic of the relevant type of agglomerated stone and provided that they do not adversely affect the performance of the tiles.	/	No defects

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



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11. Release of danger substances (SVHC 163 substances)

Test Requested:

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

- (i) One hundred and sixty one (163) substances in the Candidate List of Substances of Very High Concern (SVHC) for authorization published by European Chemicals Agency (ECHA) on and before Dec 17, 2014 regarding Regulation (EC) No 1907/2006 concerning the REACH.
- (ii) Two (2) substances in the Public Consultation List of potential Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) on March 02, 2015 regarding Regulation (EC) No 1907/2006 concerning the REACH..

Summary:

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

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 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

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



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(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; 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 $\geq 1\%$ by weight for mixtures that are solid or liquids (i.e., non-gaseous mixtures) or $\geq 0.2\%$ by volume for gaseous mixtures; or

(b) a substance that is PBT, or vPvB in an individual concentration of $\geq 0.1\%$ 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 $\geq 0.1\%$ 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.

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



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Test Sample:

Sample Description: Agglomerated stone

Test Method:

SGS In-House method- GZTC CHEM-TOP-092-01, GZTC CHEM-TOP-092-02, Analyzed by ICP-OES, UV-VIS, GC-MS, HPLC-DAD/MS and Colorimetric Method.

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 (%)
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	Cobalt dichloride*	7646-79-9	0.005
I	9	Diarsenic pentaoxide*	1303-28-2	0.005
I	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 diastereoisomers identified (α -HBCDD, β -HBCDD, γ -HBCDD) Δ	25637-99-4, 3194- 55-6	0.050
I	13	Lead hydrogen arsenate*	7784-40-9	0.005
I	14	Sodium dichromate*	7789-12-0, 10588-01-9	0.005
I	15	Triethyl arsenate*	15606-95-8	0.005
II	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
II	21	Anthracene oil, anthracene paste, distn. lights*	91995-17-4	0.050
II	22	Anthracene oil, anthracene-low*	90640-82-7	0.050
II	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
II	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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Full list of tested SVHC:

Batch	No.	Substance Name	CAS No.	RL (%)
II	28	Tris(2-chloroethyl)phosphate	115-96-8	0.050
III	29	Ammonium dichromate*	7789-09-5	0.005
III	30	Boric acid*	10043-35-3,	0.005
			11113-50-1	
III	31	Disodium tetraborate, anhydrous*	1303-96-4,	0.005
			1330-43-4,	
			12179-04-3	
III	32	Potassium chromate*	7789-00-6	0.005
III	33	Potassium dichromate*	7778-50-9	0.005
III	34	Sodium chromate*	7775-11-3	0.005
III	35	Tetraboron disodium heptaoxide, hydrate*	12267-73-1	0.005
III	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, C7-rich	71888-89-6	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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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 no.)	0.005
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-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)§	2580-56-5	0.050
VII	73	[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)§	548-62-9	0.050
VII	74	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	0.050
VII	75	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	0.050
VII	76	4,4'-bis(dimethylamino) benzophenone (Michler's Ketone)	90-94-8	0.050

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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 (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)	2451-62-9	0.050
VII	83	α,α-Bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) §	6786-83-0	0.050
VII	84	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	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
VIII	100	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

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Appendix

Full list of tested SVHC:

Batch	No.	Substance Name	CAS No.	RL (%)
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	Henicosafuoroundecanoic acid	2058-94-8	0.050
VIII	111	Heptacosafuorotetradecanoic acid	376-06-7	0.050
VIII	112	Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride	☆	0.050
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
VIII	127	o-Toluidine	95-53-4	0.050
VIII	128	Pentacosafuorotridecanoic acid	72629-94-8	0.050

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Full list of tested SVHC:

Batch	No.	Substance Name	CAS No.	RL (%)
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	Tricosafuorododecanoic 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
X	145	Cadmium sulphide*	1306-23-6	0.005
X	146	Dihexyl phthalate	84-75-3	0.050
X	147	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	0.050
X	148	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	0.050
X	149	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7	0.050
X	150	Lead di(acetate)*	301-04-2	0.005
X	151	Trixylyl phosphate	25155-23-1	0.050
XI	152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	0.050
XI	153	Cadmium chloride*	10108-64-2	0.005
XI	154	Sodium perborate; perboric acid, sodium salt*	-	0.005

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Full list of tested SVHC:

Batch	No.	Substance Name	CAS No.	RL (%)
XI	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 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate; DOTE	15571-58-1	0.050
XII	159	Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate & 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 & MOTE)	-	0.050
XII	160	Cadmium fluoride*	7790-79-6	0.005
XII	161	Cadmium sulphate*	10124-36-4, 31119-53-6	0.005
XIII	162	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate	68515-51-5, 68648-93-1	0.050
XIII	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]	-	0.050

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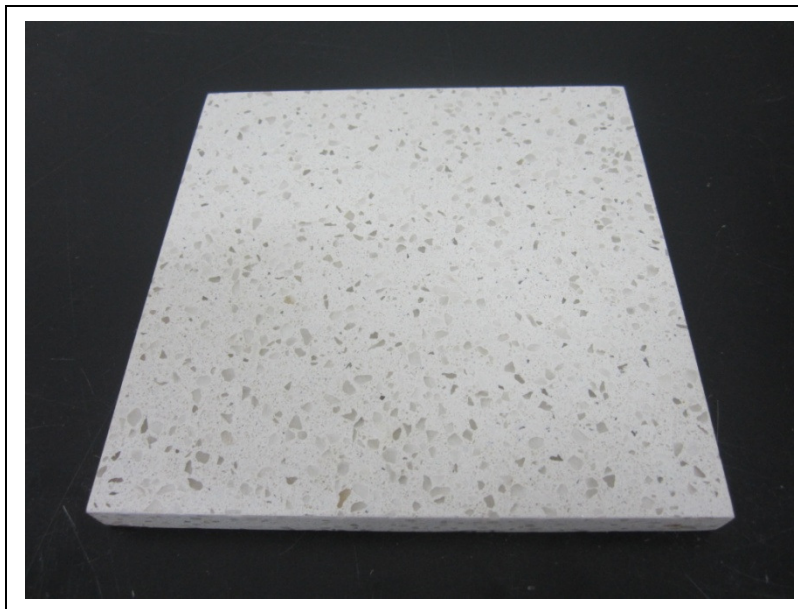
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