

Test Report

YANTAI E.S.T SILICONE TECH CO., LTD. 89 HUANHAI ROAD YANTAI CITY SHANDONG CHINA				
The following sample(s	s) was/were submitted and identified by/on behalf of the client as: SILICONE ER	GASKET		
SGS Ref No.	: 1024602			
Sample Receiving Date Testing Period	e : April 12, 2010 : April 12 to April 23, 2010			
Test Requested	: As requested by client, SVHC screening is performed according to: (1) Thirty (30) substances in the Candidate List of Substances of Very H (SVHC) for authorization published by European Chemicals Agency (EC March 30, 2010 regarding Regulation (EC) No 1907/2006 concerning the (2) Eight (8) potential SVHC in the public consultation list published by E March 08, 2010.	igh Concern HA) on e REACH. CHA on		
Test Result(s)	: Please refer to next page(s).			
Summary	:			
A	According to the specified scope and analytical techniques, concentrations f tested SVHC are $\leq 0.1\%$ (w/w) in the submitted sample.	PASS		

Date: April 23, 2010

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No. TJTC 1020611/CHEM

Signed for and on behalf of SGS-CSTC Chemical Laboratory

ison-Lucid Qi Lab Manager

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Date: April 23, 2010

Test Sample:

Sample Description: blue rubber ring

Test Method:

SGS In-House method-RSTS-EE-SVHC-003, RSTS-EE-SVHC-004, Analyzed by ICP-OES, GC-MS, GC-ECD, IC, and UV-VIS

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: (A) http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp (B) http://echa.europa.eu/consultations/authorisation/svhc/svhc cons en.asp (C) http://echa.europa.eu/chem data/reg int tables/reg int curr int en.asp#current svhc These lists are under evaluation by ECHA and may subject to change in the future.
- In accordance with Regulation (EC) No 1907/2006, any EU producer or importer of articles shall notify 2. 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).
- 3. 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.
- 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.

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Test Results : (Substances in the Candidate List of SVHC published by European Chemicals Agency (ECHA) on March 30, 2010)

Substance Name	CAS number	EC number	Concentration (%)	RL(%)
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	287-476-5	ND	0.01
Anthracene	120-12-7	204-371-1	ND	0.005
5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	201-329-4	ND	0.005
Dibutyl phthalate (DBP)	84-74-2	201-557-4	ND	0.005
4,4-Diaminodiphenylmethane (MDA)	101-77-9	202-974-4	ND	0.005
Benzyl butyl phthalate (BBP)	85-68-7	201-622-7	ND	0.005
Bis (2-ethylhexylphthalate) (DEHP)	117-81-7	204-211-0	ND	0.005
Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α -HBCDD, β -HBCDD, γ -HBCDD) $^{\Delta}$	25637-99-4 3194-55-6	247-148-4 221-695-9	ND	0.005
Bis(tributyltin)oxide(TBTO)*	56-35-9	200-268-0	ND	0.005
Cobalt dichloride*	7646-79-9	231-589-4	ND	0.005
Diarsenic pentaoxide*	1303-28-2	215-116-9		
Diarsenic trioxide*	1327-53-3	215-481-4	ND	0.005
Triethyl arsenate*	15606-95-8	427-700-2		
Lead hydrogen arsenate*	7784-40-9	232-064-2	ND	0.005
Sodium dichromate*	7789-12-0 10588-01-9	234-190-3	ND	0.005
2,4-Dinitrotoluene	121-14-2	204-450-0	ND	0.005
Diisobutyl phthalate	84-69-5	201-553-2	ND	0.005
Tris(2-chloroethyl)phosphate	115-96-8	204-118-5	ND	0.005

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Anthracene oil ®	90640-80-5	292-602-7		
Anthracene oil, anthracene paste; distn. Lights [⊕]	91995-17-4	295-278-5	ND	0.050
Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	295-275-9		
Anthracene oil, anthracene-low $^{\oplus}$	90640-82-7	292-604-8		
Anthracene oil, anthracene paste $^{\oplus}$	90640-81-6	292-603-2		
Pitch, coal tar, high temp. $^\oplus$	65996-93-2	266-028-2		
Acrylamide	79-06-01	201-173-7	ND	0.005
Aluminosilicate Refractory Ceramic Fibres*	650-017-00-8 (Index no.)	-	ND	0.005
Zirconia Aluminosilicate Refractory Ceremic Fibres*	650-017-00-8 (Index no.)	-	שא	
Lead sulfochromate yellow (C.I. Pigment Yellow 34)*	1344-37-2	215-693-7	ND	0.005
Lead chromate*	7758-97-6	231-846-0		
Lead chromate molybdate sulfate red (C.I. Pigment Red 104)*	12656-85-8	235-759-9	ND	0.005

Test Results : (Substances in the Consultation List of potential SVHC)

Substance Name	CAS number	EC number	Concentration (%)	RL(%)
Ammonium dichromate*	7789-09-5	232-143-1	ND	0.005
Boric acid*	10043-35-3 11113-50-1	233-13-2 9234-343-4	ND	0.005
Disodium tetraborate, anhydrous*	1303-96-4 1330-43-4 12179-04-3	215-540-4	ND	0.005
Tetraboron disodium heptaoxide, hydrate*	12267-73-1	235-541-3		
Potassium dichromate*	7778-50-9	231-906-6		0.005
Potassium chromate*	7789-00-6	232-140-5		
Sodium chromate*	7775-11-3	231-889-5	ND	0.005
Trichloroethylene	79-01-6	201-167-4	ND	0.005

This test was subcontracted to SGS Shanghai chemical lab.

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Notes:

- 1. RL = Reporting Limit. All RL are based on homogenous material
- ND = Not detected (lower than Reporting Limit)

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- 2. ^ΔCAS No. of diastereoisomers identified (α-HBCDD, β-HBCDD, γ-HBCDD): 134237-50-6, 134237-51-7, 134237-52-8
- 3. * Calculated concentration of cobalt dichloride is based on the identified cobalt by ICP-OES and the identified chloride by IC method.

Calculated concentration of diarsenic pentaoxide, diarsenic trioxide, lead hydrogen arsenate and triethyl arsenate are based on the identified arsenic and lead by ICP-OES.

Calculated concentrations of sodium dichromate is based on the identified sodium by ICP-OES and the identified chromium(VI) by UV-Vis.

Calculated concentration of bis(tributyltin)oxide TBTO is based on the identified tin by ICP-OES, TLC and GC-MS.

Calculated concentration of lead chromate, lead chromate molybdate sulfate red and lead sulfochromate yellow are based on the identified lead, chromium and molybdenum by ICP-OES.

Calculated concentration of aluminosilicate refractory ceramic fibres and zirconia aluminosilicate refractory ceremic fibres are based on the identified silicon, aluminum and zirconium by ICP-OES and confirmation by microscope.

Calculated concentration of ammonium dichromate is based on the identified chromium(VI) by UV-Vis.

Calculated concentration of boric acid is based on the identified boron by ICP-OES.

Calculated concentration of disodium tetraborate, anhydrous and tetraboron disodium heptaoxide, hydrate are based on the identified sodium and boron by ICP-OES

Calculated concentrations of potassium chromate and potassium dichromate are based on the identified potassium by ICP-OES and the identified chromium(VI) by UV-Vis.

Calculated concentrations of sodium chromate is based on the identified sodium by ICP-OES and the identified chromium(VI) by UV-Vis.

The client is advised to review the chemical formulation to ascertain above substances present in the sample.

RL = 0.005% is evaluated for element (i.e. tin, cobalt, chloride, arsenic, lead, sodium, chromium, chromium (VI), silicon, aluminum, zirconium, boron and potassium respectively), except molybdenum RL= 0.0005%.

4. ^(e) The SVHC consists of a diverse combination of chemical compounds fulfilling the definition of UVCB (substances of Unknown or Variable composition, Complex reaction products or Biological materials) under REACH regulation. Test result is calculated as per selected identifiers of the SVHC. The values are determined based on a reference anthracene oil and coal tar. Calculation is based on the worst-case scenario. Due to the UVCB nature the reported values may be regarded as semi-quantitative.

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Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***



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