

ROGERS CORPORATION  
171 WEST SAINT CHARLES ROAD, CAROL STREAM, ILLINOIS 60188 USA

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

Sample Description : HT 870 BLACK  
Material Component : SILICONE BASE MATERIAL  
Color : BLACK  
Sample Receiving Date : 2011/12/09  
Testing Period : 2011/12/09 TO 2011/12/14  
Sample Submitted By : ROGERS CORPORATION

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**Test Result(s)** : Please refer to next page(s).

*Ray Chang*

**Ray Chang / Asst. Manager  
Signed for and on behalf of  
SGS Taiwan Limited**



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### Test Result(s)

PART NAME NO.1 : BLACK SILICONE BASE MATERIAL

Test Item (s):	Unit	Method	MDL	Result
				No.1
Cadmium (Cd)	mg/kg	With reference to IEC 62321: 2008 and performed by ICP-AES.	2	n.d.
Lead (Pb)	mg/kg	With reference to IEC 62321: 2008 and performed by ICP-AES.	2	n.d.
Mercury (Hg)	mg/kg	With reference to IEC 62321: 2008 and performed by ICP-AES.	2	n.d.
Hexavalent Chromium Cr(VI) by alkaline extraction	mg/kg	With reference to IEC 62321: 2008 and performed by UV-VIS.	2	n.d.
<b>Sum of PBBs</b>	mg/kg	With reference to IEC 62321: 2008 and performed by GC/MS.	-	n.d.
Monobromobiphenyl			5	n.d.
Dibromobiphenyl			5	n.d.
Tribromobiphenyl			5	n.d.
Tetrabromobiphenyl			5	n.d.
Pentabromobiphenyl			5	n.d.
Hexabromobiphenyl			5	n.d.
Heptabromobiphenyl			5	n.d.
Octabromobiphenyl			5	n.d.
Nonabromobiphenyl			5	n.d.
Decabromobiphenyl			5	n.d.
<b>Sum of PBDEs</b>			mg/kg	With reference to IEC 62321: 2008 and performed by GC/MS.
Monobromodiphenyl ether	5	n.d.		
Dibromodiphenyl ether	5	n.d.		
Tribromodiphenyl ether	5	n.d.		
Tetrabromodiphenyl ether	5	n.d.		
Pentabromodiphenyl ether	5	n.d.		
Hexabromodiphenyl ether	5	n.d.		
Heptabromodiphenyl ether	5	n.d.		
Octabromodiphenyl ether	5	n.d.		
Nonabromodiphenyl ether	5	n.d.		
Decabromodiphenyl ether	5	n.d.		

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Test Item (s):	Unit	Method	MDL	Result
				No.1
<b>Halogen</b>				
Halogen-Fluorine (F) (CAS No.: 014762-94-8)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC.	50	n.d.
Halogen-Chlorine (Cl) (CAS No.: 022537-15-1)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC.	50	n.d.
Halogen-Bromine (Br) (CAS No.: 010097-32-2)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC.	50	n.d.
Halogen-Iodine (I) (CAS No.: 014362-44-8)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC.	50	n.d.

- Note : 1. mg/kg = ppm ; 0.1wt% = 1000ppm  
2. n.d. = Not Detected  
3. MDL = Method Detection Limit  
4. "-" = Not Regulated

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- 1) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr<sup>6+</sup> test method excluded)
- 2) Name of the person who made measurement: Alex Chung
- 3) Name of the person in charge of measurement: Ray Chang



Sample Material	Digestion Acid
Steel, copper, aluminum, solder	Aqua regia, HNO <sub>3</sub> , HCl, HF, H <sub>2</sub> O <sub>2</sub>
Glass	HNO <sub>3</sub> /HF
Gold, platinum, palladium, ceramic	Aqua regia
Silver	HNO <sub>3</sub>
Plastic	H <sub>2</sub> SO <sub>4</sub> , H <sub>2</sub> O <sub>2</sub> , HNO <sub>3</sub> , HCl
Others	Any acid to total digestion

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## PBB/PBDE analytical FLOW CHART

- 1) Name of the person who made measurement: Anson Tsao
- 2) Name of the person in charge of measurement: Ray Chang



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## Analytical flow chart of halogen content

- 1) Name of the person who made measurement: Jean Hung
- 2) Name of the person in charge of measurement: Ray Chang

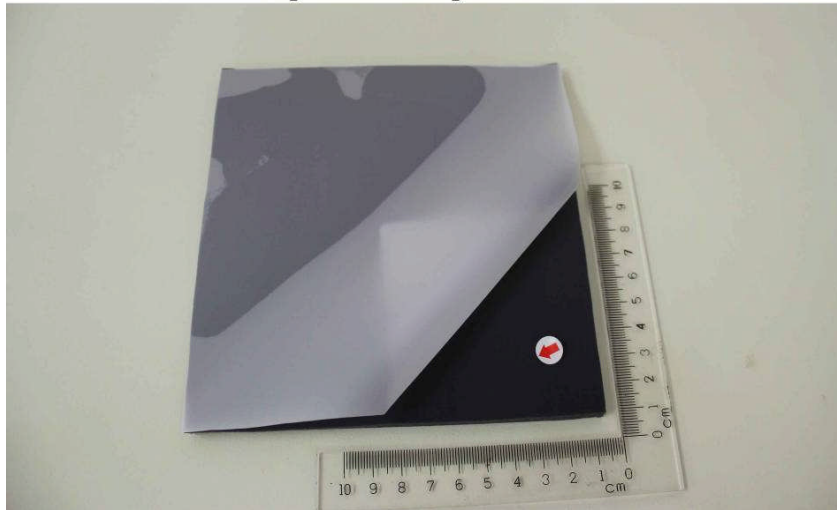


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\* The tested sample / part is marked by an arrow if it's shown on the photo. \*

### KE/2011/C1144



\*\* End of Report \*\*

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