

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 RED
Material Component : SILICONE BASE MATERIAL
Color : RED
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 : RED 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.
Sum of PBBs	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.
Sum of PBDEs			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
Halogen				
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. (Cr⁶⁺ 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 ₃ , HCl, HF, H ₂ O ₂
Glass	HNO ₃ /HF
Gold, platinum, palladium, ceramic	Aqua regia
Silver	HNO ₃
Plastic	H ₂ SO ₄ , H ₂ O ₂ , HNO ₃ , 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/C1145



** End of Report **

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