



# TEST REPORT

Applicant : Kumho Petrochemical  
Address : #45-25, Seongam-dong, Nam-gu,  
Ulsan, 680-140 Korea

Page: 1 of 4

Report No. RT09R-U1909-E

Date: Sep. 22, 2009

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Sample Description : The following submitted sample(s) said to be:-

Name/Type of Product : ABS HU650D  
Name of Material : ABS  
Sample ID No. : RT09R-U1909  
Manufacturer/Vender : Kumho Petrochemical

Sample received : Sep. 17, 2009  
Testing Date : Sep. 17, 2009 ~ Sep. 22, 2009  
Testing Laboratory : Intertek Testing Center  
Testing Environment : Temperature : ( 24 ± 2 ) °C, Humidity : ( 60 ± 5 ) % R.H.

Test Method(s) : Please see the following page(s).  
Test Result(s) : Please see the following page(s).

\* Note 1 : The test results presented in this report relate only to the object tested.

\* Note 2 : This report shall not be reproduced except in full without the written approval of the testing laboratory.

Approved by,

E.Y.Lee / Lab. Technical Manager

Authorized by,

H.W.Yoo / Lab. General Manager

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Intertek Testing Center

Seoul Office : Tel : 02-2109-1250 Fax : 02-2109-1259 Gumi Office : Tel : 054-462-7647 Fax : 054-462-7657 Web Site : [www.intertek.co.kr](http://www.intertek.co.kr)  
Seoul Lab. : #709, 7Fl, Ace Techno Tower V, 197-22, Guro-3Dong, Guro-Gu, Seoul 152-766 Korea Tel : 02-2109-1260 Fax : 02-2109-1258  
Ulsan Lab. : #340-2, Yongam-Ri, Chongryang-Myun, Ulju-Gun, Ulsan 689-865 Korea Tel : 052-257-6754 Fax : 052-276-6792



# TEST REPORT

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Date: Sep. 22, 2009

Report No. RT09R-U1909-E

Sample ID No. : RT09R-U1909

Sample Description : ABS HU650D

Test Items	Unit	Test Method	MDL	Results
Cadmium (Cd)	mg/kg	With reference to IEC 62321 Edition 1.0:2008, by acid digestion and determined by ICP-OES	0.5	N.D.
Lead (Pb)	mg/kg		5	N.D.
Mercury (Hg)	mg/kg		2	N.D.
Hexavalent Chromium (Cr <sup>6+</sup> ) (For non-metal)	mg/kg	With reference to IEC 62321 Edition 1.0:2008, by alkaline digestion and determined by UV-VIS Spectrophotometer	1	N.D.
<b>Polybrominated Biphenyl (PBBs)</b>				
Monobromobiphenyl	mg/kg	With reference to IEC 62321 Edition 1.0:2008, by solvent extraction and determined by GC/MS	5	N.D.
Dibromobiphenyl	mg/kg		5	N.D.
Tribromobiphenyl	mg/kg		5	N.D.
Tetrabromobiphenyl	mg/kg		5	N.D.
Pentabromobiphenyl	mg/kg		5	N.D.
Hexabromobiphenyl	mg/kg		5	N.D.
Heptabromobiphenyl	mg/kg		5	N.D.
Octabromobiphenyl	mg/kg		5	N.D.
Nonabromobiphenyl	mg/kg		5	N.D.
Decabromobiphenyl	mg/kg		5	N.D.
<b>Polybrominated Diphenyl Ether (PBDEs)</b>				
Monobromodiphenyl ether	mg/kg	With reference to IEC 62321 Edition 1.0:2008, by solvent extraction and determined by GC/MS	5	N.D.
Dibromodiphenyl ether	mg/kg		5	N.D.
Tribromodiphenyl ether	mg/kg		5	N.D.
Tetrabromodiphenyl ether	mg/kg		5	N.D.
Pentabromodiphenyl ether	mg/kg		5	N.D.
Hexabromodiphenyl ether	mg/kg		5	N.D.
Heptabromodiphenyl ether	mg/kg		5	N.D.
Octabromodiphenyl ether	mg/kg		5	N.D.
Nonabromodiphenyl ether	mg/kg		5	N.D.
Decabromodiphenyl ether	mg/kg		5	N.D.

Tested by : HJ Kim, HS Kim, WH Park

Notes : mg/kg = ppm = parts per million  
 < = Less than  
 N.D. = Not detected ( <MDL )  
 MDL = Method detection limit

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## TEST REPORT

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Date: Sep. 22, 2009

Report No. RT09R-U1909-E

Sample ID No. : RT09R-U1909

Sample Description : ABS HU650D

\* View of sample as received,-



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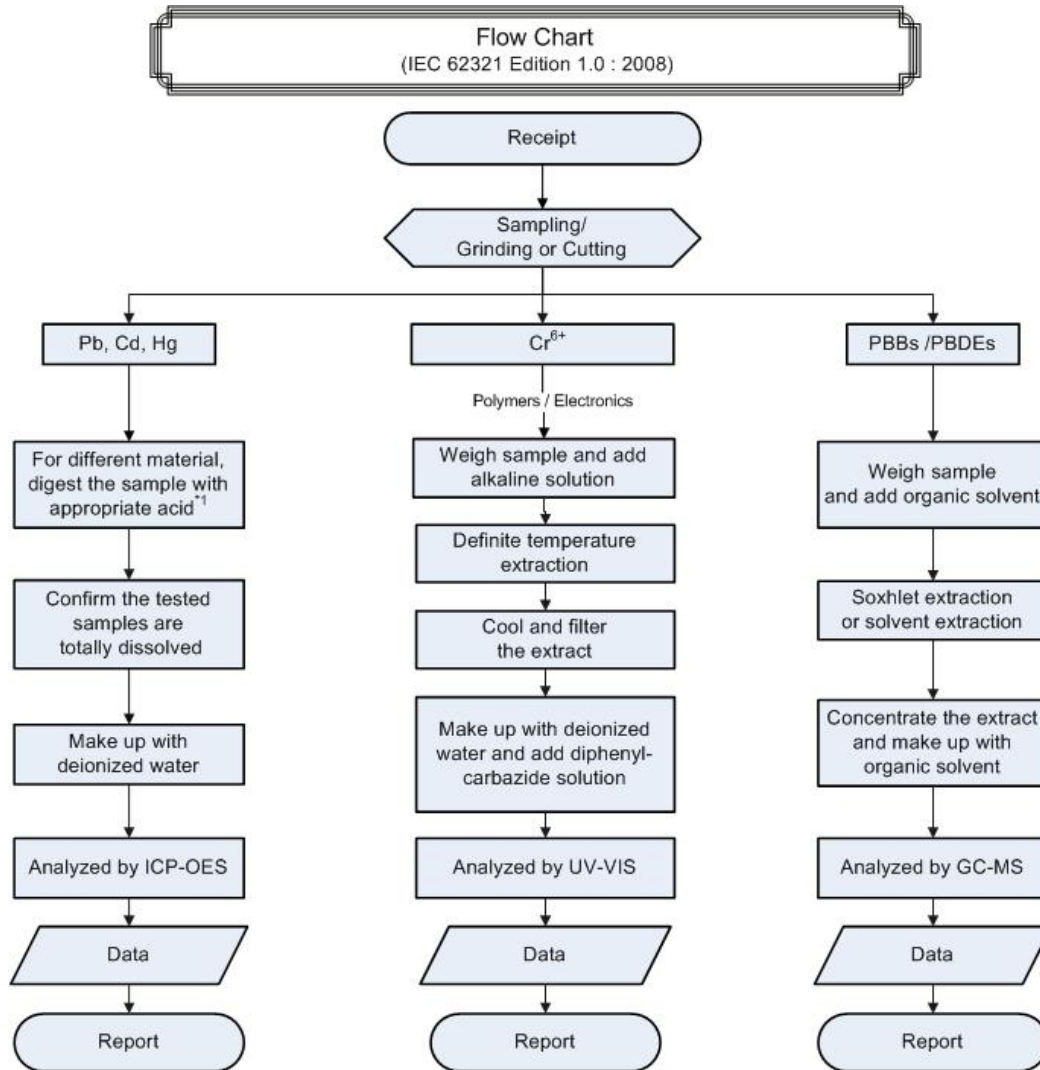
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Report No. RT09R-U1909-E

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Date: Sep. 22, 2009

Sample ID No. : RT09R-U1909

Sample Description : ABS HU650D



Remarks :

\*1 : List of appropriate acid :

Material	Acid added for digestion
Polymers	HNO <sub>3</sub> , HCl, HF, H <sub>2</sub> O <sub>2</sub> , H <sub>3</sub> BO <sub>3</sub>
Metals	HNO <sub>3</sub> , HCl, HF
Electronics	HNO <sub>3</sub> , HCl, H <sub>2</sub> O <sub>2</sub> , HBF <sub>4</sub>

\*\*\*\*\* End of Report \*\*\*\*\*

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