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## TEST REPORT

APPLICANT : Jeong Woo Chemical

BUYER

: SAMSUNG ELECTRONICS CO., LTD

KATRI NO :

: SPHA15-00000702

RECEIVED DATE : JUN. 10, 2015 ISSUED DATE : JUN. 16, 2015

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APPLICANT'S PROVIDED SAMPLE DESCRIPTION :

ONE(1) SAMPLE OF LIQUID

STYLE NO. : J-279A (Rust Preventative)

TEST ITEM	TEST RESULT
	#1
Heavy Metal Content (mg/kg) : KS C IEC 62321:2	<mark>2009</mark>
Cd Pb CrVI Hg Sb	< 5 < 10 < 2 < 1 < 1
* Detection Limit : Cd - 5 mg/kg, Pb - 10 mg	g/kg, C <mark>rVI - 2 mg/kg,</mark> Hg - 1 mg/kg
<pre><remark> 1. Sample Preparation : IEC 62321   2. Instrument</remark></pre>	Ed. 1.0 b : 2008

- Continues -

Leem, Seung yoon Director General





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TEST ITEM -	TEST RESULT	
	#1	
BBs (mg/kg) : KS C IEC 62321:2009		
PBBs		
Monobrominated biphenyl	< 1	
Dibrominated biphenyl	< 1	
Tribrominated biphenyl	< 1	
Tetrabrominated biphenyl	< 1	
Pentabrominated biphenyl	< 1	
Hexabrominated biphenyl	< 1	
Heptabrominated biphenyl	< 1	
Octabrominated biphenyl	< 5	
Nonabrominated biphenyl	< 5	
Decabrominated biphenyl	< 5	
* Note) 1. Sample Preparation : Test sample was	as extracted by organic solvent	
* Note) 1. Sample Preparation : Test sample was 2. Instrument : GC-MS  BDEs (mg/kg) : KS C IEC 62321:2009	as extracted by organic solvent	
2. Instrument : GC-MS BDEs (mg/kg) : KS C IEC 62321:2009	as extracted by organic solvent	
2. Instrument : GC-MS	as extracted by organic solvent  < 1	
2. Instrument : GC-MS  BDEs (mg/kg) : KS C IEC 62321:2009  PBDEs		
2. Instrument : GC-MS  BDEs (mg/kg) : KS C IEC 62321:2009  PBDEs  Monobromodiphenyl ether	< 1	
2. Instrument : GC-MS  BDEs (mg/kg) : KS C IEC 62321:2009  PBDEs  Monobromodiphenyl ether  Dibromodiphenyl ether  Tribromodiphenyl ether  Tetrabromodiphenyl ether	< 1 < 1 < 1 < 1 < 1	
2. Instrument : GC-MS  BDEs (mg/kg) : KS C IEC 62321:2009  PBDEs  Monobromodiphenyl ether  Dibromodiphenyl ether  Tribromodiphenyl ether  Tetrabromodiphenyl ether  Pentabromodiphenyl ether	< 1 < 1 < 1 < 1 < 1	
2. Instrument : GC-MS  BDEs (mg/kg) : KS C IEC 62321:2009  PBDEs  Monobromodiphenyl ether Dibromodiphenyl ether Tribromodiphenyl ether Tetrabromodiphenyl ether Pentabromodiphenyl ether Hexabromodiphenyl ether	< 1 < 1 < 1 < 1 < 1	
2. Instrument : GC-MS  BDEs (mg/kg) : KS C IEC 62321:2009  PBDEs  Monobromodiphenyl ether  Dibromodiphenyl ether  Tribromodiphenyl ether  Tetrabromodiphenyl ether  Pentabromodiphenyl ether  Hexabromodiphenyl ether  Heptabromodiphenyl ether	<pre> &lt; 1   &lt; 1</pre>	
2. Instrument : GC-MS  BDEs (mg/kg) : KS C IEC 62321:2009  PBDEs  Monobromodiphenyl ether  Dibromodiphenyl ether  Tribromodiphenyl ether  Tetrabromodiphenyl ether  Pentabromodiphenyl ether  Hexabromodiphenyl ether  Heptabromodiphenyl ether  Octabromodiphenyl ether	<pre> &lt; 1   &lt; 1</pre>	
2. Instrument : GC-MS  BDEs (mg/kg) : KS C IEC 62321:2009  PBDEs  Monobromodiphenyl ether Dibromodiphenyl ether Tribromodiphenyl ether Tetrabromodiphenyl ether Pentabromodiphenyl ether Hexabromodiphenyl ether Heptabromodiphenyl ether Octabromodiphenyl ether Nonabromodiphenyl ether	<pre> &lt; 1 &lt; 1</pre>	
2. Instrument : GC-MS  BDEs (mg/kg) : KS C IEC 62321:2009  PBDEs  Monobromodiphenyl ether  Dibromodiphenyl ether  Tribromodiphenyl ether  Tetrabromodiphenyl ether  Pentabromodiphenyl ether  Hexabromodiphenyl ether  Heptabromodiphenyl ether  Octabromodiphenyl ether	<pre> &lt; 1   &lt; 1</pre>	
2. Instrument : GC-MS  BDEs (mg/kg) : KS C IEC 62321:2009  PBDEs  Monobromodiphenyl ether Dibromodiphenyl ether Tribromodiphenyl ether Tetrabromodiphenyl ether Pentabromodiphenyl ether Hexabromodiphenyl ether Heptabromodiphenyl ether Octabromodiphenyl ether Nonabromodiphenyl ether	<pre> &lt; 1 &lt; 5 &lt; 5 &lt; 5 &lt; 5</pre>	

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TEST RESULT

#1

Halogen content (mg/kg): KS M 0180:2009

Chlorine(CI) < 50
Bromine(Br) < 50

<Remark> 1. Detection Limit: 50 mg/kg
2. Test Instrument: Combustion-Ion Chromatograph

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## IMAGE

#1



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