



# TEST REPORT

Applicant : Seoul Chemical Research Laboratory Co., Ltd.  
Address : #1Ma 605-5, Shiwha Comp. Jeongwang-dong,  
Siheung-si, Gyeonggi-do, Korea

Page: 1 of 7

Report No. RT17R-S3692-002-E

Date: Aug. 17, 2017

Sample Description : The following submitted sample(s) said to be:-  
  
Name/Type of Product : SPI-707G TC WITH SH-2  
Sample ID No. : RT17R-S3692-002  
Item No. : SPI-707G TC-2 WITH SH-2, SPI-707G TC-3 WITH SH-2,  
SPI-707G TC-4 WITH SH2, SPI-707G TC-5 WITH SH-2,  
SPI-707G TC-6 WITH SH-2, SPI-707G TC-7, SPI-707G MATT WITH SH-2,  
SPI-707G MATT(1) WITH SH-2, SPI-707G SEMIMATT WITH SH-2  
Manufacturer/Vendor : Seoul Chemical Research Laboratory Co., Ltd.  
  
Sample received : Aug. 10, 2017  
Testing Date : Aug. 10, 2017~ Aug. 17, 2017  
  
Test Type : RoHS wet chemical analysis  
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.
- \* Note 3 : The item no. is assigned by client and indicated according to their requirement and guarantee letter.

Approved by,

Authorized by,



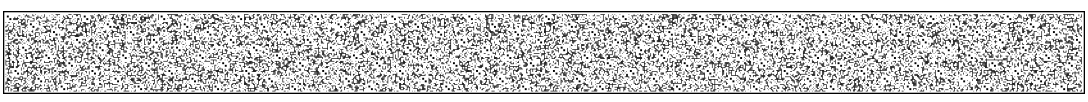
Authenticity check

Jade Jang / Lab. Technical Manager

Bo Park / Lab. General Manager

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Report No. RT17R-S3692-002-E

Sample ID No. : RT17R-S3692-002  
Sample Description : SPI-707G TC WITH SH-2

Test Item	Unit	Test Method	MDL	Result
Cadmium (Cd)	mg/kg	With reference to IEC 62321-5 Edition 1.0 : 2013, by acid digestion and determined by ICP-OES	0.5	N.D.
Lead (Pb)	mg/kg		5	N.D.
Mercury (Hg)	mg/kg	With reference to IEC 62321-4 Edition 1.0 : 2013, by acid digestion and determined by ICP-OES	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 62321-6 Edition 1.0 : 2015, 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 62321-6 Edition 1.0 : 2015, 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 : Jean Kim, Seulgi Park, Sujung Lee

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: Aug. 17, 2017

Report No. RT17R-S3692-002-E

Sample ID No. : RT17R-S3692-002  
Sample Description : SPI-707G TC WITH SH-2

Test Item	Unit	Test Method	MDL	Result
Arsenic (As)	mg/kg	With reference to US EPA 3052, by acid digestion and determined by ICP-OES	2	N.D.
Antimony (Sb)	mg/kg	With reference to US EPA 3052, by acid digestion and determined by ICP-OES	2	N.D.

Tested by : Jean Kim

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Sample ID No. : RT17R-S3692-002  
Sample Description : SPI-707G TC WITH SH-2

Test Item	CAS No.	Unit	Test Method	MDL	Result
Dibutyl phthalate (DBP)	84-74-2	mg/kg	With reference to IEC 62321-8 Edition 1.0 : 2017, by solvent extraction and determined by GC/MS	50	N.D.
Di(2-ethylhexyl) phthalate (DEHP)	117-81-7	mg/kg		50	N.D.
Benzyl butyl phthalate (BBP)	85-68-7	mg/kg		50	N.D.
Diisobutyl phthalate (DIBP)	84-69-5	mg/kg		50	N.D.

Tested by : Doohyun Chae

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\* View of sample as received;-



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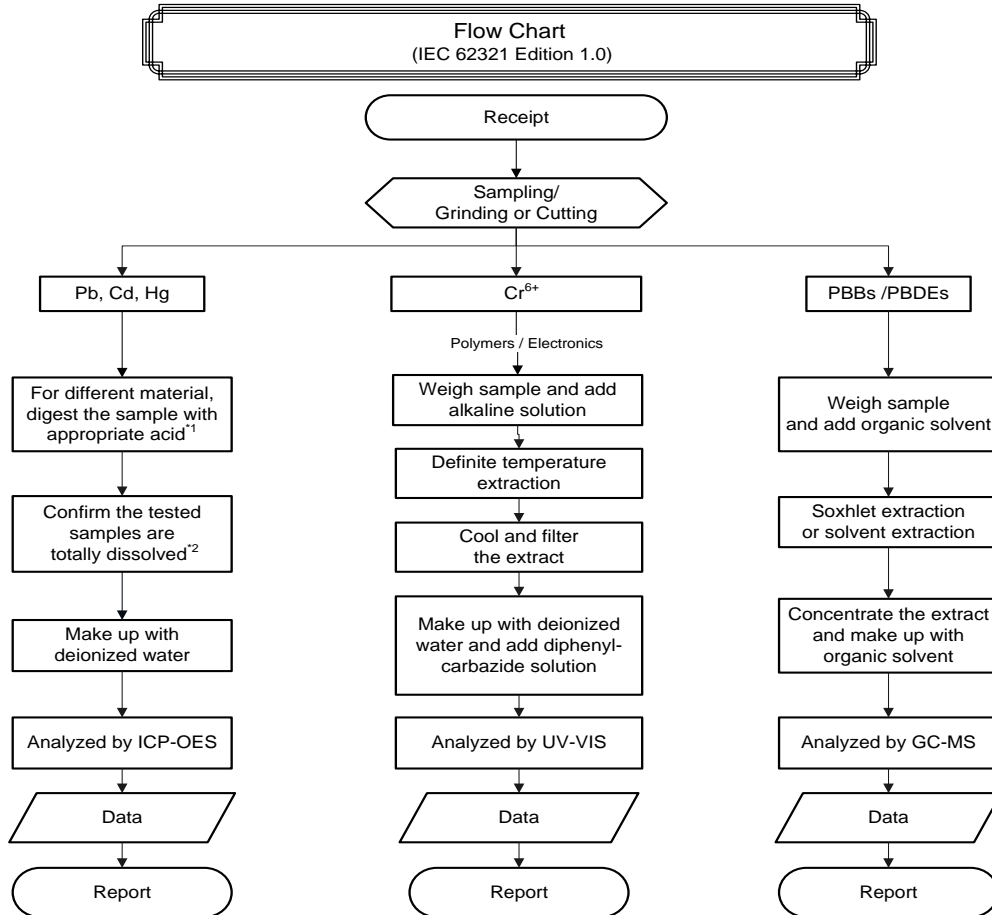


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Sample ID No. : RT17R-S3692-002  
Sample Description : SPI-707G TC WITH SH-2



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>

\*2 : The samples were dissolved totally by pre-conditioning method according to above flow chart.

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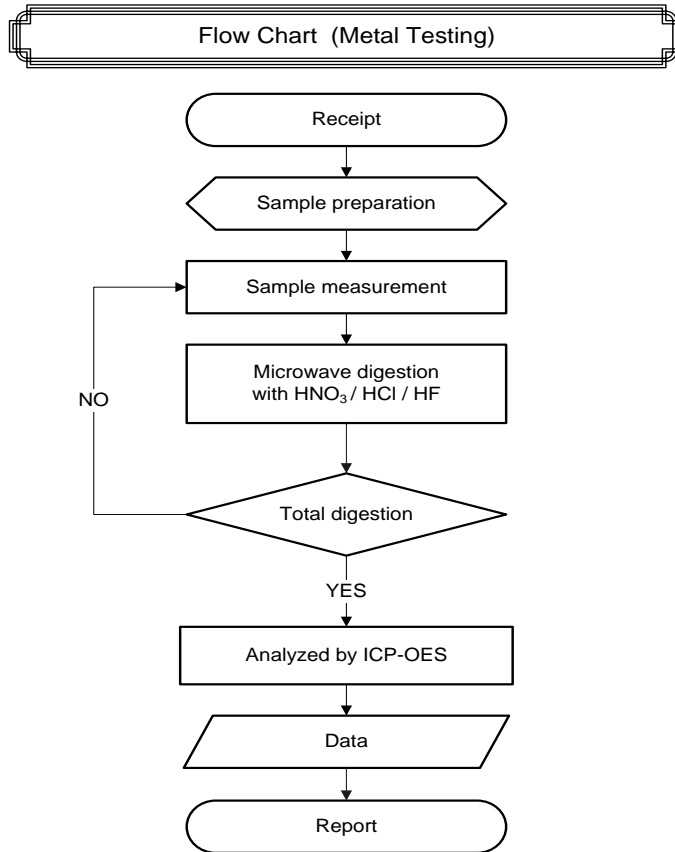
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\*\* Remarks : The samples were dissolved totally by pre-conditioning method according to above flow chart.

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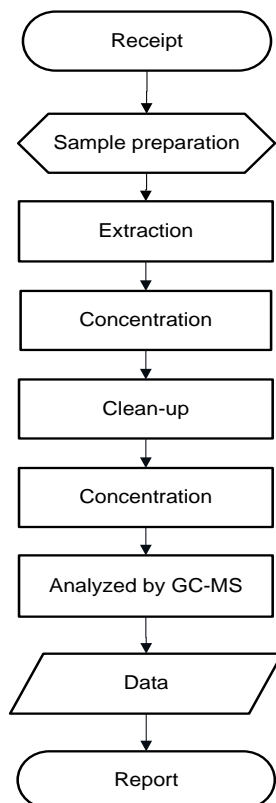
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## Flow Chart (Phthalates)



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

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