

## TEST REPORT

APPLICANT : Seoul Chemical Research Laboratory CO., LTD.  
ADDRESS : #1MA 605-5, Sihwa Comp. 63 Gongdan 2-daero  
Siheung-si, Gyeonggi-do, Korea

PAGE: 1 of 7

REPORT NO. RT21R-S4672-001-E

DATE: Jul. 28, 2021

SAMPLE DESCRIPTION : The following submitted sample(s) said to be:-

NAME/TYPE OF PRODUCT : SPI-707 BLACK KC WITH SH-2 KC

SAMPLE ID NO. : RT21R-S4672-001

ITEM NO. : SPI-707 BROWN WITH SH-2, SPI-707 MATT BLACK WITH SH-2,  
SPI-707 SEMI MATT BLACK KC WITH SH-2 KC,  
SPI-707 MATT BLACK KC WITH SH-2 KC,  
SPI-707 Y BROWN KC WITH SH-2 KC

MANUFACTURER/VENDOR : Seoul Chemical Research Laboratory CO., LTD.

SAMPLE RECEIVED : Jul. 20, 2021

TESTING DATE : Jul. 20, 2021 ~ Jul. 28, 2021

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 refer 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,



Jade Jang / Lab. Technical Manager

Authorized by,



Bo Park / Lab. General Manager



Authenticity check

Intertek Testing Services Korea Ltd.

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SAMPLE ID NO. : RT21R-S4672-001  
 SAMPLE DESCRIPTION : SPI-707 BLACK KC WITH SH-2 KC

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 : 2013/AMD1 : 2017, by acid digestion and determined by ICP-OES	2	N.D.
Hexavalent Chromium (Cr <sup>6+</sup> )	mg/kg	With reference to IEC 62321-7-2 Edition 1.0 : 2017, by alkaline/toluene digestion and determined by UV-VIS Spectrophotometer	8	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 : Jooyeon Lee, Chano Kim, Hayan 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

PAGE: 3 of 7  
DATE: Jul. 06, 2021

REPORT NO. RT21R-S4672-001-E

SAMPLE ID NO. : RT21R-S4672-001

SAMPLE DESCRIPTION : SPI-707 BLACK KC WITH SH-2 KC

TEST ITEM	UNIT	TEST METHOD	MDL	RESULT
Hexabromocyclododecane (HBCDD)	mg/kg	With reference to IEC 62321-9(111/409/CD), by solvent extraction and determined by LC/MS and GC/MS	10	N.D.

Tested by : Hayan Park

Notes : mg/kg = ppm = parts per million  
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PAGE: 4 of 7  
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REPORT NO. RT21R-S4672-001-E

SAMPLE ID NO. : RT21R-S4672-001  
SAMPLE DESCRIPTION : SPI-707 BLACK KC WITH SH-2 KC

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.
Diisobutyl phthalate (DIBP)	84-69-5	mg/kg		50	N.D.
Benzyl butyl phthalate (BBP)	85-68-7	mg/kg		50	N.D.

Tested by : Hayan Park

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\* View of sample as received;-



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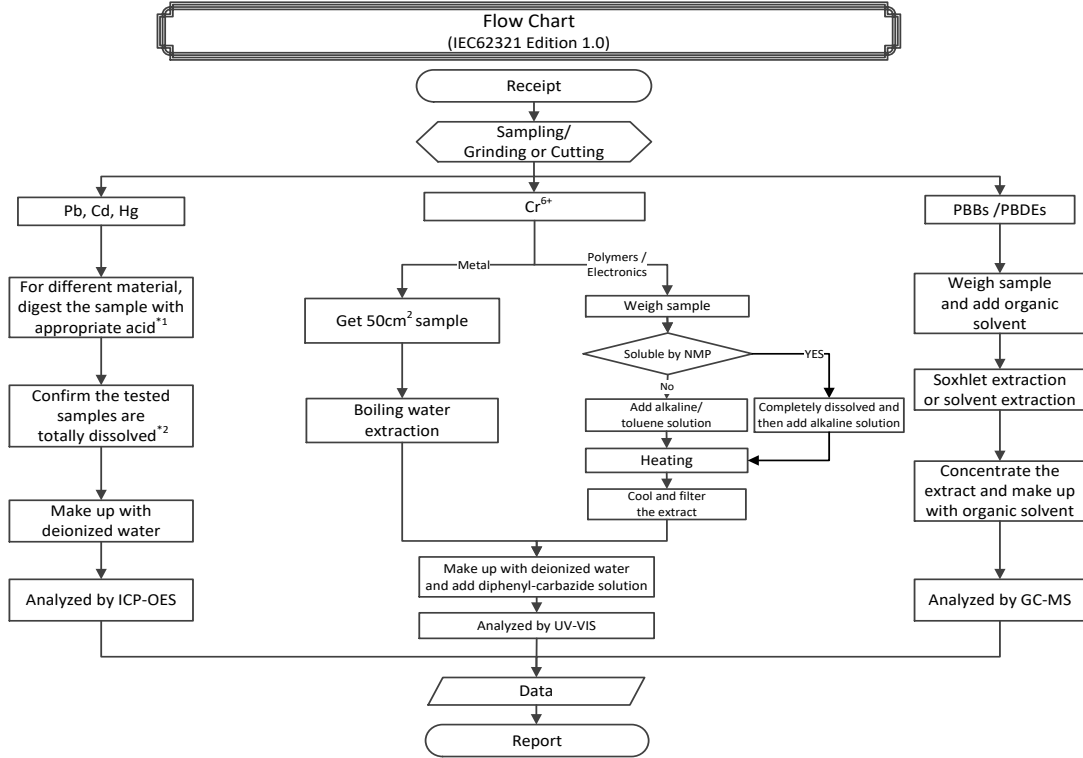
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SAMPLE ID NO. : RT21R-S4672-001  
SAMPLE DESCRIPTION : SPI-707 BLACK KC WITH SH-2 KC



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.



## TEST REPORT

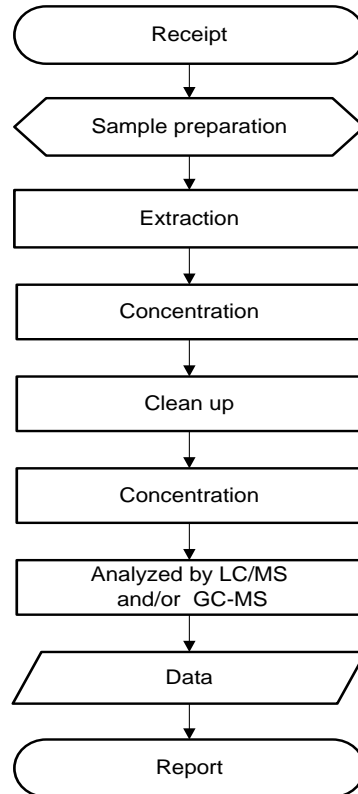
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### Flow Chart (HBCDD)



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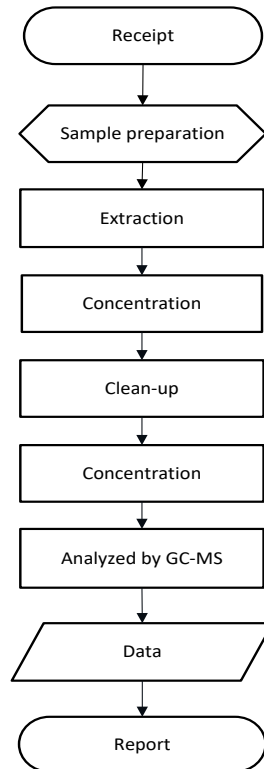
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### Flow Chart (Phthalates)



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

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