



Test Report No. ETLR180517.0727

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Applicant : JOYLIFE Co., Ltd.
1400, Nakdong-daero, Sasang-gu, Busan, Republic of Korea

The following sample(s) was/were submitted and identified on behalf of the applicant as: -

Sample Name : NON-WOVEN FABRIC

Sample ID/Description : -

Date of receipt : May 17, 2018

Test Period : May 25 ~ 30, 2018

Date of issue : May 30, 2018

Testing Environment

Temperature : $(24.4 \pm 1.0) ^\circ\text{C}$

Relative Humidity : $(49 \pm 9) \%$

For further details, please refer to the following pages.

Reviewed by:

Approved by:

Jessica Kwon / Environmental Project Manager

Mina Lee/Senior Environmental Project Manager

DISCLAIMER

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RMS AND CONDITIONS

UL Verification Service. Neither selected the sample nor determined whether the sample was representative of product on samples. The result apply only to the actual samples tested.



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■ Result

Polybrominated biphenyls (PBBs)

Item(s)	Unit	Test Method	MDL	Result
Monobromobiphenyl	mg/kg	IEC 62321-6 : 2015, 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.

Polybrominated diphenyl ethers (PBDEs)

Item(s)	Unit	Test Method	MDL	Result
Monobromodiphenyl ether	mg/kg	IEC 62321-6 : 2015, 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.

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■ Result

Heavy metal

Item(s)	Unit	Test Method	MDL	Result
Cadmium (Cd)	mg/kg	IEC 62321-5 : 2013, ICP-OES.	1	N.D.
Lead (Pb)	mg/kg		5	N.D.
Mercury (Hg)	mg/kg	IEC 62321-4 : 2013, ICP-OES.	5	N.D.
Hexavalent Chromium (Cr ⁶⁺)	mg/kg	IEC 62321-7-2 : 2017, UV-VIS.	1	N.D.

Phthalate

Item(s)	CAS No.	Unit	Test Method	MDL	Result
Diisobutyl phthalate (DIBP)	84-69-5	mg/kg	IEC 62321-8 : 2017, GC-MS.	50	N.D.
Di-n-butyl phthalate (DBP)	84-74-2	mg/kg		50	N.D.
Benzyl butyl phthalate (BBP)	85-68-7	mg/kg		50	N.D.
Di(2-ethyl hexyl) phthalate (DEHP)	117-81-7	mg/kg		50	N.D.

* Note :

MDL = Method detection limit

N.D. = Not detected

Negative = Undetectable / Positive = Detectable

mg/kg = ppm (part per million)

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■ Photograph



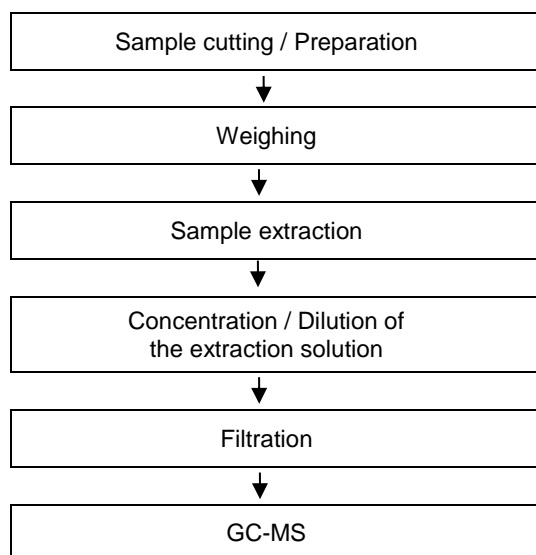
The tested sample is marked by an arrow if it's shown on the photograph.

RMS AND CONDITIONS

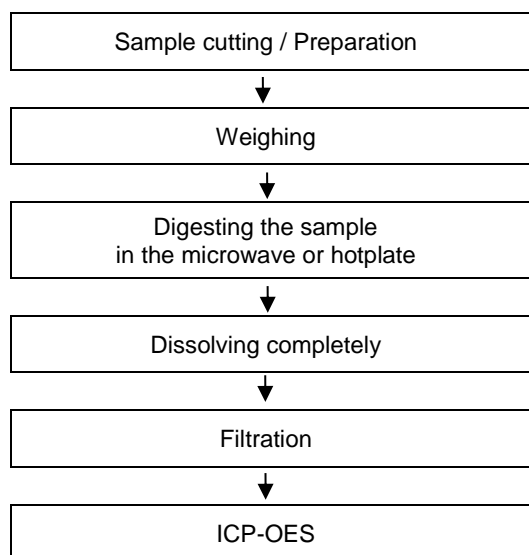
UL Verification Service. Neither selected the sample nor determined whether the sample was representative of product on samples. The result apply only to the actual samples tested.

■ Flow chart

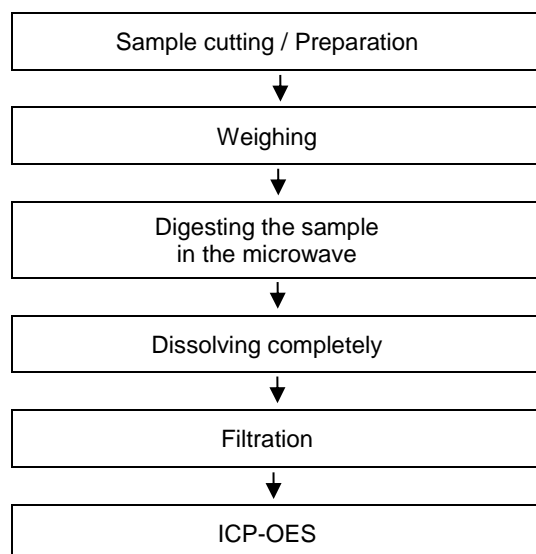
PBBs, PBDEs



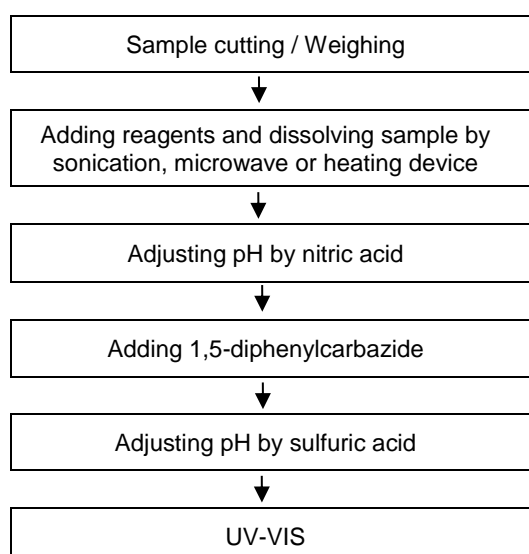
Cd, Pb



Hg



Cr⁶⁺



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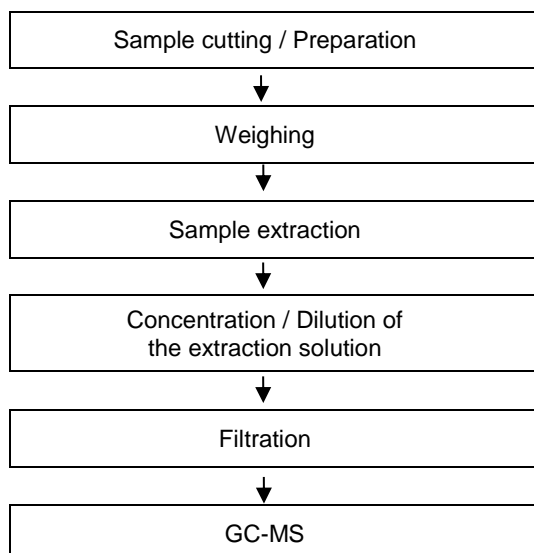
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■ Flow chart

Phthalate



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