

DOOSAN CORPORATION ELECTRO-MATERIALS

40, Dusan-ro Jeungpyeong-eup Jeungpyeong-gun, Chungcheongbuk-do Korea

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

SGS File No. : AYAA18-64077

Product Name : DS-7408

Item No./Part No. : N/A

Received Date : 2018. 12. 06

Test Period : 2018. 12. 06 to 2018. 12. 18

Test Results: For further details, please refer to following page(s)

SGS Korea Co., Ltd.

Issued Date: 2018. 12. 18

Jeff Jang / Chemical Lab Mgr

Page 1 of 4

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx2
and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms-e-document.htm
http://www.sgs.com/terms-e-document.htm
<a href="http://ww



Sample No. : AYAA18-64077.001

Sample Description : DS-7408

Item No./Part No. : N/A
Materials : N/A

Phthalates

Test Items	Unit	Test Method	MDL	Results
Benzyl butyl phthalate (BBP)	mg/kg	With reference to IEC 62321-8; 2017, GC/MS	50	N.D.
Di-butyl phthalate (DBP)	mg/kg	With reference to IEC 62321-8; 2017, GC/MS	50	N.D.
Di-(2-ethylhexyl) phthalate (DEHP)	mg/kg	With reference to IEC 62321-8; 2017, GC/MS	50	N.D.
Di-isodecyl phthalate (DIDP)	mg/kg	With reference to IEC 62321-8; 2017, GC/MS	50	N.D.
Di-isononyl phthalate (DINP)	mg/kg	With reference to IEC 62321-8; 2017, GC/MS	50	N.D.
Di-n-octyl phthalate (DNOP)	mg/kg	With reference to IEC 62321-8; 2017, GC/MS	50	N.D.
Di-isobutyl phthalate (DIBP)	mg/kg	With reference to IEC 62321-8; 2017, GC/MS	50	N.D.
Di-ethyl phthalate(DEP)	mg/kg	With reference to IEC 62321-8; 2017, GC/MS	50	N.D.
Di-methyl phthalate (DMP)	mg/kg	With reference to IEC 62321-8; 2017, GC/MS	50	N.D.
[di(C7-C11 alkyl)phthalate] linear and branched (DHNUP)	mg/kg	With reference to IEC 62321-8; 2017, GC/MS	50	N.D.
[di(C6-C8 alkyl)phthalate] branched (DIHP)	mg/kg	With reference to IEC 62321-8; 2017, GC/MS	50	N.D.
Bis(2-methoxyethyl) phthalate (BMP, BMEP, DMEP)	mg/kg	With reference to IEC 62321-8; 2017, GC/MS	50	N.D.
Di-iso-pentyl phthalate(DIPP)	mg/kg	With reference to IEC 62321-8; 2017, GC/MS	50	N.D.
Di-n-hexyl phthalate (DNHP)	mg/kg	With reference to IEC 62321-8; 2017, GC/MS	50	N.D.
Di-n-pentyl phthalate(DPP, DnPP)	mg/kg	With reference to IEC 62321-8; 2017, GC/MS	50	N.D.
n-Pentyl-isopentyl phthalate (iPnPP)	mg/kg	With reference to IEC 62321-8; 2017, GC/MS	50	N.D.
Di-pentyl phthalate, linear and branched (TDPP)	mg/kg	With reference to IEC 62321-8; 2017, GC/MS	50	N.D.

NOTE: (1) N.D. = Not detected.(<MDL)

(2) mg/kg = ppm

(3) MDL = Method Detection Limit

(4) - = No regulation

(5) ** = Qualitative analysis (No Unit)

(6) Negative = Undetectable / Positive = Detectable

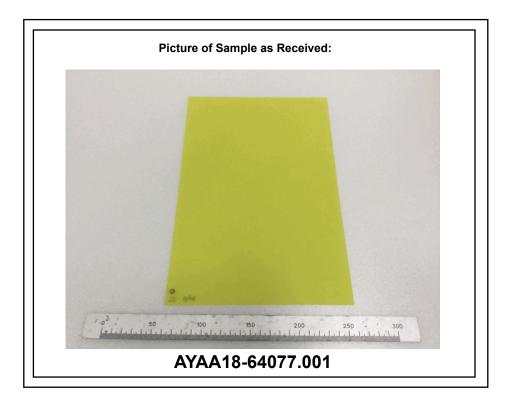
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx
and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms-e-document.htm http://www.sgs.com/terms-e-document.htm <a href="http

Issued Date: 2018. 12. 18

Page 2 of 4



Page 3 of 4



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx
and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms-e-document.htm http://www.sgs.com/terms-e-document.htm <a href="http

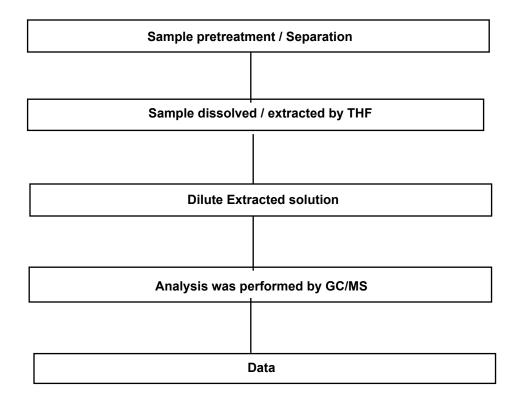
Issued Date: 2018. 12. 18



Page 4 of 4

Flow Chart for Phthalate Test

Issued Date: 2018. 12. 18



*** End of Report ***

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx
and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms-e-document.htm http://www.sgs.com/terms-e-document.htm <a href="http