



Test Report

No.: ETR21902510

Date: 16-Sep-2021

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SHOWA DENKO MATERIALS CO., LTD.
1500 OGAWA, CHIKUSEI-SHI IBARAKI, 308-8521, JAPAN

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

Sample Submitted By : SHOWA DENKO MATERIALS CO., LTD.
 Sample Name : COPPER CLAD LAMINATES WITHOUT COPPER (PLASTIC PART OF MCL) / GLASS EPOXY PREPREG
 Style/Item No. : MCL-E-679FGB(S) PLASTIC PART / MCL-E-679FG(S) PLASTIC PART / GEA-679FG(S) / MCL-E-679FGB(S)_#6 PLASTIC PART / MCL-E-679FG(S)_#6 PLASTIC PART / GEA-679FG(S)_#6

=====
 Sample Receiving Date : 10-Sep-2021
 Testing Period : 10-Sep-2021 to 16-Sep-2021

Test Requested : As specified by client, with reference to RoHS 2011/65/EU Annex II and amending Directive (EU) 2015/863 to determine DBP, BBP, DEHP, DIBP contents in the submitted sample(s).

Test Results : Please refer to following pages.

Troy Chang
 Troy Chang, Manager
 Signed for and on behalf of
 SGS TAIWAN LTD.
 Chemical Laboratory - Taipei




PIN CODE: 38EC4D0A

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Test Part Description

No.1 : BLACK SHEET

Test Result(s)

Test Item(s)	Method	Unit	MDL	Result
				No.1
Butyl benzyl phthalate (BBP) (CAS No.: 85-68-7)	With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.	mg/kg	50	n.d.
Dibutyl phthalate (DBP) (CAS No.: 84-74-2)		mg/kg	50	n.d.
Di-(2-ethylhexyl) phthalate (DEHP) (CAS No.: 117-81-7)		mg/kg	50	n.d.
Diisobutyl phthalate (DIBP) (CAS No.: 84-69-5)		mg/kg	50	n.d.

Note :

1. mg/kg = ppm ; 0.1wt% = 1000ppm
2. MDL = Method Detection Limit
3. n.d. = Not Detected (Less than MDL)

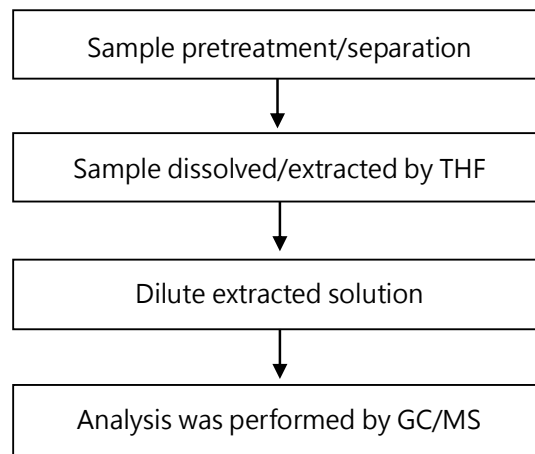
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Analytical flow chart - Phthalate

【Test method: IEC 62321-8】



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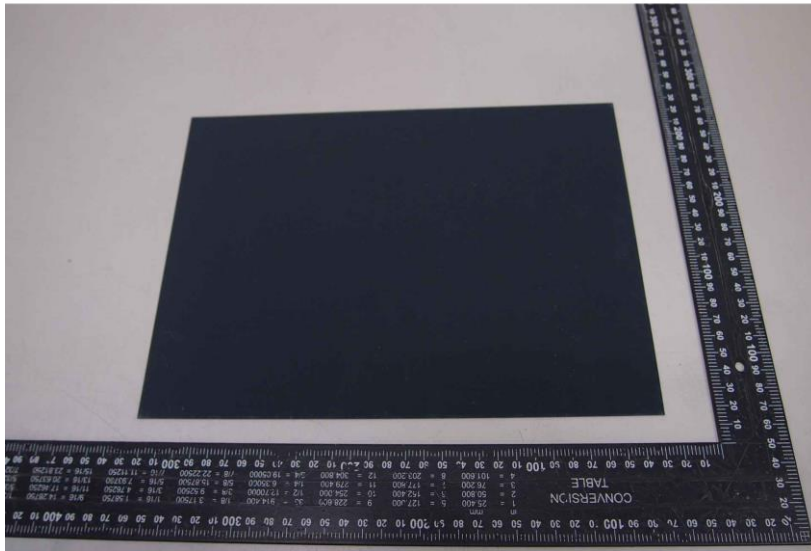
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* The tested sample / part is marked by an arrow if it's shown on the photo. *

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** End of Report **

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