

Date: 07-Jan-2021

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** 

No.: ETR20C07273

Style/Item No. : MCL-E-679FGB(R) PLASTIC PART / MCL-E-679FG(R) PLASTIC PART /

MCL-E-679FG(RM) PLASTIC PART / MCL-E-679FGB PLASTIC PART /

MCL-E-679FG PLASTIC PART / GEA-679FG(R) / GEA-679FG

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Sample Receiving Date : 29-Dec-2020

Testing Period : 29-Dec-2020 to 07-Jan-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.





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PIN CODF: 647F6984

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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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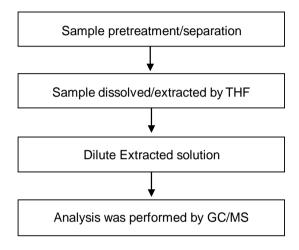


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#### Analytical flow chart - Phthalate

[Test method: IEC 62321-8]



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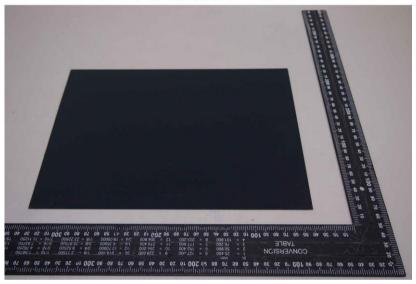


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\* The tested sample / part is marked by an arrow if it's shown on the photo. \*

### ETR20C07273



\*\* End of Report \*\*

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