Test Report
No. : CE/2020/11786     Date : 2020/01/14

HITACHI CHEMICAL 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:

<table>
<thead>
<tr>
<th>Sample Submitted By</th>
<th>HITACHI CHEMICAL CO., LTD.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td>COPPER CLAD LAMINATES WITHOUT COPPER (PLASTIC PART OF MCL) / GLASS EPOXY PREPREG</td>
</tr>
<tr>
<td>Sample Receiving Date</td>
<td>2020/01/07</td>
</tr>
<tr>
<td>Testing Period</td>
<td>2020/01/07 to 2020/01/14</td>
</tr>
</tbody>
</table>

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 Method: Please refer to following pages.

Test Result(s): Please refer to following pages.

Troy Chang  
Manager  
Signed for and on behalf of  
SGS TAIWAN LTD.  
Chemical Laboratory - Taipei
### Test Result(s)

**PART NAME No.1**: BLACK SHEET

<table>
<thead>
<tr>
<th>Test Item(s)</th>
<th>Unit</th>
<th>Method</th>
<th>MDL</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEHP (Di- (2-ethylhexyl) phthalate) (CAS No.: 117-81-7)</td>
<td>mg/kg</td>
<td>With reference to IEC 62321-8 (2017). Analysis was performed by GC/MS.</td>
<td>50</td>
<td>n.d.</td>
</tr>
<tr>
<td>BBP (Butyl Benzyl phthalate) (CAS No.: 85-68-7)</td>
<td>mg/kg</td>
<td></td>
<td>50</td>
<td>n.d.</td>
</tr>
<tr>
<td>DBP (Dibutyl phthalate) (CAS No.: 84-74-2)</td>
<td>mg/kg</td>
<td></td>
<td>50</td>
<td>n.d.</td>
</tr>
<tr>
<td>DIBP (Di-isobutyl phthalate) (CAS No.: 84-69-5)</td>
<td>mg/kg</td>
<td></td>
<td>50</td>
<td>n.d.</td>
</tr>
</tbody>
</table>

**Note:**
1. mg/kg = ppm : 0.1wt% = 1000ppm
2. MDL = Method Detection Limit
3. n.d. = Not Detected = below MDL
Analytical flow chart - Phthalate

- Technician: Yaling Tu
- Supervisor: Troy Chang

【Test method: IEC 62321-8】

1. Sample pretreatment/separation
2. Sample dissolved/extracted by THF
3. Dilute Extracted solution
4. Analysis was performed by GC/MS
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* The tested sample / part is marked by an arrow if it’s shown on the photo. *

CE/2020/11786

** End of Report **