**Test Report**

No.: CE/2018/37469  Date: 2018/04/09

KESTER AN ILLINOIS TOOL WORKS COMPANY
800 W. THORNADE AVE. ITASCA, IL 60143

The following samples was/were submitted and identified by/on behalf of the applicant as:

<table>
<thead>
<tr>
<th>Sample Submitted By</th>
<th>KESTER AN ILLINOIS TOOL WORKS COMPANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Description</td>
<td>979</td>
</tr>
<tr>
<td>Style/Item No.</td>
<td>IC170314</td>
</tr>
<tr>
<td>Sample Receiving Date</td>
<td>2018/03/29</td>
</tr>
<tr>
<td>Testing Period</td>
<td>2018/03/29 TO 2018/04/09</td>
</tr>
</tbody>
</table>

Test Requested:

1. 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).
2. Please refer to next pages for the other item(s).

Test Result(s):

Please refer to following pages.

Conclusion:

1. Based on the performed tests on submitted sample(s), the test results of DBP, BBP, DEHP, DIBP comply with the limits as set by RoHS and amending Directive (EU) 2015/863.
## Test Result(s)

**PART NAME No.1**: TRANSPARENT LIQUID

<table>
<thead>
<tr>
<th>Test Item(s)</th>
<th>Unit</th>
<th>Method</th>
<th>MDL</th>
<th>Result No.1</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBP (Dibutyl phthalate) (CAS No.: 84-74-2)</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>
<td>1000</td>
</tr>
<tr>
<td>BBP (Butyl Benzyl phthalate) (CAS No.: 85-68-7)</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>
<td>1000</td>
</tr>
<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>
<td>1000</td>
</tr>
<tr>
<td>DIBP (Di-isobutyl phthalate) (CAS No.: 84-69-5)</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>
<td>1000</td>
</tr>
<tr>
<td>D DIDP (Di-isodecyl phthalate) (CAS No.: 28761-40-0; 68515-49-1)</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>
<td>-</td>
</tr>
<tr>
<td>DINP (Di-isononyl phthalate) (CAS No.: 28553-12-0; 68515-48-0)</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>
<td>-</td>
</tr>
<tr>
<td>DNOP (Di-n-octyl phthalate) (CAS No.: 117-84-0)</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>
<td>-</td>
</tr>
</tbody>
</table>

**Note**:

1. mg/kg = ppm; 0.1wt% = 1000ppm
2. MDL = Method Detection Limit
3. n.d. = Not Detected = less than MDL
4. " - " = Not Regulated

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Analytical flow chart - Phthalate

- Technician: Andy Hsu
- Supervisor: Troy Chang

【Test method: IEC 62321-8】

Sample pretreatment/separation

Sample dissolved/extracted by THF

Dilute Extracted solution

Analysis was performed by GC/MS
Test Report

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

** End of Report **