Test Report

No. CKGEC1900679803  Date: 29 Jul 2019  Page 1 of 11

CHENGDU DATANG COMMUNICATION CABLE CO., LTD.
10#, XIXIN ROAD, HIGH-TECH DISTRICT, CHENGDU-611731 CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as: 1/2" Coaxial Cable

SGS Job No.: 20155396 - CQ
Model No.: HCAAY-50-12
Date of Sample Received: 18 Jul 2019
Test Requested: Selected test(s) as requested by client.
Test Method: Please refer to next page(s).
Test Results: Please refer to next page(s).

Conclusion: Based on the performed tests on submitted sample(s), the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) and Phthalates such as Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), DIBUTYL phthalate (DBP), and Diisobutyl phthalate (DIBP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Chongqing Branch

Tess Lv
Approved Signatory
Test Results:

Test Part Description:

<table>
<thead>
<tr>
<th>Specimen No.</th>
<th>SGS Sample ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SN1</td>
<td>CKG19-006798.001</td>
<td>Copper metals (raw materials)</td>
</tr>
<tr>
<td>SN2</td>
<td>CKG19-006798.003</td>
<td>White material (raw materials)</td>
</tr>
<tr>
<td>SN3</td>
<td>CKG19-006798.004</td>
<td>Copper metals (raw materials)</td>
</tr>
<tr>
<td>SN4</td>
<td>CKG19-006798.005</td>
<td>Black plastics with white printing (raw materials)</td>
</tr>
</tbody>
</table>

Remarks:

1. 1 mg/kg = 0.0001%
2. MDL = Method Detection Limit
3. ND = Not Detected (< MDL)
4. '-' = Not Regulated


<table>
<thead>
<tr>
<th>Test Item(s)</th>
<th>Limit</th>
<th>Unit</th>
<th>MDL</th>
<th>003</th>
<th>005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium (Cd)</td>
<td>100 mg/kg</td>
<td>2</td>
<td>ND</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>Lead (Pb)</td>
<td>1,000 mg/kg</td>
<td>2</td>
<td>ND</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Mercury (Hg)</td>
<td>1,000 mg/kg</td>
<td>2</td>
<td>ND</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>Hexavalent Chromium (CrVI)</td>
<td>1,000 mg/kg</td>
<td>8</td>
<td>ND</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>Sum of PBBS</td>
<td>1,000 mg/kg</td>
<td>-</td>
<td>ND</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>Monobromobiphenyl</td>
<td>- mg/kg</td>
<td>5</td>
<td>ND</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>Dibromobiphenyl</td>
<td>- mg/kg</td>
<td>5</td>
<td>ND</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>Tribromobiphenyl</td>
<td>- mg/kg</td>
<td>5</td>
<td>ND</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>Tetra bromobiphenyl</td>
<td>- mg/kg</td>
<td>5</td>
<td>ND</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>Penta bromobiphenyl</td>
<td>- mg/kg</td>
<td>5</td>
<td>ND</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>Hexabromobiphenyl</td>
<td>- mg/kg</td>
<td>5</td>
<td>ND</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>Heptabromobiphenyl</td>
<td>- mg/kg</td>
<td>5</td>
<td>ND</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>Octabromobiphenyl</td>
<td>- mg/kg</td>
<td>5</td>
<td>ND</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>Nonabromobiphenyl</td>
<td>- mg/kg</td>
<td>5</td>
<td>ND</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>Decabromobiphenyl</td>
<td>- mg/kg</td>
<td>5</td>
<td>ND</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>Sum of PBDEs</td>
<td>1,000 mg/kg</td>
<td>-</td>
<td>ND</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>Monobromodiphenyl ether</td>
<td>- mg/kg</td>
<td>5</td>
<td>ND</td>
<td>ND</td>
<td></td>
</tr>
</tbody>
</table>
### Test Report

**Test Item(s)** | Limit | Unit | MDL | 003 | 005
---|---|---|---|---|---
Dibromodiphenyl ether | - | mg/kg | 5 | ND | ND
Tribromodiphenyl ether | - | mg/kg | 5 | ND | ND
Tetramethylphenyl ether | - | mg/kg | 5 | ND | ND
Pentabromodiphenyl ether | - | mg/kg | 5 | ND | ND
Hexabromodiphenyl ether | - | mg/kg | 5 | ND | ND
Heptabromodiphenyl ether | - | mg/kg | 5 | ND | ND
Octabromodiphenyl ether | - | mg/kg | 5 | ND | ND
Nonabromodiphenyl ether | - | mg/kg | 5 | ND | ND
Decabromodiphenyl ether | - | mg/kg | 5 | ND | ND
Dibutyl phthalate (DBP) | 1000 | mg/kg | 50 | ND | ND
Butyl benzyl phthalate (BBP) | 1000 | mg/kg | 50 | ND | ND
Bis (2-ethylhexyl) phthalate (DEHP) | 1000 | mg/kg | 50 | ND | ND
Diisobutyl phthalates (DIBP) | 1000 | mg/kg | 50 | ND | ND

**Notes:**

1. The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863. IEC 62321 series is equivalent to EN 62321 series.


**Test Item(s)** | Limit | Unit | MDL | 001 | 004
---|---|---|---|---|---
Cadmium (Cd) | 100 | mg/kg | 2 | ND | ND
Lead (Pb) | 1,000 | mg/kg | 2 | ND | 14
Mercury (Hg) | 1,000 | mg/kg | 2 | ND | ND
Hexavalent Chromium (Cr(VI)) | - | µg/cm² | 0.10 | ND | ND

**Notes:**

1. The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863. IEC 62321 series is equivalent to EN 62321 series.

(2) ▼ a. The sample is positive for CrVI if the CrVI concentration is greater than 0.13 µg/cm². The sample coating is considered to contain CrVI.
   b. The sample is negative for CrVI if CrVI is ND (concentration less than 0.10 µg/cm²). The coating is considered a non-CrVI based coating.
c. The result between 0.10 μg/cm² and 0.13 μg/cm² is considered to be inconclusive - unavoidable coating variations may influence the determination. Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.
Elements (IEC62321) Testing Flow Chart

1) These samples were dissolved totally by pre-conditioning method according to below flow chart.
Hexavalent Chromium (Cr(VI)) Testing Flow Chart

1. **Sample Preparation**
   - **Nonmetallic material**
   - **Metallic material**

2. **Sample Measurement**
   - **Nonmetallic material**
     - **ABS/PC/PVC**
       - Dissolving by ultrasonication
     - **Others**
       - Digesting at 150~160°C
     - Digesting at 60°C by ultrasonication
   - **Metallic material**
     - Boiling water extraction
     - Adding 1,5-diphenylcarbazide for color development

3. **DATA**
   - pH adjustment
   - Adding 1,5-diphenylcarbazide for color development
   - UV-Vis
   - DATA
PBBs/PBDEs Testing Flow Chart

1. Sample cutting/preparation
2. Sample measurement
3. Solvent extraction
4. Concentration/Dilution of extraction solution
5. Filtration
6. GC-MS
7. DATA
Phthalates Testing Flow Chart

1. Sample cutting/preparation
2. Sample measurement
3. Solvent extraction
4. Concentration/Dilution
5. Filtration
6. GC-MS
7. DATA

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-23) 6761 3247 or email: wu.china@sgs.com
Sample photo:

CKG19-006798.001

CKG19-006798.003
SGS authenticate the photo on original report only

*** End of Report ***