

Report Number :

**DELCL9001585**





## TEST REPORT

APPLICANT : USHA AMORPHOUS METAL LTD  
486-487, Phase-iii, Sector -20 ,Udyog  
Vihar ,Gurgaon ,Haryana , - ,India  
ATTN : H L Sharma

Sample Description : THE SUBMITTED SAMPLE SAID TO BE AMORPHOUS METAL  
CORE. - UMCCC-16A  
Colour : BLACK  
Base Material/ Raw Material : -  
Raw Material Supplier : -  
Article No. / Part No. : 1  
Grade : -  
Buyer's Name : USHA AMORPHOUS METALS LTD.  
Manufacturer's Name : -  
Date Sample Received : 21 Jan 2019  
Style No. : -  
Type : -

TEST CONDUCTED: AS REQUESTED BY THE APPLICANT ROHS DIRECTIVE 2011/65/EU FOR DETAILS  
REFER TO ATTACHED PAGES

### REMARKS

TESTED COMPONENT OF SUBMITTED SAMPLE MEETS THE REQUIREMENT OF ROHS ANNEX II OF  
2011/65/EU AND AMENDMENT (EU) 2015/863.

AUTHORIZED BY  
FOR INTERTEK INDIA PRIVATE LIMITED [ANALYTICAL - GURGAON]



RAVINDRA S  
DEPUTY LAB MANAGER

**TEST REPORT**

**TEST CONDUCTED:**

A] TEST RESULTS SUMMARY OF HEAVY METALS FOR ROHS DIRECTIVE 2011/65/EU

| TESTING ITEM  | RESULTS                                    |
|---|--|
| Cadmium (Cd) Content in Ppm                                   | ND (<2)                                    |
| Lead (Pb) Content in Ppm                                      | 13 ppm                                     |
| Mercury (Hg) Content in Ppm                                   | ND (<2)                                    |
| Chromium (VI) Content in $\mu\text{g}/\text{cm}^2$ (On Metal) | NEGATIVE (<0.1 $\mu\text{g}/\text{cm}^2$ ) |

Remark: < = LESS THAN, ND = NOT DETECTED, ppm = PARTS PER MILLION

**B] TEST METHOD:**

| TESTING ITEM                        | TESTING METHOD  | REPORTING LIMIT  |
|-------------------------------------|---|--|
| CADMIUM (Cd) CONTENT                | WITH REFERENCE TO IEC 62321 -5 : 2013, BY MICROWAVE OR ACID DIGESTION AND DETERMINED BY ICP-OES                                       | 2 PPM  |
| LEAD (Pb) CONTENT                   | WITH REFERENCE TO IEC 62321 -5 : 2013, BY MICROWAVE OR ACID DIGESTION AND DETERMINED BY ICP-OES                                       | 2 PPM  |
| MERCURY (Hg) CONTENT                | WITH REFERENCE TO IEC 62321 -4 : 2013, BY MICROWAVE OR ACID DIGESTION AND DETERMINED BY ICP-OES                                       | 2 PPM  |
| CHROMIUM (VI) CONTENT (FOR METAL) @ | WITH REFERENCE TO IEC 62321 -7-1:2015, (BY BOILING WATER EXTRACTION AND DETERMINED BY UV-VIS SPECTROPHOTOMETER OR VISUAL OBSERVATION) | 0.10 $\mu\text{g}/\text{cm}^2$ with 50 $\text{cm}^2$ (IN TESTING SOLUTION) |

**C] RoHS REQUIREMENT:**

| RESTRICTED SUBSTANCES | LIMITS   |
|-----------------------|--|
| CADMIUM (Cd) CONTENT  | 100 ppm  |
| LEAD (Pb) CONTENT     | 1000 ppm (40000 ppm FOR BRASS/COPPER MATERIAL)<br>(3500 ppm FOR STEEL)<br>(4000 ppm FOR ALUMINIUM) |
| MERCURY (Hg) CONTENT  | 1000 ppm   |
| CHROMIUM (VI) CONTENT | 1000 ppm   |

**@THE EXPLANATION OF CHROMIUM VI ANALYSIS RESULT**

| COLORIMETRIC RESULT  | QUALITATIVE RESULT | EXPLANATION  |
|--|--------------------|--|
| <0.10 $\mu\text{g}/\text{cm}^2$  | NEGATIVE           | THE RESULT OF SAMPLE IS NEGATIVE FOR CR (VI). THE SAMPLE COATING IS CONSIDERED A NON-CR (VI) BASED COATING.  |
| >0.10 $\mu\text{g}/\text{cm}^2$<br>And $\leq 0.13$ $\mu\text{g}/\text{cm}^2$ | INCONCLUSIVE       | THE RESULT OF SAMPLE IS CONSIDERED TO BE INCONCLUSIVE. IF ADDITION SAMPLE ARE AVAILABLE, RECOMMEND TO ADD TRIALS AND GET THE AVERAGE RESULT FOR FINAL DETERMINATION. |



## TEST REPORT

>0.13 µg/cm<sup>2</sup>

POSITIVE

THE RESULT OF SAMPLE IS POSITIVE FOR CR (VI). THE SAMPLE COATING IS CONSIDERED TO CONTAIN CR (VI). A RESULT EXPRESSES AS POSTIVE, WHILE NOT AN ACTUAL VALUE, WHICH INDICATES A VISUAL OBSERVATION WAS USED.

THE ABOVE LIMITS WERE QUOTED FROM ANNEX II OF 2011/65/EU AND AMENDMENT EU 2015/863 FOR HOMOGENEOUS MATERIAL.

# END OF THE TEST REPORT #

*This report is made solely on the basis of your instructions and/or information and materials supplied by you. It is not intended to be a recommendation for any particular course of action. Intertek does not accept a duty of care or any other responsibility to any person other than the Addressee in respect of this report and only accepts liability to the Addressee insofar as is expressly contained in the terms and conditions governing Intertek's provision of services to you. Intertek makes no warranties or representations either express or implied with respect to this report save as provided for in those terms and conditions. We have aimed to conduct the review on a diligent and careful basis and we do not accept any liability to you for any loss arising out of or in connection with this report, in contract, tort, by statute.*