

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |                                                                                                                                                                                         |  |                                                                                       |  |                                                                                     |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|
| <b>Prüfbericht - Nr.:</b><br>Test Report No.:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | <b>0101-03746-25-07</b><br><b>TC1382525000374607F</b>                                                                                                                                   |  | <b>Seite 1 von 4</b><br>Page 1 of 4                                                   |  |  |  |
| <b>Auftraggeber:</b><br>Client:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | <b>JSW Steel Limited</b><br>Dolvi Works Geetapuram Dolvi, Taluka Pen,<br>Dist. Raigad 402107, India.                                                                                    |  |                                                                                       |  |                                                                                     |  |
| <b>Kunden-referenz-Nr.:</b><br>Client reference no.:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | TRF 2025-11-24                                                                                                                                                                          |  | <b>Auftrags-Nr:</b><br>Order no.:                                                     |  | 147133577                                                                           |  |
| <b>Gegenstand der Prüfung:</b><br>Test item:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Hot rolled coil                                                                                                                                                                         |  | <b>Auftragsdatum:</b><br>Order date.:                                                 |  | 2025-11-26                                                                          |  |
| <b>Bezeichnung Typ-Nr.:</b><br>Identification / Type No.:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | -                                                                                                                                                                                       |  | <b>wareneingangsda</b><br><b>tum:</b><br>Date of sample receipt:                      |  | 2025-11-26                                                                          |  |
| <b>Auftrags-Inhalt:</b><br>Order content:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Chemical Test                                                                                                                                                                           |  | <b>Prüfmuster-Nr:</b><br>Test sample no.:                                             |  | 0101-03746-25-07                                                                    |  |
| <b>Prüfgrundlage:</b><br>Test specification:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Customer Requirement:<br>RoHS Directive Compliance:<br>Restriction of the use of<br>Hazardous Substances Directive<br>2011/65/EU, RoHS2 with its<br>Amendment Directive<br>2015/863/EU. |  | <b>prüfzeitraum</b><br>Testing Period:                                                |  | 2025-11-26 To 2025-12-02                                                            |  |
| <b>Ort der Prüfung:</b><br>Place of testing:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Plot No. 27B, 2 <sup>nd</sup> Cross, Electronic City Phase1, Hosur Road, Bangalore - 560 100, Karnataka, India                                                                          |  |                                                                                       |  |                                                                                     |  |
| <b>Prüflaboratorium:</b><br>Testing laboratory:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | TÜV Rheinland (India) Private Limited,<br>Material Testing Laboratory                                                                                                                   |  |  |  |                                                                                     |  |
| <b>Prüfergebnis:</b><br>Test Result:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | PASS                                                                                                                                                                                    |  |                                                                                       |  |                                                                                     |  |
| <b>Geprüft von:</b><br>Checked by:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | Suresh M                                                                                                                                                                                |  | <b>Genehmigt von:</b><br>authorized by:                                               |  | Anbukumar S                                                                         |  |
| <b>Datum:</b><br>Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | 2025-12-02                                                                                                                                                                              |  | <b>Ausstelldatum:</b><br>Issue date:                                                  |  | 2025-12-02                                                                          |  |
| <b>Stellung / Position:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Deputy.Manager<br>Material Testing Laboratory                                                                                                                                           |  | <b>Stellung / Position:</b>                                                           |  | Manager-Operation<br>Material Testing Laboratory                                    |  |
| <b>Sonstiges/ Other:</b> Nil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                                                                         |  |                                                                                       |  |                                                                                     |  |
| <b>Zustand des prüfgegenstandes bei Anlieferung:</b><br>Condition of the test item at the time of delivery: Good                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                         |  |                                                                                       |  |                                                                                     |  |
| <b>Abkürzungen:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | ok / P = entspricht Prüfgrundlage<br>fail / F = entspricht nicht Prüfgrundlage<br>n.a. / N = nicht anwendbar                                                                            |  | <b>Abbreviations:</b>                                                                 |  | ok / P = passed<br>fail / F = failed<br>n.a. / N = not applicable                   |  |
| <p><b>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</b></p> <p>This test report relates to the a.m test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark. Test item submitted by client. Sampling not done by TUVRI. 'Laboratory employs simple acceptance rule in making Pass or Fail decisions on test results with no guard band'.</p> |  |                                                                                                                                                                                         |  |                                                                                       |  |                                                                                     |  |

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## TEST RESULTS

Discipline: Chemical. Product Group: Hazardous & Restricted Chemicals

### 1. Heavy Metals:

Test Methods: IEC 62321-4:2017 for Mercury, IEC 62321-5:2014 for Total Lead, Cadmium, Chromium by ICP-OES, Work Instruction MS-0026248 for Hexavalent Chromium(Cr(VI)) in metal by spot test.

| Sample No.       | Unit  | Total Cadmium | Hexavalent Chromium (Cr(VI)) | Total Mercury | Total Lead |
|------------------|-------|---------------|------------------------------|---------------|------------|
| Sample-001-Metal | mg/kg | ND            | Negative                     | ND            | ND         |
| RoHS Limit, Max. | mg/kg | 100           | 1000                         | 1000          | 1000       |

Limit of Quantification : Total Cadmium, Lead : 50 mg/kg and Mercury: 10 mg/kg

Qualitative Analysis of Hexavalent Chromium :

Positive indicates Presence of Cr(VI) Coating,

Negative Indicates absence of Cr(VI) Coating.

Abbreviation: "IEC" denotes International Electrotechnical Commission, "ND" denotes not detected,

"ICP-OES" denotes Inductively Coupled Plasma-Optical Emission Spectrometer,

"mg/kg" denotes milligram per kilogram,

### 2. PBBs and PBDEs:

Test Methods: IEC 62321-6:2015, GC-MS for PBBs and PBDEs

| Flame Retardants |                                  | Results,<br>Sample 001, mg/kg. |
|------------------|----------------------------------|--------------------------------|
| PBBs             | Bromobiphenyl                    | ND                             |
|                  | Dibromobiphenyl                  | ND                             |
|                  | Tribromobiphenyl                 | ND                             |
|                  | Tetrabromobiphenyl               | ND                             |
|                  | Pentabromobiphenyl               | ND                             |
|                  | Hexabromobiphenyl                | ND                             |
|                  | Heptabromobiphenyl               | ND                             |
|                  | Octabromobiphenyl                | ND                             |
|                  | Nonabromobiphenyl                | ND                             |
|                  | Decabromobiphenyl                | ND                             |
|                  | RoHS Limit, Sum of PBB's, mg/kg  | 1000                           |
| PBDEs            | Bromodiphenylether               | ND                             |
|                  | Dibromodiphenylether             | ND                             |
|                  | Tribromodiphenylether            | ND                             |
|                  | Tetrabromodiphenylether          | ND                             |
|                  | Pentabromodiphenylether          | ND                             |
|                  | Hexabromodiphenylether           | ND                             |
|                  | Heptabromodiphenylether          | ND                             |
|                  | Octabromodiphenylether           | ND                             |
|                  | Nonabromodiphenylether           | ND                             |
|                  | Decabromodiphenyl ether          | ND                             |
|                  | RoHS Limit, Sum of PBDE's, mg/kg | 1000                           |

Limit of Quantification : PBBs & PBDEs: 50 mg/kg Each

Abbreviation : "mg/kg" denotes milligram per kilogram, "ND" denotes not detected,

"IEC" denotes International Electrotechnical Commission.

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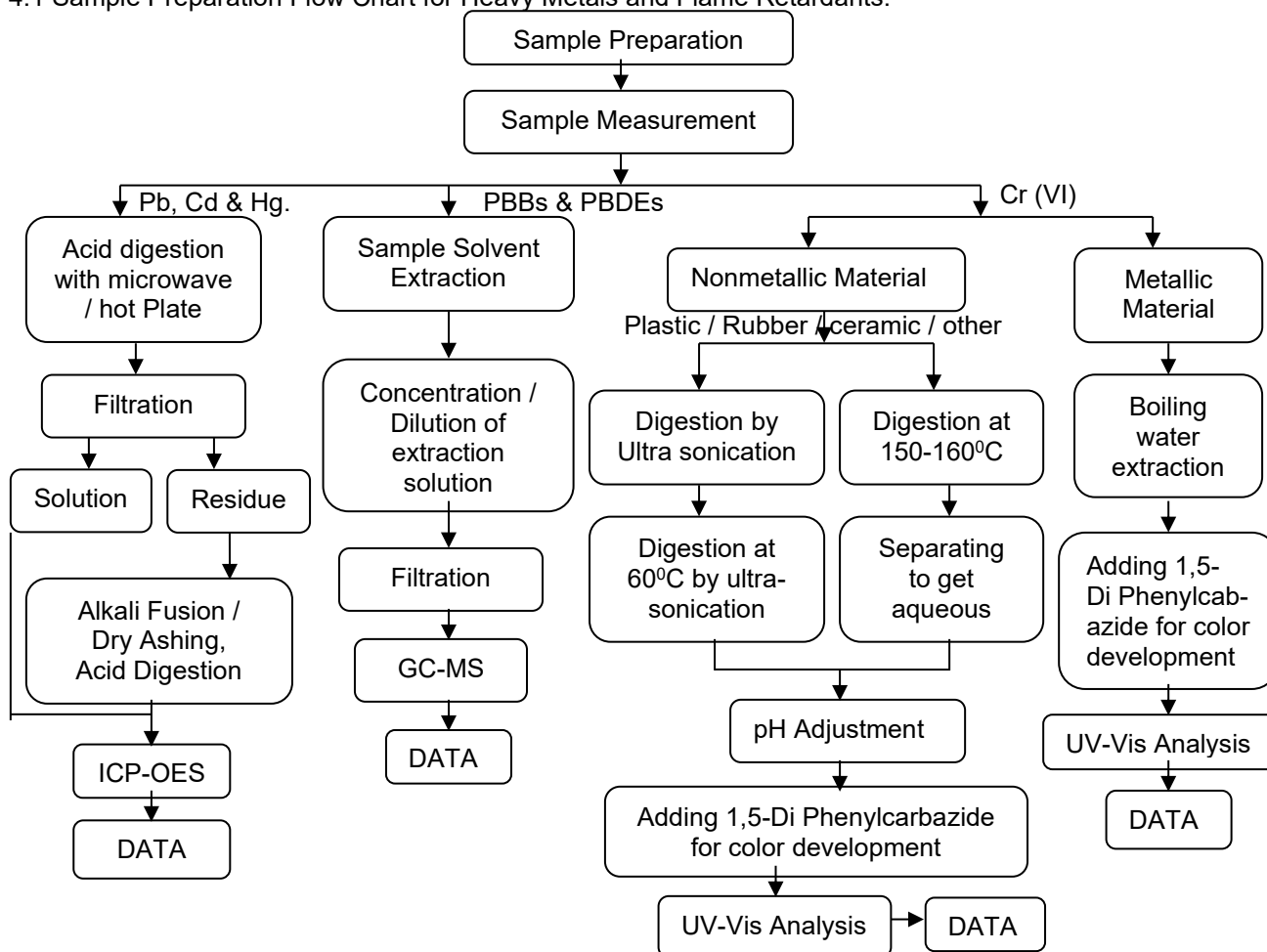
### 3. Phthalates: Sample-001

| Sl.no | Test / Parameter              | Unit  | Limit | Results | Test Method             |
|-------|-------------------------------|-------|-------|---------|-------------------------|
| 1     | Dibutyl Phthalate(DBP)        | mg/kg | 1000  | ND      | IEC 62321-8:2017, GC-MS |
| 2     | Benzyl Butyl Phthalate(BBP)   |       | 1000  | ND      | IEC 62321-8:2017, GC-MS |
| 3     | Diethyl Hexyl Phthalate(DEHP) |       | 1000  | ND      | IEC 62321-8:2017, GC-MS |
| 4     | Di Iso Butyl Phthalate(DiBP)  |       | 1000  | ND      | IEC 62321-8:2017, GC-MS |

Note: Limit of Quantification for each Phthalates: 50 mg/kg, GC-MS Denotes Gas chromatograph Mass spectrometer 'ND'- Denotes 'not detected'. "mg/kg" Denotes milligram per kilogram, "IEC" denotes International Electrotechnical Commission.

**Conclusion:** The submitted sample complies with the requirements of RoHS Directive 2011/65/EU with its Amendment Directive 2015/863/EU.

#### 4.1 Sample Preparation Flow Chart for Heavy Metals and Flame Retardants:



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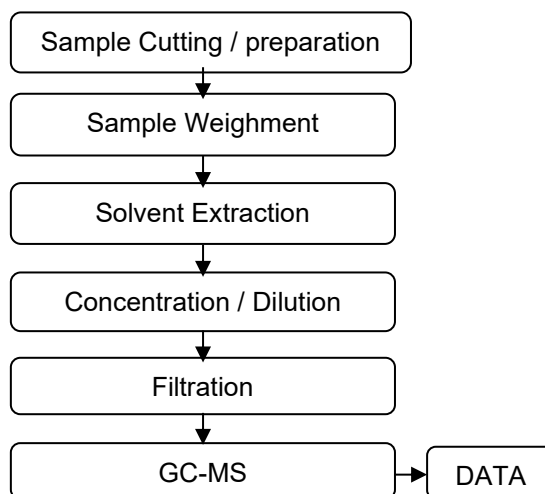
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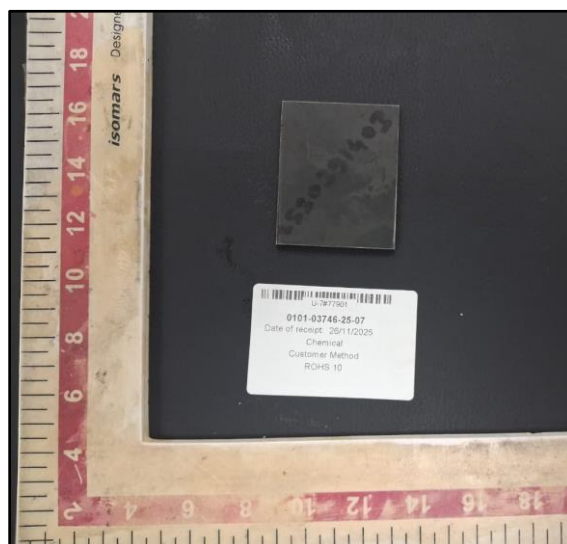
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#### 4.2 Phthalates Testing Flow Chart



#### 5. Test item Photograph:



**Sample-001**

Photograph of test sample as in received condition

#### Disclaimer:

1. This report is issued based on our General Terms and Conditions.
2. The results and recommendations in this report are based on the information available at the time of the testing. They are further applicable within the limits of any instruction of the customer.
3. Test sample(s), as well as sample information, description, product details and intended usage was provided by customer. The laboratory is not responsible for the information/data provided by the customer which can affect the validity of results.
4. This test report was issued for the customer only. No other party may rely on its contents and any liability towards third parties is strictly disclaimed, unless and to the extend such party is expressly mentioned in the report.

----- End of Test Report -----