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| --- | --- | --- | --- |
| **Sno** | **Description** | **UOM** | **Specification** |
|  | Physical State / Color | - | Solid/ Silvery White |
|  | Assay Content | % | 50(Ni) & 50(Fe) |
|  | Grade | % | NA |
|  | Mol. Wt. | g/mole | NA |
|  | **Element** | **%** | **Percentage** |
|  | Nickel | % | ≥ 49 |
|  | iron (Fe) | % | ≥ 49 |
|  | Manganese (Mn) | % | < 1 |
|  | Silicon (Si) | % | < 0.5 |
|  | Sulphur (S) | % | < 0.03 |
|  | Carbon (C) | % | < 0.10 |
|  | Melting point | °C | 1450 – 1455 |
|  | Thermal Expansion | 10-6 /°C | 9.6 – 10.4 |
|  | Supplier | - | JLC electromet |
|  | MSDS no. | - | XXX |
|  | CAS no. | - | XXX |
|  | **Acceptance Criteria** | | |
|  | Visual Acceptance | - | Silvery White Solid |
|  | Assay Content | % | 48(Ni) & 52(Fe) ± 1 |
|  | Dimensions | - | Drawing no: |
|  | Thermal Conductivity | W/m-K | XXX |
|  | **Properties** | **Test Method** | **Test Agency** |
|  | Quantitative analysis | ICPMS/AAS | NABL, IIT-HYD, CMET |
|  | Dimensions | Vernier & others | RES |
|  | Mechanical Properties | Tensile strength | CITD |
|  | Specific heat & Thermal Conductivity | COC | NABL, IIT-HYD, CMET |