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| --- | --- | --- | --- |
| **Sno** | **Description** | **UOM** | **Specification** |
|  | Physical State / Color | - | Solid Powder / White |
|  | Assay Content | % | 98 |
|  | Grade | - | AR |
|  | Mol. Wt. | g/mol | 42.39 |
|  | **Element** | **%** | **Percentage** |
|  | Lithium (Li+) | % | 16.36 |
|  | Cl (Cl-) | % | 83.64 |
|  | Sulphates (SO42- ) | % | 0.05 |
|  | Barium (Ba 2+) | % | 0.002 |
|  | Iron (Fe) | % | 0.002 |
|  | Calcium (Ca) | % | 0.01 |
|  | Melting point | °C | 605 |
|  | Boiling point | °C | 1382 |
|  | Particle size distribution | µm | 50 - 150 |
|  | Bulk density | kg/m3 | 530 |
|  | Specific heat | J/ (kg K) | 4243 |
|  | Supplier | - | Azaricta research labs |
|  | MSDS no. | - | XXXX |
|  | CAS no. | - | 7447-41-8 |
|  | **Acceptance Criteria** | | |
|  | Assay Content (w.r.t Chloride) | % | 98±1 |
|  | Visual Acceptance | - | White Solid Powder |
|  | Melting Point | °C | 605±2 |
|  | Eutectic Mixture (LiCl: KCl = 44:56) M. P | °C | 352 |
|  | **Properties to be tested** | **Test Method** | **Test Agency** |
|  | Assay Content (w.r.t Chloride) | Argentometric titration | RES/SRR |
|  | Quantitative/Qualitative analysis | ICPMS | NABL, IIT-HYD, CMET |
|  | Particle size distribution | Sieving & others | RES |
|  | Specific heat, Melting point | DSC/TGA | NABL, IIT-HYD, CMET |