|  |  |  |  |
| --- | --- | --- | --- |
| **S.no** | **Description** | **UOM** | **Specification** |
|  | Physical State / Color | - | Solid Powder / White |
|  | Assay Content | % | 98 |
|  | Grade | - | XXX |
|  | Mol. Wt. | g/mol | 138.55 |
|  | **Element** | **%** | **Percentage** |
|  | Potassium (K+) | % | 27.8 |
|  | Chlorine (Cl+7) | % | 24.4 |
|  | Oxygen (O2-) | % | 46.19 |
|  | Melting point | °C | 400 |
|  | Particle size distribution | µm | 30 - 140 |
|  | Bulk density | kg/m3 | 1150 |
|  | Burning Speed (Fe: KClO4 = 87:13) | mm/sec | 138 |
|  | Calorific Value (Fe: KClO4 = 87:13) | cal/g | 260 |
|  | Supplier | - | Nano Research Lab |
|  | MSDS no. | - | XXXX |
|  | CAS no. | - | 7778-74-7 |
|  | **Acceptance Criteria** | | |
|  | Visual Acceptance | - | Solid White Powder |
|  | Assay Content | % | 98 ± 1 |
|  | Melting point | °C | 400 ± 2 |
|  | Burning Speed (Fe: KClO4 = 87:13) | mm/sec | 138±2 |
|  | Calorific Value (Fe: KClO4 = 87:13) | cal/g | 260±2 |
|  | **Properties to be tested** | **Test Method** | **Test Agency** |
|  | Quantitative & qualitative analysis | ICPMS/XRD | NABL, IIT-HYD, CMET |
|  | Particle size distribution | Sieving & Others | RES, NABL, SRR labs |
|  | Specific heat & Thermal Conductivity | DSC/TGA | NABL, IIT-HYD, CMET |