



This is general properties of Epoxy powder for bus bar.

There are 3 type grade. (Balance type, Flexible type, and Heat resistance type. Each grade has flame retardant type. It can choice for request.

| Item | Unit | Balance type | | Flexible type | | Heat resistance type | | Test Method | |
|---------------------------|-----------------------------------|-----------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| | | F-440 | F-450 | F-460 | F-472 | F-480 | F-490 | | |
| Power Properties | Color | — | Gray | Blue | Green | Black | Black | Gray | Visual inspection |
| | Gel time(150°C) | s | 120 | 80 | 80 | 80 | 80 | 80 | JIS C2161 |
| | Gel time(200°C) | s | 30 | 25 | 20 | 20 | 15 | 15 | |
| | Melt flow rate(140°C) | % | 8 | 8 | 15 | 10 | 8 | 8 | Somar method |
| | Particle size | μm | 65 | 45 | 50 | 55 | 55 | 55 | Dry laser method |
| | Bulk Density | g/cm ³ | 0.9 | 0.9 | 0.7 | 0.7 | 0.9 | 0.9 | JIS C2161 |
| Cured Properties | Impact Strength | cm | over 50 | over 50 | over 50 | over 50 | 35 | 35 | JIS C2161 (500g, φ6.35mm) |
| | Volume Resistivity | Ω·cm | 1 × 10 ¹⁵ over | 1 × 10 ¹⁵ over | 1 × 10 ¹⁵ over | 1 × 10 ¹⁵ over | 1 × 10 ¹⁵ over | 1 × 10 ¹⁵ over | JIS C2161 |
| | Breakdown Voltage | kV/0.5mm | 18 | 18 | 18 | 18 | 18 | 18 | JIS C2161 |
| | Glass Transition Temperature(DSC) | °C | 100 | 120 | 100 | 110 | 125 | 135 | JIS K7172 by DSC |
| | Co-efficient of liner expansion | | | | | | | | Measured by TMA |
| | Under Tg | 10 ⁻⁶ °C ⁻¹ | 45 | 40 | 75 | 80 | 50 | 35 | |
| | Over Tg | 10 ⁻⁶ °C ⁻¹ | 150 | 110 | 200 | 200 | 110 | 100 | |
| | Longitudinal Shear Strengt | | | | | | | | JIS K6850 |
| | SPCC—SD | MPa | 25 | 25 | 25 | 25 | 20 | 20 | |
| | Cupper | MPa | 20 | 20 | 20 | 20 | 15 | 15 | |
| | Cupping test | mm | 1以下 | 1以下 | 10 | 10 | 1以下 | 1以下 | JIS C2161 |
| | Tracking index(CTI) | V | 600 | 300 | 600 | 300 | 600 | 400 | JIS C2161 |
| Fire-resistant | — | — | Equivalent to V-0 | — | V-0 | — | Equivalent to V-0 | UL94 V method | |
| Cured conditon (exsample) | | | 190°C × 15Min | 190°C × 15Min | 190°C × 5Min | 190°C × 5Min | 190°C × 30Min | 190°C × 30Min | |

The above figures are provided for reference only and are not regarded as specifications.