

# DEM-8004

## Insulation resin for Casting



DEM-8004 is an excellent paint for casting that mainly consists of epoxy and modified amin resin. It features outstanding adhesiveness, elasticity, and water resistance. Especially, it has outstanding thermal shock property.

### Usage

For casting electric components and relay components

### Specification

|                  |                                                                                                                                                                                                                                                                                      |                             |                                                                        |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------------------|
| Type of varnish  | 2K epoxy resin type                                                                                                                                                                                                                                                                  |                             |                                                                        |
| Product features | <ol style="list-style-type: none"><li>1. It features outstanding thermal shock resistance.</li><li>2. It features outstanding water resistance capability.</li><li>3. It features outstanding electrical property values.</li><li>4. It features outstanding adhesiveness.</li></ol> |                             |                                                                        |
| Thinner          | None                                                                                                                                                                                                                                                                                 | Pot time (25 °C)<br>(A + B) | 30 min.                                                                |
| Exterior         | White                                                                                                                                                                                                                                                                                |                             |                                                                        |
| Viscosity        | 200 - 360 POISE                                                                                                                                                                                                                                                                      | Curing conditions           | 90 °C x 1 hour + 100 °C x 2 hours                                      |
| Specific gravity | 1.73 ± 0.02                                                                                                                                                                                                                                                                          | UL-certified                | Not certified                                                          |
| Gel time (90°C)  | 8 - 10 min.                                                                                                                                                                                                                                                                          | Storage conditions          | Store in a shaded indoor space with sufficient ventilation.            |
| Mixing ratio     | A : B = 100 : 8 (Weight)                                                                                                                                                                                                                                                             | Shelf life                  | 3 months from the manufacturing date (when storage conditions are met) |

### Product Properties (Physical Property Data)

|                          |                                                        |
|--------------------------|--------------------------------------------------------|
| Breakdown voltage        | Above 20 KV/mm                                         |
| Volume resistivity       | At least $1.0 \times 10^{14} \Omega\text{cm}$          |
| Thermal shock resistance | Over 50 cycles (Cycle: -40 °C x 1 HR -> 140 °C x 1 HR) |
| Hygroscopicity           | Below 0.1 %                                            |

### How to Use

|            |                                                                                                                                                                                                                                                                                                                |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| How to Use | <ol style="list-style-type: none"><li>1. Mix evenly after adding the substances according to the designated mixing ratio.</li><li>2. Defoam with vacuum to eliminate air pockets.</li><li>3. Inject well-mixed epoxy to the substrate.</li><li>4. Dry according to the designated curing conditions.</li></ol> |
| Caution    | <ol style="list-style-type: none"><li>1. Instructions above may vary depending on the type of substrate and the painting line conditions.</li><li>2. Please refer to the MSDS when handling the product.</li></ol>                                                                                             |

► The data shown above were obtained under the laboratory conditions, and the product properties may vary depending on work method and circumstances. Please refer to the property data listed above only as reference.