# Di-Pak™ R-4307FR

Thermoplastic

Hapco Inc.

## Message:

RIGID
DI-PAK R-4307
A high performance, long working life potting compound for potting/encapsulating units requiring high physical strength and excellent electricals.
DI-PAK R-4307 is a holds its mechanical and electrical properties while under the most severe conditions. This is due to its low water absorption, thermal shock resistance, and retention of strength at elevated temperatures.

| General Information | |
|---|---|
| Features | Electrically Insulating |
| | Flame Retardant |
| | Good Electrical Properties |
| | Good Processability |
| | Good Thermal Shock Resistance |
| | Good Toughness |
| | High Heat Resistance |
| | High Strength |
| | Low to No Water Absorption |
| | Low Viscosity |
| Uses | Battery Cases |
| | Electrical/Electronic Applications |
| | Power Cable Shields |
| | Switches |
| Appearance | Blue |
| Forms | Liquid |
| Processing Method | Encapsulating |
| | Potting |

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Specific Gravity | 1.62 | g/cm³ | ASTM D4669 |
| Molding Shrinkage - Flow | 0.10 to 0.35 | % | ASTM D2566 |
| Weight - per cubic inch | 27 | g | |
| Service Temperature | 170 | °C | |
| Gel Time [1] (25°C) | 1.0 | day | ASTM D2971 |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Durometer Hardness (Shore D) | 86 | | ASTM D2240 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |

| | | | |
|---|---|---|---|
| Tensile Modulus | 3450 | MPa | ASTM D638 |
| Tensile Strength | 99.1 | MPa | ASTM D638 |
| Tensile Elongation (Break) | 3.0 | % | ASTM D638 |
| Flexural Modulus | 3860 | MPa | ASTM D790 |
| Flexural Strength | 118 | MPa | ASTM D790 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact | 25 | J/m | ASTM D256 |
| Unnotched Izod Impact | 38 | J/m | ASTM D256 |
| Thermal | Nominal Value | Unit | |
| Thermal Conductivity | 0.39 | W/m/K | |
| Electrical | Nominal Value | Unit | Test Method |
| Volume Resistivity | 5.3E+15 | ohms·cm | ASTM D257 |
| Dielectric Strength | 17 | kV/mm | ASTM D149 |
| Dielectric Constant | | | ASTM D150 |
| 1 kHz | 3.90 | | |
| 100 kHz | 3.70 | | |
| Dissipation Factor (25°C, 100 kHz) | 0.021 | | ASTM D150 |
| Flammability | Nominal Value | Unit | Test Method |
| Flame Rating (3.00 mm) | V-0 | | UL 94 |
| Thermoset | Nominal Value | Unit | Test Method |
| Thermoset Components | | | |
| Part A | Mix Ratio by Weight: 100, Mix Ratio by Volume: 100 | | |
| Part B | Mix Ratio by Weight: 100, Mix Ratio by Volume: 100 | | |
| Thermoset Mix Viscosity (25°C) | 18000 | cP | ASTM D4878 |
| Demold Time (121°C) | 120 | min | |
| NOTE | | | |
| 1. | 100 g | | |



## Recommended distributors for this material

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