

Stiffened IE-3025 w / 5 Minute Gel

Rigid polyurethane

Key Properties

- Excellent physical properties after RT cure
- Free of mercury, MOCA or TDI
- Very low mixed viscosity
- Ideal for color-matching due to its neutral semi-transparent appearance

Applications

- For room temperature hand-batch or vacuum assisted casting methods

Contact your RAMPF Group Inc. representative to find out more about custom color-matching services.

Processing Properties

| | | | Resin (Isocyanate) | Hardener (Polyol) |
|--------------------------|-------------|-------------------|--------------------|-------------------|
| Mix ratio | | pbw | 100 | 94 |
| | | pbv | 100 | 100 |
| Density | ASTM D-792 | g/cm ³ | ca. 1.10 | ca. 1.03 |
| Viscosity at 77°F (25°C) | ASTM D-2393 | cP | ca. 40 | ca. 250 |

| | | | Mixture |
|------------------------------|-------------|-----|---------|
| Mix viscosity at 77°F (25°C) | ASTM D-2393 | cP | ca. 100 |
| Gel time at 77°F (25°C) | | min | 4-6 |
| Demold time at 77°F (25°C) | | min | 20-40 |

Cured / Mechanical Properties (approximate values)

| Cure 1: 7 days at 77°F | | | Cure 1 |
|-------------------------------------|-------------|-------------------|-------------|
| Aspect | visual | | Translucent |
| Density | ASTM D-792 | g/cm ³ | 1.08 |
| Shore hardness D | ASTM D-2240 | | 70-80 |
| Deflection temperature, HDT (66psi) | ASTM D-648 | °F (°C) | 131 (55) |
| Tensile strength | ASTM D-638 | psi | 7,000 |
| Elongation at Break | ASTM D-638 | % | 10 |
| Flexural strength | ASTM D-790 | psi | 9,400 |
| Flexural modulus | ASTM D-790 | psi | 267,000 |
| Notched Izod | ASTM D-256 | ft-lbf/in | 0.6 |
| Linear shrinkage | ASTM D-2566 | in/in | 0.005-0.010 |

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Processing

The processing and material temperature should be between 68-77°F (20-25°C).

Formulated for hand-batch or vacuum assisted casting equipment. For best results, de-air the material prior to casting, then pressurize to 60 psi until cured.

Agitate the hardener and resin before mixing to ensure that the formula is homogeneous.

Packaging

| | |
|--------------------|------------|
| IE-3077 Quart Kit | 3.88 lbs. |
| IE-3077 1 Gal. Kit | 15.52 lbs. |
| IE-3077 5 Gal. Kit | 77.6 lbs. |
| IE-3077 Drum Kit | 873 lbs. |

Storage

Original containers should be kept tightly sealed and stored at ambient temperatures 59-86°F (15°C to 30°C). If properly stored the products have the shelf-life indicated on the product label.

Partly used containers should always be sealed appropriately and used up as soon as possible.

Handling Precautions

Good workplace ventilation is to be ensured during processing. At the same time, the employer's liability insurance association's industrial hygiene safety regulations regarding the handling of reaction resins and their hardeners are to be observed. Please take heed of the appropriate safety data sheets.
