

## IE-3644 w / 90 Second Gel

Tough, abrasion resistant urethane

### Key Properties

- Excellent physical properties after RT cure
- Free of mercury, MOCA or TDI

### Applications

- For room temperature meter-mix dispensing

### Processing Properties

|                          |             |                   | Resin (Isocyanate) | Hardener (Polyol) |
|--------------------------|-------------|-------------------|--------------------|-------------------|
| Mix ratio                |             | pbw               | 100                | 51                |
|                          |             | pbv               | 100                | 50                |
| Density                  | ASTM D-792  | g/cm <sup>3</sup> | ca. 1.14           | ca. 1.18          |
| Viscosity at 77°F (25°C) | ASTM D-2393 | cP                | ca. 5,800          | ca. 80            |

|                              |             |     | Mixture   |
|------------------------------|-------------|-----|-----------|
| Mix viscosity at 77°F (25°C) | ASTM D-2393 | cP  | ca. 2,750 |
| Gel time at 77°F (25°C)      |             | min | 1:15-1:45 |
| Demold time at 77°F (25°C)   |             | min | 10-20     |

### Cured / Mechanical Properties (approximate values)

**Cure 1: 24 hours at 77°F + 16 hours at 150°F**

**Cure 2: 7 days at 77°F**

|                     |             |                   | Cure 1            | Cure 2            |
|---------------------|-------------|-------------------|-------------------|-------------------|
| Aspect              | visual      |                   | Translucent Amber | Translucent Amber |
| Density             | ASTM D-792  | g/cm <sup>3</sup> | 1.14              | 1.14              |
| Shore hardness D    | ASTM D-2240 |                   | 50-60             | 50-60             |
| Tensile strength    | ASTM D-638  | psi               | 2,800             | 3,000             |
| Elongation at Break | ASTM D-638  | %                 | 20                | 100               |
| Tear strength       | ASTM D-624  | pli               | 350               | 370               |
| Flexural modulus    | ASTM D-790  | psi               | 38,000            | 45,000            |
| Notched Izod        | ASTM D-256  | ft·lbf/in         | 6.0               | 9.0               |
| Linear shrinkage    | ASTM D-2566 | in/in             | .001              | .001              |

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### Processing

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

Agitate the hardener before use to ensure that the formula is homogeneous.

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### Packaging

|                    |            |
|--------------------|------------|
| IE-3645 Quart Kit  | 3.02 lbs.  |
| IE-3645 1 Gal. Kit | 12.08 lbs. |
| IE-3645 5 Gal. Kit | 60.4 lbs.  |
| IE-3645 Drum Kit   | 679.5 lbs. |

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### 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.

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### 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.

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