

90A Water Clear

Water clear, semi-flexible polyurethane elastomer

Key Properties

- Excellent physical properties after RT cure
- Free of mercury, MOCA or TDI
- Excellent optical clarity as well as U.V. stability

Applications

- For room temperature hand-batch, vacuum assisted casting and meter mix dispensing methods

Processing Properties

| | | | Resin (Isocyanate) | Hardener (Polyol) |
|--------------------------|-------------|-------------------|--------------------|-------------------|
| Mix ratio | | pbw | 50 | 100 |
| | | pbv | 50 | 100 |
| Density | ASTM D-792 | g/cm ³ | ca. 1.07 | ca. 1.07 |
| Viscosity at 77°F (25°C) | ASTM D-2393 | cP | ca. 200 | ca. 1,000 |

| | | | Mixture |
|------------------------------|-------------|-----|---------|
| Mix viscosity at 77°F (25°C) | ASTM D-2393 | cP | ca. 750 |
| Gel time at 77°F (25°C) | | min | 13-19 |
| Demold time at 77°F (25°C) | | h | 2-4 |

Cured / Mechanical Properties (approximate values)

| | | | Cure 1 | Cure 2 |
|---|-------------|-------------------|-------------|-------------|
| Cure 1: 24 hours at 77°F + 16 hours at 150°F | | | | |
| Cure 2: 7 days at 77°F | | | | |
| Aspect | visual | | Clear | Clear |
| Density | ASTM D-792 | g/cm ³ | 1.07 | 1.07 |
| Shore hardness A | ASTM D-2240 | | 85-95 | 85-95 |
| Tensile strength | ASTM D-638 | psi | 2,100 | 1,950 |
| Elongation at Break | ASTM D-638 | % | 65 | 65 |
| Tear strength | ASTM D-624 | pli | 225 | 250 |
| Linear shrinkage | ASTM D-2566 | in/in | 0.001-0.005 | 0.001-0.005 |

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

Certain silicone rubbers, including platinum silicones, will inhibit the OC-5000 series. Tin based silicones will yield the most favorable results. It is recommended that a test plaque be cast on the outside of the silicone tool to test for compatibility. Contact your RAMPF Group Inc. representative for more information. For best results, de-air the material prior to casting, then pressurize to 60 psi until cured. If pigment has been added to the hardener component, it will separate during storage.

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

Packaging

| | |
|--------------------|----------|
| OC-5090 Quart Kit | 3 lbs. |
| OC-5090 1 Gal. Kit | 12 lbs. |
| OC-5090 5 Gal. Kit | 60 lbs. |
| OC-5090 Drum Kit | 675 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.
