

EC-2400 / EH-2952-1

Epoxy Casting System

Abrasion resistant

Key Properties

- Easy to pour
- Low sedimentation
- Good chemical resistance
- Adjustable reactivity
- Hard surface, abrasion resistant
- Good mechanical properties

Applications

- Foundry patterns
- Copy models
- Foam molds

Processing Properties

| | | Unit | EC-2400 | EH-2952-1 |
|--------------------|-------------|-------------------|-------------------|-----------|
| Color | visual | | blue | yellowish |
| Mix ratio | | pbw | 100 | 7 |
| Density | DIN 2811-1 | g/cm ³ | ca. 2.00 | ca. 0.96 |
| Viscosity at 25 °C | DIN 53019-1 | mPa·s | 100,000 - 200,000 | 20 - 50 |

| | | Unit | EC-2400 / EH-2952-1 |
|------------------------|-------------|-------|---------------------|
| Mix viscosity at 25 °C | DIN 53019-1 | mPa·s | 12,000 - 18,000 |
| Pot life at 25 °C | 1000 ml | min | 120 - 150 |
| Demold time | | h | 18 |
| Max. layer thickness | | mm | 60 |

Cured / Mechanical Properties

| | | Unit | EC-2400 / EH-2952-1 |
|----------------------------------|-----------|----------------------------------|--------------------------|
| Cure | | | 16h at RT + 14h at 120°C |
| Color | | visual | blue |
| Density | ISO 1183 | g/cm ³ | ca. 1.90 |
| Hardness | ISO 868 | Shore D | 85 - 90 |
| Coefficient of thermal expansion | ISO 11359 | 10 ⁻⁶ K ⁻¹ | 30 - 40 |
| Deflection temperature, HDT | ISO 75 | °C | 115 - 120 |
| Glass transition temperature, Tg | DSC | °C | 115 - 120 |
| Compressive strength | ISO 604 | MPa | 165 - 170 |
| Compressive modulus | ISO 604 | MPa | 9,500 - 10,000 |
| Flexural strength | ISO 178 | MPa | 115 - 120 |
| Flexural modulus | ISO 178 | MPa | 9,000 - 9,500 |
| Linear shrinkage* | | mm/m | ca. 0.10 |

*measured on maximum layer thickness as stated above



Processing

The processing temperature and material temperature should be between 20-25°C.

Mix the two components thoroughly in the ratio indicated.

Degassing is recommended.

The mechanical properties and temperature resistance are only obtained through a post cure according to the recommended cure schedule.

Recommended cure schedule

After initial curing at room temperature for 12-24 hours depending on the size and thickness of the parts, the parts must be heated up to 120°C in steps and post cured for 14 hours at 120°C, then cooled down gradually. The curing time at room temperature, heating and cooling rate depend on the size and thickness of the parts.

Packaging

| | |
|----------------------|------|
| RAKU® TOOL EC-2400 | 5 kg |
| RAKU® TOOL EH-2952-1 | 3 kg |

Storage

Original containers should be kept tightly sealed and stored at ambient temperatures (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.