

Adhesive for epoxy boards

Key Properties

- Similar density, hardness, temperature resistance and coefficient of thermal expansion to epoxy board material

Applications

- Bonding of epoxy boards

Processing properties Adhesive

| | | | EP-2304 | EH-2934-1 |
|-----------|------------|-----------------------------------------|--------------------|---------------------|
| Color | visual | | Green | Yellowish |
| Mix ratio | | pb weight | 100 | 20 |
| | | pb volume | 100 | 17 |
| Density | ASTM D-792 | lb/ft ³ (g/cm ³) | ca. 54.9 (ca 0.88) | ca. 63.7 (ca. 1.02) |

| | | | EP-2304 / EH-2934-1 |
|-------------------------------------|--------|---------|---------------------|
| Pot life at 25 °C (77°F) | 500 ml | min | 50 – 60 |
| Max. layer thickness | | in (mm) | – |
| Minimal curing time at 25 °C (77°F) | | h | 16 |

Cured / Mechanical Properties

| 16h at RT + 14h at 120°C (248°F) | | | EP-2304 / EH-2934-1 |
|----------------------------------|-------------|-------------------------------------------------------------------------|-----------------------------------|
| Aspect | visual | | Light green |
| Density | ASTM D-792 | lb/ft ³ (g/cm ³) | ca. 56 (ca. 0.9) |
| Shore hardness D | ASTM D-2240 | | 75-80 |
| Coefficient of thermal expansion | ASTM D-3386 | 10 ⁻⁶ F ⁻¹ (10 ⁻⁶ K ⁻¹) | 19 – 25 (35 – 45) |
| Deflection temperature, HDT | ASTM D-648 | °F (°C) | 239 – 248 (115 – 120) |
| Glass Transition Temperature, Tg | DSC | °F (°C) | 239 – 248 (115 – 120) |
| Compressive strength | ASTM D-695 | psi (MPa) | 9,400 – 10,200 (65 – 70) |
| Compressive modulus | ASTM D-695 | psi (MPa) | 435,000 – 508,000 (3,000 – 3,500) |
| Flexural strength | ASTM D-790 | psi (MPa) | 6,500 – 7,300 (45 – 50) |
| Flexural modulus | ASTM D-790 | psi (MPa) | 435,000 – 508,000 (3,000 – 3,500) |

Processing

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

Mix the two components thoroughly in the ratio indicated and apply to both sides of the surface to be bonded. The mechanical properties and temperature resistance are only obtained through the 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 (248°F) in steps and post cured for 14 hours at 120°C (248°F), 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 EP-2304 | 5 kg |
| RAKU® TOOL EH-2934-1 | 1 kg |

Storage

Original containers should be kept tightly sealed and stored at ambient temperatures (15°C to 30°C) (59-86 °F). 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.
