Product Information

Tooling

Resin EP 4625

FEATURES

- Hardness 91 Shore D
- High temperature resistance
- Low shrinkage

COMPOSITION

- Part A: epoxy resin EP 4625
- Part B: hardener H 4625

EP 4625 is a two-component casting resin, containing aluminium, formulated for high temperature applications. The product is characterized by a rapid curing with very low shrinkage, excellent polishing properties and stability up to 160°C (with post-curing).

APPLICATIONS

- Designed to create RIM molds, composite molds and high temperature tools.

TYPICAL PROPERTIES

Specifications writers: These values are not intended for use in preparing specifications. Please contact your local sales representative prior to writing specifications on this product.

Property	Unit	Value
Colour (Resin A/Hardener B)	visual	Grey / Colorless
Density at 23°C (Resin A/Hardener B)	g/cm^3	1.83 – 1.88 / 0.90 – 0.95
Viscosity at 23°C (Resin A/Hardener B)	mPa.s	120000-160000 / 10-20
Colour (Mixture)	visual	Grey
Density at 23°C (Mixture)	g/cm^3	1.68 – 1.73
Mixing ratio	pbw	100 : 10
Pot life at 23°C (150g)	minutes	100 - 140
Demoulding	hours	12 - 16
Hardness	Shore D	91
Tensile strength	MPa	12.0 – 17.0
Deformation at break	%	2.0 – 3.0
Flexural modulus	MPa	7400 – 7900
Flexural strength	MPa	56.0 – 61.0
Glass transition (DSC)	°C	160
Linear shrinkage	%	0.10

SETTINGS

EP4625 contains fillers, which tend to settle over time. We recommend to use extreme care in re-homogenize the product in the container before use. Weight the two components and stir thoroughly until mixing is complete. Epoxy resins can crystallize at low temperature. To bring them back to their original condition heating at 40°C-50°C avoiding local overheating, then cool to room temperature.

MIXING

The two components should be thoroughly mixed using a ratio of 100:10 by weight, until a homogeneous mixture.

POTLIFE AND GELTIME

When the two components are thoroughly mixed in the right mixing ratio the reaction starts. The pot life, or usable time of the mixture, is normally the time required for an increase equal to twice the initial viscosity. Both Pot-life and Gel-time are depending on the mass and temperature: higher the mass

faster the reaction. Higher the temperature faster the reaction.

CURING

The system polymerizes at room temperature but the following cycle is recommended:

24 hours at RT + 4 hours at 80°C + 2 hours at 120°C

HANDLING PRECAUTIONS

The information for a correct and safe handling of the products are contained in the safety data sheet. Consult the safety data sheets before use for complete information on the risks for health and environment and for suitable protective devices to be adopted. Share the safety data sheets with all the staff involved in the use of the products.

PACKAGING

Resin is supplied in 5kg containers, hardener in 500g containers.

USABLE LIFE - STORAGE

Resin and hardener must be stored in the original unopened containers at a temperature between +10°C and +35°C. Be sure to close the containers after use. Resin and hardener, if stored under certain conditions, have a shelf life of 12 months from the date of manufacture.

LIMITATIONS

This product is neither tested nor represented as suitable for food contact, skin contact or medical uses.

LIMITED WARRANTY

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