## **Product Information**

## Composites



# Resin EP 504LV Hardener H60

#### **FEATURES**

- Low viscosity
- Fast curing

#### **COMPOSITION**

• Part A: epoxy resin EP504LV

• Part B: hardener H60



Two component, low viscosity, fast curing epoxy system designed for the production of laminating composites.

#### APPLICATIONS

• Composite materials

#### 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.

Properties	Unit	Value
Aspect Part A/Part B	Visual	Liquid
Color Part A/Part B	Visual	Straw / Colorless
Density at 23°C Part A/Part B	g/cm <sup>3</sup>	1.15 / 0.99
Viscosity at 23°C Part A/Part B	mPa.s	800 / 35
Mix ratio Part A/Part B	pbw	100:38
Density at 23°C Mixture	g/cm <sup>3</sup>	1.10
Viscosity at 23°C Mixture	mPa.s	240
Pot life (150g at 23°C)	Minutes	16
Gel time (150g at 23°C)	Minutes	24
Onset [DSC]	°C	53
Peak [DSC]	°C	104
Hardness	Shore D	76
Flexural modulus	MPa	2580
Flexural strength	MPa	101
Tensile strength	MPa	70.4
Elongation at break	%	11.0
Compressive modulus	MPa	1780
Compressive strength	MPa	83.5
Linear shrinkage [500x50x10mm]	%	0.16
Glass transition (DSC)	°C	58

#### **SETTINGS**

Check and, if necessary, homogenize the components before use. Epoxy resins tend to crystallize at temperatures below 25°C. In the presence of partial or total crystallization, heat in the oven at 40-60°C until complete melting. Avoid local overheating.

## MIXING

Weigh resin and hardener in the indicated ratio and mix until a homogeneous compound is obtained.

**Warning!** Epoxy resins and amines can generate a highly exothermic, uncontrolled reaction, with decomposition above 250°C. Prepare limited quantities of material and proceed with application.

#### **POTLIFE E GELTIME**

The Potlife or time of use of the mixture is normally the time required for an increase equal to twice the initial viscosity. Both Pot-life and Geltime depend on mass and temperature: the greater the mass, the faster the reaction will be. The higher the temperature, the faster the reaction.

#### **CURING**

The system cures at room temperature.

## 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**

EP504LV resin is supplied in 25kg containers; H60 hardener is supplied in 4kg containers.

#### **USABLE LIFE - STORAGE**

Store in the original, unopened containers at a temperature between +15°C and +35°C. Epoxy resins have a pronounced tendency to crystallize at

temperatures below 25°C. Hardeners are sensitive to moisture: be sure to close containers after use. This material, when stored under the specified conditions, has a shelf life of 24 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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#### www.chemix.it

Chemix Srl Via Berlinguer 8, 21010 Golasecca (Italy). Phone +39(0)331959373 info@chemix.it