

Faserverbundwerkstoffe<sup>®</sup> Composite Technology

## **Technical data**

# **Epoxy adhesive E**

High-strength structural adhesive for metals and other materials

## Description

- High bond strength
- Tough-hard formulation
- Free of solvents and fillers



Owing to their relatively low reactivities, metal adhesives are available with processing times from 90 to 120 minutes depending on the mixing ratio.

The adhesive has a tough-hard formulation, meaning that the bond between metal parts does not split even when heated. The thermal resistance is over 100 °C.

#### **Application**

Two-component epoxy resin for aluminium and other metals, wood, ceramics, rigid foams, and many plastics.

#### Processing

Owing to the polyamino amine hardener this adhesive system can be dosed in a mixing ratio ranging from 100:50 to 100:100 (resin : hardener). The result is different processing times and final strengths.

The adhesive system can be inspissated with fillers such as thixotropy-enhancing agents, cotton flock, milled glass fibres, glass bubbles, etc. (e.g. for repairs and filling gaps).

Set of two components: 0,05 kg - 25 kg order no.158 100-x

Epoxy adhesive E	Unit	Resin	Hardener
State of delivery	-	liquid	liquid
Colour	-	yellow-transparent	-
Colour index	Gardener	-	< 10
Density at 20 °C	g/cm <sup>3</sup>	1,15	0,96
Viscosity at 25 °C	mPas	43000	700-900
Epoxy value	100/equivalent	0,43	-
Amine equivalent	g/equivalent	-	130
Refractive index	n <sub>D</sub> 25	1,447	-
Heat resistance of bonds		> 100	
Gelling time (250 g/23 °C)	minutes	-	110—120
Storage (original packed)	months	min. 12	min. 12

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## Determining the bond strength of overlapped single-shear bonds (lap shear test) as per DIN 53281, Aluminium (AlCuMg1)

Mixing ratio	100 : 50	100 : 100
Shear strength	16,2	10,9

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