

EP552

# Thixotropic epoxy adhesive



**Trelleborg EP552 is a thixotropic, two component epoxy adhesive system designed for use up to temperatures of 120°C.** It may be used for many diverse bonding applications but is most suitable for bonding vertical surfaces and especially for blocking up Trelleborg epoxy boards. The adhesive system gels at room temperature, but requires a post cure to achieve maximum properties.

#### EP552 Features & Benefits

- Thixotropic
- High heat stability
- Does not drip in the vertical

#### EP552 Applications

- EP552 is designed for epoxy board bonding and is suitable for use with EP678, EP700 and TB650.

#### EP552 Product Sizes

EP552 is available in 5kg and 1kg kits.



#### EP552 Storage

Adhesive EP552 and hardener EP552 should be stored in original containers at a temperature between 15 and 25°C. Both components, if stored in the specified conditions, have a shelf life of 12 months from the date of production.

#### EP552 Health & Safety

Eye protection and gloves should be worn when working with Trelleborg EP552.

Please refer to the Trelleborg MSDS.

#### PHYSICAL PROPERTIES

Product	EP552 Adhesive	EP552 Hardener	Mixture
Material	Epoxy formulation	Amine formulation	Epoxide
Aspect	Thixotropic gel	Thixotropic liquid	Thixotropic liquid
Colour			Straw/Amber
Mix Ratio (pbw)	100	28	
Specific Gravity	1.10 - 1.20	0.95 - 1.05	1.05 - 1.15
Viscosity	Thixotropic	Thixotropic	Thixotropic
Gel Time* (200g)			30 minutes
Pot Life* (200g)			25 minutes

\* data measured at 20°C

	MECHANICAL PROPERTIES	
Shore Hardness	84 D	ISO 868
Flexural Modulus	2900 MPa	ISO 178
Tensile Strength	56 MPa	ISO 527-1
Compressive Strength	68 MPa	ISO 604
HDT, Post Cure	120 °C	ASTM D648

## EP552 Processing Guidelines

### Preparation of Substrates

Read the Material Safety Data Sheet before use.

Substrate surfaces must be cleaned and dried to remove traces of dust, dirt, oils or release agent before applying EP552. If necessary, degrease with 1-bromopropane or other suitable solvent. Models, moulds and parts to be assembled must withstand the recommended post-cure cycle temperature.

### Mixing and Application

Always use clean, dry tools for mixing and applying.

Adhesive EP552 must be mixed with hardener EP552 in the exact mix ratio by weight indicated. Both components must be at room temperature (20 – 25°C).

Initially mix for 4 – 5 minutes to obtain a homogeneous mixture, paying attention to the material on the edges of the container and not to incorporate too much air.

For gluing and repair of epoxy boards intended for applications at elevated temperatures, the use of vacuum is recommended to avoid the retention of any air pockets.

Using a spatula or roller, apply a 0.2 mm layer on each of the surfaces to be glued. The performance of the product at approximately 400 g/sqm varies according to the application method.

### Polymerization and Post-Curing

Hardening is achieved after 48 hours at 20°C but a thermal cycle with a gradual curve is recommended in order to ensure maximum effectiveness of the material. Leave the product at ambient temperature for at least 24 hours, then heat at 40°C for 1 hour, 60 °C for 1 hour, 80°C for two hours and finally 100°C for a further two hours. Allow the product to return gradually to ambient temperature. To achieve maximum thermal resistance, additional treatment of two hours at 120°C is recommended.



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