

# Technical Data Sheet

## ALCHEMIX EP 4352

*Two Part Epoxy Laminating Paste System  
For use with ALCHEMIX gelcoats and casting resins*

ALCHEMIX EP 4352 is a glass fibre reinforced epoxy laminating paste for use as a back filling compound in combination with ALCHEMIX gelcoats and flexible casting resins. After mixing both components a very smooth consistency is achieved with good and easy to spread characteristics. ALCHEMIX EP 4352 is formulated for use in RIM tools, moulds for pre-pregs, foundry patterns, gauges, jigs and fixtures, copy models and large negatives and controlling stencils.

### Special Features

- Wetter than standard pastes, easy to mix and apply
- Easy application on vertical surfaces
- Smooth consistency

### Mix Ratio

**EP 4352 : H4352**  
By Weight 100 : 8

### Product Data

Property	Units	EP 4352	H4352	Mix
Material	-	Glass fibre filled epoxy resin	Formulated amine	Glass fibre filled epoxy
Appearance	-	Grey paste	Blue liquid	Grey paste
Viscosity (25 °C)	mPa.s	Paste	150 – 250	Paste
Density (25 °C)	gcm <sup>-3</sup>	0.80 – 0.84	0.98 – 1.02	0.81 – 0.85
Usable Life (200g, 25 °C)	Minutes	-	-	60 – 120
Demould Time (200g, 25 °C)	Hours	-	-	24 may be longer in cold conditions

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## Cured Properties

Properties	Standard	Units	Result (Full Post Cure)
Hardness	BS EN ISO 868	Shore D	75 – 80
Tensile Strength	BS EN ISO 527	MPa	8.0 – 12.0
Elongation at Break	BS EN ISO 527	%	< 2.0
Flexural Strength	BS EN ISO 178	MPa	25.0 – 30.0
Flexural Modulus	BS EN ISO 178	MPa	3200 – 3500
Linear Shrinkage	500 x 50 x 10mm	%	< 0.05
Maximum Operating Temperature	Alchemie STM	°C	80

## Method of Use

### **Mixing and Application**

ALCHEMIX EP 4352 should be mixed with HARDENER H4352 according to the indicated mix ratio. The two components should be thoroughly mixed by hand or machine (e.g. dough mixer) until uniform in consistency and then applied in even layers, not less than 12mm and not deeper than 25mm thick. Care should be taken to avoid forming any air gaps. Using a roller will ensure an even layer thickness of 12 – 25 mm, avoiding unnecessary exotherm and resulting in a stable structure. When handling ALCHEMIX EP 4352, protect your hands with rubber gloves. Refer to the product MSDS for more information.

### **Storage**

ALCHEMIX EP 4352 and HARDENER H4352 should be stored in original, unopened containers between 15 and 25°C. KEEP THE PACKING TIGHTLY SEALED WHEN NOT IN USE.

If stored under the above conditions, ALCHEMIX EP 4352 / H4352 will have a shelf life of 12 months, from the date of production.

### **Packaging**

ALCHEMIX EP 4352 is supplied in 5kg and 20kg containers.  
HARDENER H4352 is supplied in 400g and 1.6kg containers.

(Please contact Alchemie Ltd for bulk supply)

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## **Further Information**

This data is not to be used for specifications. Values listed are for typical properties and should not be considered minimum or maximum.

Our technical advice, whether verbal, or in writing is given in good faith, but without warranty – this also applies where proprietary rights of third parties are involved. It does not release you from the obligation to test the products supplied by us as to their suitability for the intended process and use.

Before using any of our products, users should familiarise themselves with the relevant Technical and MSDS provided by Alchemie Ltd.

## **Alchemie Limited**

Alchemie Ltd develop, formulate and distribute Epoxy Resins, Polyurethane Resins, Silicones, Model Boards and Sheet Wax for use in the following applications:

- Electrical encapsulation
- Rapid Prototyping
- Prototypes
- Casting
- Gel Coating
- Laminating
- Model Making
- Master Models
- Flexible and rigid mould making

We offer fast service, technical support, development expertise, innovative products, diverse knowledge and experience.

We are a well-established company, with a high level of investment and experience. We implement BS EN ISO 9001.

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