



ALCHEMIX[®] EP 4350

Two Part Epoxy Laminating Paste System

For use with GELCOAT EP 4062 and ALCHEMIX EP 4062C Coupling Coat

ALCHEMIX EP 4350 is a glass fibre reinforced epoxy laminating paste for use as a back filling compound in combination with GELCOAT EP 4062 and ALCHEMIX EP 4062C coupling coat. After mixing both components a very smooth consistency is achieved with good and easy to spread characteristics. ALCHEMIX EP 4350 is formulated for use in RIM tools, moulds for pre-pregs, foundry patterns, gauges, jigs and fixtures, copy models and large negatives, controlling stencils and applications requiring high heat resistance.

Special Features

- High heat distortion temperature
- Easy application on vertical surfaces
- Smooth consistency

Rapport de mélange (en poids)

EP 4350 : H4350

100 : 8

Caractéristiques du produit

Property	Units	EP 4350	H4350	Mix
Material	-	Glass fibre filled epoxy resin	Formulated amine	Glass fibre filled epoxy
Appearance	-	Grey paste	Amber liquid	Grey paste
Viscosity (25°C)	mPa.s	Paste	10 – 20	Paste
Density (25°C)	gcm-3	1.20 – 1.30	0.95 – 1.00	1.17 – 1.27
Usable Life (200g, 25°C)	Minutes	-	-	120
Demould Time (200g, 25°C)	Hours	-	-	24 may be longer in cold conditions



Cured Properties

Properties	Standard	Units	Result (Full Post Cure)
Hardness	BS 2782: Part 3: Method 365B	Shore D	75 – 85
Linear Shrinkage	500 x 50 x 10 mm	%	< 0.05
Tensile Strength	BS 2782: Part 3: Method 320B	MPa	5.5 – 7.5
Elongation at Break	BS 2782: Part 3: Method 320B	%	2.0 – 3.0
Flexural Strength	BS 2782: Part 3: Method 335A	MPa	40.0 – 50.0
Flexural Modulus	BS 2782: Part 3: Method 335A	MPa	5200 – 5800
Coefficient of Thermal Expansion (CoTE)	TMA	°C-1	6 – 10 x 10 ⁻⁶
Heat Distortion Temperature (HDT)	TMA	°C	150 – 160 (After full post cure, see below)

Method of Use

Mixing and Application

ALCHEMIX EP 4350 should be mixed with HARDENER H4350 according to the indicated mix ratio. The two components should be thoroughly mixed by hand until uniform in consistency and then applied on top of ALCHEMIX EP 4062C coupling coat or a layer of ALCHEMIX EP 574 with chopped strand mat. Refer to the relevant data sheets for information on the use of GELCOAT EP 4062, ALCHEMIX EP 4062C coupling coat and ALCHEMIX EP 574 or contact Alchemie Ltd for more information.

The laminating paste should be applied in even layers, not less than 12mm and not deeper than 25mm thick. Care should be taken to avoid forming any air gaps between the coupling coat and the laminating paste. 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 4350, protect your hands with rubber gloves. Refer to the product MSDS for more information.

Cure and Post Cure

To achieve full high temperature properties, a step wise post cure treatment is recommended. Allow the product to cure at room temperature for at least 24 hours, then heat to 40°C for 1 hour, followed by 60°C for 1 hour, followed by 80°C for 1 hour, followed by 100°C for 1 hour, followed by 120°C for 3 hours.



To prevent any distortion during the post cure cycle, the unit should be placed on a conformer. When post-curing is complete, let the unit cool down slowly to room temperature, preferably in the oven. Sudden change in temperature can cause distortion or warping. The product can be used without post cure or with partial post cure, but will not achieve full high temperature properties. The product can be post cured at higher temperatures (up to 160°C), however, care should be taken if using the product at these temperatures as any air voids from the laminating process can cause bubbling or delamination between the layers.

Stockage

ALCHEMIX EP 4350 and HARDENER H4350 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 4350 / H4350 will have a shelf life of 12 months, from the date of production.

Conditionnement

ALCHEMIX EP 4350 is supplied in 5kg and 20kg containers.
HARDENER H4350 is supplied in 400g and 1.6kg containers.

Autres informations

Nos conseils techniques, verbaux ou écrits, sont donnés en toute bonne foi, mais sans garantie - il en est de même lorsque des droits de propriété de tiers sont mis en cause. Ceci ne vous libère pas de votre obligation de tester les produits que nous vous fournissons quant à leur aptitude au procédé et à l'emploi prévus.

*Les fiches techniques et de sécurité sont disponibles sur simple demande ;
par fax au 01 30 93 35 82 ou bien Par email à info@prodemmia.fr*

Toutes les indications ci-dessus sont données de bonne foi de par notre expérience et selon les essais effectués aux titres des fabrications, formulations et distributions des produits à mettre en œuvre. Il appartient cependant à l'utilisateur de s'assurer que la transformation de ces produits convient en tous points à leur destination finale .

La responsabilité de société PRODEMMIA ne peut en aucun cas être engagée pour toute utilisation non conforme aux normes et réglementations en vigueur dans le pays de destination des produits dont elle à la vente.

Conditions générales de ventes disponibles sur simple demande.