

E45GB

- Epoxy Casting Resin System -



The Epoxy System E45GB is an unfilled, low-viscous combination of resin and hardener with middle working time.

Product Properties:

Very good flowability
 Highly fillable
 Non-gluey surfaces
 High impact resistance, rest flexible
 Low shrinkage

Bridging of material tolerances
 Transparent casting

Physicochemical Characteristics:

Physical data / raw condition:	Value	Unit	Test method
Viscosity Resin 25 ° C	500 - 900	mPa * s	PM.01.003
Viscosity hardener 25 ° C	290 - 450	mPa * s	PM.01.003

Physical data / cured condition:	Value	Unit	Test method
density	1,1 – 1,2	g/cm ³	PM.01.002
shore hardness D	81		PM.01.009
colour	transparent		visually

Physical data determined on the unfilled specimen. Curing took place 7d at 20 °C.

Instructions to use:

Processing data:	
Mix ratio (by weight)	100 parts resin / 60 parts hardener
Mix ratio (by volume)	100 parts resin / 66 parts hardener
Mix viscosity	Low viscous
Pot life (working time) 20°C	45 min (100g)
Demouldable	48 h (20°C)
Full cure	7 d (20°C)
Working temperature (optimal)	15 °C – 25 °C

Application:	filler:	Mix ratio (by volume):
Levelling mass	-	Unfilled resin system
Light casting mass	Micro balloons	1 part resin system: 1 part filler
Coloured system	colour pigments	depending on colour intensity transparent or opaque

Safety Instructions:

The safety instructions are to be taken from the respective containers. Do not allow children to handle. Prevent inhalation of the fumes and contact with bare skin. Wear suitable protective gloves and safety goggles. Do not eat, drink or smoke while using. During the hardening process, energy can be released in the form of heat, hence a cooling/heat exchanging should be provided in order to prevent hot spots. Only mix the components in the recommended proportions in accordance with the instructions.

Application Instructions:

We recommend to perform preliminary tests to check the suitability for the particular type of application. The system should only be used in the mentioned temperature conditions. The relative air humidity should not be above 70%. Depending on the material of the casting mould, it may be necessary to use a release agent to ensure a perfect final moulding.

Shake or stir product intensively before use. In compliance with the safety instructions, resin and hardener are weighed in a suitable mixing container (for example PP) according to the characteristics of the product data sheet. Deviating from the mixing recommendations can lead to incomplete hardening and through that to a loss of performance. Ensure that the edges are well mixed using a stirring stick or a propeller type mixer. Localized signs of smear formation indicate insufficient stirring and mixing of the components. After complete homogenization of the mixture, optional additives, dry fillers and colour pigments can be stirred in. By degassing in a vacuum at 30 - 50 mbar, the system can be vented. Attention, the material expands.

Larger amounts (> 100g) and higher temperatures (> 20 ° C) shorten the processing time. Mixtures which rise above 40 ° C in the mixing vessel should not be used any further since curing leads to property losses.

Cleaning of work tools:

Unhardened product remains can be removed from tools by means of acetone. Tools should be given a good airing after being cleaned with this solvent, in order to prevent the solvent from being retained until the tool is used again.

Hardened remains can only be removed by mechanical means, e.g. by sanding.

Storage:

Threaded container tops should be kept free of material remains. Do not exchange tops/lids. Close opened containers tightly. Store in a cool and dry place.

With optimal storage conditions, shelf-life should be beyond 12 months.

Disposal:

Do not allow to enter drains, waterways or soil. Uncured product residues are hazardous waste. The cured system is construction site waste / household waste.

Further Information:

Further application information can be obtained from our website, by selecting Product Info on the homepage. Please do not hesitate to contact us by telephone if you have further queries.

Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. It is the user's responsibility to determine for himself the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. We make no warranty as to the results to be obtained in using any material and, since conditions of use and storage are not under our control, we must necessarily disclaim all liability with respect to the use of any material supplied by us. We recommend tests be performed for trials and suitability for the particular type of application.

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