Technical Datasheet

EPOMAX-LIQUID GLASS

Two-component, transparent, solvent-free epoxy resin

Description

EPOMAX-LIQUID GLASS is a two-component, transparent, solvent-free epoxy resin (liquid glass), formulated to create decorative surfaces. Shows high mechanical and chemical resistance, excellent adhesion to a wide range of substrates and great workability. Ideal for use in applications carried out in confined spaces and in general where the presence of solvents is not desired.
Certified according to EN 13813 and classified as a SR-B2,0-AR0,5-IR4 type floor coating material. CE marked.

Fields of application

EPOMAX-LIQUID GLASS is intended for use either as a transparent final decorative coating on different types of substrates, such as wood, metal, stone, plastic, etc., or for the embedding of various objects, producing a hard-wearing, glass-like final surface.

Technical data

Basis:	two-component epoxy resin
Color:	transparent
Viscosity:	450-550 mPa·s at +23°C
Density (A+B):	1.10 kg/l
Mixing ratio (A:B):	100:58 by weight
Pot life:	35-40 min at +23°C
Minimum hardening temperature:	+8°C
Initial curing time:	8 h at +23°C
Light pedestrian use:	24 h at +23°C
Final strength:	7 days at +23°C
Maximum thickness per layer:	5-6mm
Indicative waiting time between layers:	1-2 h at +23°C
Tensile strength:	42 N/mm^2
Elongation at break:	14%
Shore D hardness:	75
Compressive strength: (EN 13892-2)	> 60 N/mm^2
Flexural strength: (EN 13892-2)	> 50 N/mm^2
Adhesive strength:	>3 N/mm^2 (concrete failure)
Wear resistance: (BCA method, EN 13892-4)	AR 0.5
Impact resistance: (EN ISO 6272)	IR4

Cleaning of tools:
Tools should be thoroughly cleaned with SM-12 special solvent immediately after use.

Directions for use

1. Substrate preparation

The surface to be treated must be:
- Dry and stable.
- Free from materials that might impair adhesion, e.g. dust, loose particles, grease, etc.
- Protected from negative water pressure.

2. Mixing of components

Components A (resin) and B (hardener) are packaged in two separate containers with the correct, fixed mixing ratio by weight. The entire contents of component B is added to component A. The two components should be then mixed for about 2 minutes with a low speed mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container to achieve the uniform dispersion of the hardener.

3. Application process – Consumption

Depending on the use, the mixture can be applied with a roller or spatula, or can be poured onto the surface to be treated.

During the casting of objects, the steps described below should be followed:

<u>Filling - smoothing layer</u>
Absorbent surfaces, such as wood, ceramic, etc., must be sealed with a thin layer of EPOMAX-LIQUID GLASS to ensure their leveling and achieve a uniform result. After the leveling layer has completely dried, any uneven parts must be smoothed out with sandpaper.

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Encapsulation of objects
Embedments, such as coins, leaves, etc., must be completely dry and free of moisture.
When casting thickness is ≥ 2mm, the proper mold should be made so that no resin leakage is allowed.

Application of EPOMAX-LIQUID GLASS
The required amount of resin is poured over the treated surface and then spread with a spatula for uniform distribution. After 10-20 minutes, the surface of the poured resin should be carefully checked for any entrapped air bubbles, which, if detected, can be removed by heating up the fresh surface of EPOMAX-LIQUID GLASS using for example a small blowtorch or a heat gun.
Following the completion of the application, the surface must be covered for at least 24 hours to be protected from dust and other contaminants.
Consumption: 1.1 kg/m^2/mm of layer thickness.

Packaging

EPOMAX-LIQUID GLASS is supplied in 1kg and 3kg buckets (A+B), with components A and B having a fixed mixing ratio by weight (A:B=100:58% by weight).

Shelf life – Storage

12 months from production date if stored in original, unopened packaging at temperatures ranging between +5°C and +35°C. Protect from direct sunlight and frost.

Remarks

- It is recommended not to exceed the proposed 5-6mm application thickness in order to prevent an increase in temperature during the exothermic reaction and help any entrapped air bubbles escape more easily.
- Bonding between successive layers may be severely affected by moisture or dirt present between them.
- In case recoat time is longer than expected or old floors are to be overlaid again, the substrate should be thoroughly cleaned and ground before applying the new layer.
- EPOMAX-LIQUID GLASS can be colored by means of suitable pigments. For further information, please contact the Technical Support Department.
- Please consult the safety instructions written on the packaging before use.

Volatile Organic Compounds (VOCs)

According to Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory l, type WB is 200g/l (2010) for the ready-to-use product.
The ready-to-use product EPOMAX-LIQUID GLASS contains a maximum of 200g/l VOC.

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CE

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EN 13813 SR-B2,0-AR0,5-IR4

Synthetic Resin screed material for use internally in buildings

DoP No.: EPOMAX LIQUID GLASS / 1874-01

Reaction to fire: F

Release of corrosive substances: SR

Water permeability: NPD

Wear resistance: AR0,5

Adhesion: B2,0

Impact resistance: IR4

Sound insulation: NPD

Sound absorption: NPD

Thermal resistance: NPD

Chemical resistance: NPD

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