

with hand and head



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<https://www.apraktika.hu/en/epoxy-coating-resin>

Glass Varnish Epoxy resin: Technical Data Sheet

This glass varnish resin has a high degree of UV resistance. It is two-component epoxy resin. The base resin is pale purple but translucent and unfilled, solvent free.

The resin can be used to coat the surface of a wide variety of materials. Such as wood, ceramic, plastic, porcelain, polyurethane and other foams, etc.

Features:

- Clear
- High hardness, scratch resistance
- UV resistant
- Well spreading, thin, easy to pour

1. Main Fields of Application

- Jewellery making and coating.
- Surface protection against UV, scratch, chemicals.



2. Instructions for use

- Use protective equipment, rubber gloves
 - Provide a clean work environment
 - Ideal processing temperature: 18 ° C to 30 ° C
 - The object temperature to be coated must also be constant during working time
 - All tools, mixing bowl, etc. and the environment should be dry and low humidity
 - Work in a UV-free space
 - Do not expose the object to UV radiation for at least 7 days after curing to achieve the best UV stability.
 - Do not use any solvents or incompatible additives
 - Colouring is possible with epoxy pigments
1. Prepare the two components (resin and hardener) and shake them separately or mix thoroughly before use.
 2. Weigh out the specified amount of base and hardener (eg 10 cm³ of base and 5 cm³ of hardener). It is also possible to measure the components in % by weight by converting them from the above ratio and the density in the table below.
 3. Once the two components have been accurately weighed (**Caution!** Epoxy resins are generally sensitive to accurate mixing ratios. Failure to do so may inhibit curing process.)
 4. Place the components in the mixing bowl and mix thoroughly. The mixing vessel should preferably be made of polypropylene or polyethylene plastic, with which the resin does not react at all. Do not leave unmixed components on the wall of the mixing bowl.
 5. Then use a brush to apply the glass varnish to the desired surface.



The working time (pot life) depends on the temperature. It starts to gel after 190 minutes (at ~ 20 °C). This time decreases with increasing ambient temperature. E.g. at ~ 30 °C to 110 minutes.

However, after mixing the components react, the mixture starts to heat up.

Therefore, try to apply within 10 minutes.

Thermal treatment is possible to achieve the perfect result. However, in everyday use it is not necessary.

In this case, the heat treatment can be started at least 12 hours after curing. The heat is to be performed at 40 °C for 12 hours.

However, for best results, heat the object at 60 °C for 8 hours, e.g. in a well controlled oven.

Take into account the material properties of the coated object. For example, if it has high thermal expansion or softens at low temperatures, do not apply heat treatment. Jewellery and ornaments coated with glass varnish will usually have a sufficient luster even without it.

3. Important Recommendations

- Observe the general health and safety regulations
- Wear protective gloves
- Ensure adequate ventilation
- Wear safety goggles and suitable safe clothing



4. Chemical and Physical Properties

	Resin (base)	Hardener
Mixing ratio (volume %)	100	50
Colour	blausviolett	transparent
Viscosity mPas , 25 °C	1550	100
Mixing time 25 °C	1 min	
Gel time 20 °C	190 min.	
Peak temperature	220 °C	
Complete hardening duration, 25 °C	48 h	
Density, 20 °C	1,18 g/cm ³	0,99 g/cm ³

5. Shelf Life

The Glass Varnish epoxy resin is guaranteed for a period of 18 months if it is stored correctly at a temperature of between 5°- 27°C (41° - 80°F).

The advice given verbally, in writing or through demonstrations on the use of the products are based on our best knowledge.

The use and application of the product by the user lie beyond the control of the company and are therefore the user's own responsibility.