

COLORSIVIT EPOX CASTING



EPOXY COMPOUND FOR TRANSPARENT CASTING (A+B)

DESCRIPTION

Solvent free epoxy product with very low yellowing, and high gloss. Applied in castings with thicknesses between 2 and 5 cm, it hardens without shrinkage while maintaining perfect transparency and deaeration. The mass reaction develops little heat, does not cause yellowing and does not cause tension or deformation.

USE

Ideal for incorporating objects and creating elements that provide for high thicknesses, such as: tables, river table, artistic objects.

SUPPORT

The surface receiving the casting must be solid, dry, not polluted by oils, detergents, powders or other release substances.

The temperature of the substrate must be > 15 °C.

PREPARATION OF THE SUPPORT

The molds in which to cast must be non-absorbent and non-stick (plastic or waxed): To avoid material leakage it is recommended to apply hot glue along the joints. In case of casting on wood or porous surfaces, seal at best by applying COLORSIVIT EPOX CLEAR TIX with a spatula or brush and pouring after 8-12 hours. Even in case of incorporation of wooden, porous or organic objects to carry out the above treatment, it is recommended in any case that they are perfectly dry.

APPLICATION

General indications: at the time of application, combine the components in a single container and mix slowly and homogeneously for at least two minutes. Carefully respect the ratio of mixture by weight. Let the mixture rest for 5-10 minutes, if possible near a heat source to facilitate the removal of any air incorporated in the mass. Pour the product on the surface to be coated for a consumption of 1 kg/m² per millimeter of thickness. Take care to pour the product as close as possible to the surface to avoid the incorporation of air. Thicknesses of less than 2 cm are not recommended as they may require hardening times >72 hours and manifest tension or defect on the surface.

In these cases it is recommended to use COLORSIVIT EPOX CLEAR or COLORSIVIT EPOX T.

For thicknesses greater than 5 cm it is advisable to make two pourings of product to avoid the formation of defects such as mechanical stress, incorporation of air bubbles or yellowing from exothermy. The mixture of COLORSIVIT EPOX CASTING can be colored by adding to the mixture suitable inks, compatible colored pastes, powder pigments or metal pigments (provided they are perfectly dry). Translucent or fully covering effects can be achieved. For the percentages of use of dyes, see the technical data table at the bottom of the card. For vertical applications use COLORSIVIT EPOX CLEAR TIX. After hardening, the surface can be abrasive with an orbital polisher, using abrasive papers in progression (indicatively with grains from 120 to 3000 or higher) until a smooth and shiny surface is obtained. Then using polishing waxes paste you can make the surfaces like a mirror. If you want to increase chemical resistance with a top-coating sanding with grain 220-360 to promote adhesion. After sanding remove dust completely.

Making tables: in the specific realization of artistic tables in combination with wood, the work cycles can be widely customized, depending on the operating conditions, the size of the product, etc. and are at the discretion of the applicator. Contact Sivit Technical Service for more information.

Warnings: it is always advisable to heat the components to a temperature of at least 25°C, in order to make the reaction speed optimal and thus avoid the possible formation of air bubbles inside the mass. To further facilitate the deaeration of the casting system, we recommend the use of a hot air gun. In case of storage at very low temperatures, component A may show opalescence; once heated and brought back to environment temperature regains transparency and can be used.

Reports of use dyes:

- for "translucent" effects, use up to 1.0% by weight of solvent-compatible inks
- for "opaque" effects use up to 1.0% by weight of concentrated coloring pastes for epoxy (COLORPASTA EPOX)
- powder, metallic or other pigments must be evaluated on a case-by-case basis with preliminary tests to assess their compatibility and intensity of effect

TECHNICAL SPECIFICATIONS

PRODUCT DATA	
Colour	Transparent
Consumption	1 kg/m ² per 1 mm thickness
Specific gravity (at 25°C): mixture (A+B)	1,10 +/- 0,05 g/ml
Viscosity (at 25 °C): mixture (A+B)	600 +/- 120 mPa·s (spindle 2, rpm 60)
Flash point	> 100°C
Solvent for cleaning tools	UNI Solvent
Storage	12 months, store in a dry place at a temperature between 15°C and 30°C
APPLICATION DATA AND TIMING	
Mixture ratio	by weight: A=100, B=47
Pot-life (150 g of A+B blend and 50% R.H.)	at 15°C > 90 min at 25°C 60 min at 30°C 30 min

Tack Free (2 cm thick and 50% R.H.)	at 15°C 48 hours at 25°C 36 hours at 30°C 24 hours
Tack Free (5 cm thick and 50% R.H.)	at 15°C 36 hours at 25°C 24 hours at 30°C 18 hours
Overcoating (50% R.H.)	See times of "Tack Free"
Hardening in depth (50% R.H.)	at 25°C 5-7 days
Coating maintenance	For cleaning operations use neutral detergents
TECHNICAL PERFORMANCE DATA	
Hardness SHORE D at 24 hours and 20°C	Depth 5 cm: 70 Depth 2 cm: 40
at 48 hours and 20°C	Depth 5 cm: 80 Depth 2 cm: 70
Chemical resistance	Contact Sivit Technical Service for detailed information

Product for professional use, the buyer undertakes to follow the above warnings in the application of the purchased product and the instructions in the safety data sheet.