

## Technical Data Sheet

# Epox-5116

**(Epoxy resin making decorative parts)**

### Product description

This product is a two-component epoxy system that includes transparent semi-dilute epoxy resin and transparent hardener, which is used to make small-volume resin parts and abstract panels. The special formulation of this compound causes minimal bubbles to form during mixing. The very high corrosion resistance of this resin increases the durability and longevity of the made resin parts.

### Product properties

Completely transparent  
Low viscosity and permeable to the surface  
Curable at ambient temperature  
Resistance to moisture, water and chemicals  
Excellent adhesion  
More stability to rays sun  
Very long life

### Instructions

- The amount of strength and durability of this adhesive depends on how to prepare the substrate and the correct mixing to apply the adhesive on it.
  - For the least possible preparation, the desired surface should be cleaned of any dust, oil and grease.
- Use cleaners such as acetone to clean greasy surfaces.
- Resin and hardener should be thoroughly mixed at room temperature.

### Mixing procedure

Measure at 2 volumes of part A and 1 volumes of part B



## Product specification

	Resin	hardener
Appearance	clear liquid	clear liquid
Specific gravity	1.1	
Mixing ratio by wight	2	1
Pot life at 25 c (100gr)	120 min	

### Cure time

- hours at 5 c
- hours at 15 c
- 168 hours at 25 c
- 72 hours at 35 c

### Tack-free time(thin film initial cure)

- hours at 15 c
- 72 hours at 25 c
- 36 hours at 35 c

## Practical tips and considerations for working with resin

- A set of measures that are better to be used and will have a positive impact on the quality of the final product:
- Do not use solvents in any way.
- The exact ratio of resin and hardener must be observed (preferably weighed with a scale with an accuracy of one gram)



Avoid whipping and stirring while mixing Wahdner resin and mix gently and for a longer time (at least 3-5 minutes) to create less bubbles.

- To eliminate the bubbles, it is better to vibrate the mold and gently remove the surface bubbles with a flame.
- Try to transfer the mixed resin to another container and then pour it on the work.
- Do not work in heat and sunlight (the best temperature is 22-25 degrees)
- If necessary, use a suitable wax or separator on the mold.
- If the work is more than 3 cm thick, it is better to apply the resin in different stages.
- Each step continues after a little hardening and cooling of the previous layer.
- The mold and around the work environment should be cleaned of dust, sand and wood dust.

Eliminate dust suspended in the workshop air.

\* An important point in working with wood and porous surfaces, is that before pouring the resin on the wood, pre-treat the wood or surface with a resin brush and allow it to harden completely. This closes the air outlet from the wood into the resin, which hardens after the resin heats up, and prevents the resin from being wasted into the cavities.

## Typical Physical Properties

Property	value	test method
tensile strength	40 mpa	ASTM D638
tensile shear strength steel/steel	13 mpa	ASTM D1002
compressive strength	80 mpa	ASTM D695
flexural strength	40 mpa	ASTM D790



## **Equipment maintenance**

All tools should be cleaned with hot soapy water before the adhesive residue dries. Removing cooked debris is a difficult and time consuming operation. If solvents such as acetone are used for cleaning, staff should take appropriate precautions and, in addition, avoid skin and eye contact.

## **health and safety**

The adhesive should be stored in closed containers at a temperature of 25 degrees.

After using the material, close the lid of the remaining material tightly.

Before using the material on the surface, make sure that there is no dust, damp or moisture on the surface.

Before using the material, clean the surface from any grease and dirt.

Wear industrial gloves and a mask when using materials.

