

CS POXY GEL

Adhesive, Joint and Surface Filler



PRODUCT DESCRIPTION

CS Poxy Gel is an epoxy-based, solvent-free, two-component adhesive gel for natural and artificial stones. It uses a specially formulated, cycloaliphatic amine hardener which causes minimal yellowing.

SPECIAL FEATURES

CS Poxy gel is mainly used in the stone-working industry for weather-resistant bonding and gluing of natural stones (marble, granite) as well as artificial stones or building materials. The high-quality raw materials employed in the manufacturing process ensure a hardly yellowing system which can be used with light-colored stones. Due to its supple, gel-like consistency, the product has a high creep strength on vertical surfaces and still provide thin adhesive joints. CS Poxy Gel can also be used with plastics (hard PVC, polyester, polystyrene, polycarbonate), paper, wood, silicones, Teflon, rubber etc.

ADVANTAGES

- Neutral color
- Low shrinkage minimizes stress development in joints
- Weather resistance
- Solvent-free product
- Good resistance to alkali materials
- Compatible with solvent-sensitive materials
- Post curing, product is harmless upon contact with food

APPLICATION AREAS

- Natural and artificial stones
- Building materials
- Plastics
- Polyester
- Paper and wood
- Glass

PACKAGING

CS Poxy Gel kit contains 1.5 kg epoxy resin and 0.75 kg hardener.

STORAGE AND SHELF LIFE

CS Poxy Gel has a shelf life of approximately 12 months when stored under cool and dry conditions in original container.

PRECAUTIONS AND HINTS

- For optimal mechanical strength and chemical properties, always mix resin (component A) and hardener (component B) in a 2 : 1 ratio by weight. Excess of A or B can cause softening and/or discoloration of the area.
- Use gloves to protect hands during application.
- Resin and hardener should be extracted with SEPARATE spatulas/spoons.
- Resin (component A) tends to slightly crystallize upon standing. It can be made workable again by warming it.
- Do not use adhesive once it has jellied or thickened.
- Do not use product in temperatures below 10°C as it may not fully cure in the reported amount of time.

- If the cured material is exposed to temperatures above 50°C, it is prone to yellowing.
- Hardened adhesive can only be removed by mechanical means and/or extreme heat (> 200°C).
- Ask for safety datasheet if needed.

APPLICATION PROCEDURE

- Contact surfaces to be thoroughly cleaned and lightly abraded.
- Two parts by weight of resin (component A) to be mixed with one part by weight of hardener (component B) until mixture is homogenous.
- Coloration is possible by adding color tint up to 5% of total volume.
- The mixture is workable for about 15 – 20 minutes at 20°C. Bonded parts can be transported after about 6 – 8 hours. They can bear loads and be tooled after 12 – 16 hours. Maximum strength is reached after 7 days (@ 20°C).
- Warm temperature accelerates curing process and cold temperature slows curing process.
- Tools can be cleaned with CS Poxy Remover.

TECHNICAL DATA

The following information has been collected in accordance with DIN 53452 and DIN 53455

Parameter Results		Results	
Density			
Resin	1.16	Hardener	1.07
Working Time (min:sec)			
Mixture of 400 gm Resin + 100 gm Hardener			
At 10°C	At 20°C	At 30°C	At 40°C
Approx. 40:00	15:00 – 20:00	12:30 – 17:30	10:00 – 15:00
At 20°C with varying amounts (min:sec)			
20 gm resin + 10 gm hardener		15:00 – 20:00	
50 gm resin + 25 gm hardener		15:00 – 20:00	
100 gm resin + 50 gm hardener		10:00 – 15:00	
300 gm resin + 150 gm hardener		10:00 – 15:00	
Shore D Hardness			
At 3 hours		42	
At 4 hours		62	
At 5 hours		72	
At 6 hours		77	
At 7 hours		78	
At 8 hours		80	
At 24 hours		81	
Tensile Strength (N/mm²)		35 – 40	
Bending Strength (N/mm²)		> 80 N/mm	