

## STEEL EPOXY

### 1 – DESCRIPTION

**Steel Epoxy** is a two component, epoxy based, solvent free, fast curing and extremely strong, metal bonding adhesive which develops high strength. The gap filling property makes this adhesive system suitable for rough and poorly fitting surfaces.

### 2 – PROPERTIES

- High lap shear strength and durability,
- Very fast cure,
- Cures at room temperature,
- Cures without shrinkage and crack,
- Good gap filling capability,
- Machinable,
- Water and chemical resistant,
- Weather and temperature resistant,
- Easy to mix and dispense,
- Paintable and sandable.

### 3 – APPLICATIONS

- Bonding for metal, concrete, wood, glass and ceramic,
- Use for repairing machinery, appliances, tools, automotive components, pipes,
- Imbedding bolts and screws into metals, concrete or stone,
- Sealing electrical components,
- Not recommended for polyethylene, polypropylene, nylon, PTFE or flexible plastics.

### 4 – INSTRUCTIONS

- **Personal Safety:** Preferably wear gloves during use.
- **Surface Preparation:** Surfaces must be dry, clean and free from oil, wax and paint. For better bonding slightly roughen surfaces with emery cloth and abrasive paper.
- **Application:** Remove the end tips of the syringe. Turn syringe end up and pull plunger back slightly allowing air bubbles to rise top. Depress the double piston to dispense equal quantities of both parts into mixing tray. Use mixing stir and mix thoroughly resin and hardener for one minute until homogenous mix is obtained. Apply the mixed adhesive as quickly as possible to one of the surfaces to be bonded by carefully and assemble parts immediately together. Press the two surfaces together and hold in place for 120 seconds. Allow at least 20 min. before handling and for best result do not move the assembled parts until the end of cure duration. The adhesive attains its full strength after 24 hours at 20 °C. Working time of the mixed adhesive depends on temperatures and the quantities mixed. Higher temperatures and larger quantities

will shorten this working time. Best results are achieved between 20°C and 25°C. After use clean the special cap and close tightly. Always store the adhesive in a vertical position.

- **Cleaning:** Clean excess uncured adhesive immediately by wiping a clean cloth. Acetone or mineral spirit may be used to assist in removal. Solvents must be always handled with care because they are hazardous and flammable. Follow manufacturer's instructions and test on small area before applying. Cured adhesive can only be removed mechanically; can be cut away with caution using a sharp blade.

## 5- PACKAGING

Product	Volume / Weight	Package
Steel Epoxy	25 ml (28,8±0,4 gr)	12

## 6- STORAGE AND SHELF LIFE

21 months from date of production if stored properly in original, unopened and undamaged sealed packaging in cool, dry conditions at temperatures between +8°C and +30°C. High and low temperature storage can adversely affect product properties. Keep from freezing.

## 7- SAFETY

For information and precautions on the safe handling, transportation storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety related data.

## 8- TECHNICAL PROPERTIES

Basis	: Epoxy based
Color	: Resin: Transparent Hardener: Black
Density (gr/cm <sup>3</sup> )	: Resin: 1,16 Hardener: 1,13
Viscosity (cps)(25 °C)	: Resin : 12,000-13,000 Hardener: 10,000-11,000
VOC Content (%)	: 0 (by weight) (Resin and Hardener)
Application temperature (°C)	: 5°C to 25 °C
Mix ratio	: 1:1 (by volume)
Mixed density (gr/cm <sup>3</sup> )	: 1,15
Final colour	: Black
Set time (min.)	: 4- 5 (at 23°C)
Handling time (min.)	: 20 (at 23°C)
Full cure time (hr.)	: 24 (at 23°C)
Service temperature (°C)	: -23 to +60
Gap fill	: Good
Hardness Shore D	: 80±2 (after 7 days)
Paintable	: Yes (but confirm by test)
Sandable	: Yes