

TECHNICAL DATA SHEET

PENOSIL EpoxyFix Metal 520

Hand mixed two-component epoxy putty reinforced with anticorrosion steel allowing fast fixing and restoration. After mixing the activator and the base in the internal and external layers, a polymer compound with is formed that can be formed or used for repairing, restoring and patching metal parts.

Easy to use, indispensable for small fast repairs. The consistency (like modelling clay) eliminates drips and runs, facilitates adhesion to the substrate, and allows the material to be shaped and formed as needed before curing begins.

Main benefits

- Can be drilled, sawed, carved, sanded, filed, and painted.
- Resistant to water and chemicals.
- temperature resistance up to +150 °C.
- Contains no solvents or VOCs.
- It is non-flammable and releases no noxious fumes.
- Does not shrink.

Fields of application

- Fills cracks and voids in metal.
- Seals leaks in pipe joints.
- Restoration of uncovered nail heads, small machine parts, corroded metal.
- Forming special-shape tools, handles, prototype parts.

Adhering

- Metal

Application instructions

Application conditions

Application temperature between +5 °C and +30 °C.

Surface preparation

The surfaces must be dry, clean from dust, loose particles and oil. Non-porous surfaces should be cleaned with solvent and a clean, non-fluffy cotton cloth. Solvent excess should be removed before evaporating with a clean cloth.

Application method

Before applying, roughen and clean the area to be repaired. Then follow these easy steps:
Cut or twist off required amount.

Mix by kneading with fingers to a uniform colour. If mixing is difficult, warm the product to room temperature or slightly above. Even mixing is important for achieving a good quality.

Apply to surface to be repaired within 2 minutes of mixing. Force into any cracks or holes and strike off excess material, preferably with a tool moistened with clean water. Upon applying the putty to moisture, wet or slowly leaking surface, press the material strongly to the surface and press until adhered. For best result, moisten your fingers in order to make mixing, applying and smoothing of cured product easier.

Remove excess material before curing.

Cleaning

Clean the uncured putty with PENOSIL Cleaning Wipes. Cured putty can only be removed mechanically.

Technical data

Properties	Value	Unit
Consistency	Putty	
Application temperature	+5...+30	°C
Service temperature	-40°C to +121°C Continuous -40°C to +149°C intermittent	°C
Work life	3...5	minutes at 24°C
Shore D Hardness ASTM D2240	80	
Lap shear strength Steel ASTM D1002	6,2	N/mm ²
Dielectric strength ASTM D149	11800	V/mm
Compressive strength ASTM D695	55	N/mm ²

The values specified were obtained at +23 °C and 50% relative humidity, unless otherwise specified. These values may vary depending on environmental factors such as temperature, moisture and type of substrates.

Colour

Cures to a dark grey metallic colour.

Package

30 ml stick individually packaged in a reusable clear plastic tube with instructions and plastic friction top. Packed 12 sticks in a display carton.

Storage conditions and shelf life

Guaranteed storage time 24 months starting from the date of manufacture if stored in a closed original package in a dry place between +5 °C and +20 °C.

Limitations

- Adhesion tests on any unknown material are recommended before use.
- There is no adhesion to PE, PP, PTFE (Teflon®).

Safety regulations

Ensure sufficient ventilation during application and wear necessary personal protective equipment. More specific safety information is available on the safety data sheet (SDS).

Note: The instructions in the present documentation are based on tests carried out by the manufacturer and are presented in good faith. Due to variations in materials and substrates as well as the various application possibilities that are beyond our control, the manufacturer is not liable for the results achieved. In any case, it is recommended to test the product suitability at the place of application. Manufacturer reserves the right to modify products without prior notice. This TDS replaces and supersedes all previous data sheets on the same product.