

EPM™

Epoxy Based Paste for Metal Repair



Building
&
Transportation



Oil, Gas
&
Industrial



Offshore
&
Onshore



Water
&
Wastewater



PRODUCT DESCRIPTION

The CTech-LLC® Epoxy Based Paste (EPM™) is a type of epoxy putty / repair material used to fix various metal parts, components, and surfaces, including aluminum, brass, and steel.

The CTech-LLC® Epoxy Based Paste (EPM™) is made up of two components: The metal filled epoxy resin and a hardener. When combined, they form a hard and durable compound that can be used to repair a wide range of metal surfaces, holes, cracks, solid metal shafts, live leaks, and pipe repair (as metal repair epoxies are often used as a pipe leak sealer).

PHYSICAL and MECHANICAL PROPERTIES

Chemical Base	Epoxy resin
Mixing Ratio (by weight)	100:20 Part A: 100 Part B: 20
Color	Mixed resin and hardener is dark grey paste
Curing Time at 20° C	Usable Life: 30 minutes Machining and light loading: 2 hours Maximum over coating time: 6 hours Full cure: 3 days
Coverage Rates*	0.406 m ² at 1mm 0.203 m ² at 2mm 0.135 m ² at 3mm
Shelf Time	24 months
Storage Condition	Store dry and away from direct sunlight 15-35° C

*1kg of fully mixed product

MECHANICAL PROPERTIES

Property	Test Method	Test Value*
Compressive Strength	ISO 604	125 MPa
Compressive modulus	ISO 604	9900 - 1350 MPa
Flexural Strength	ISO 178	100

ADVANTAGES

- **Durability:** Epoxy based paste for metal repair (EPM™) is durable and withstand extreme temperatures, harsh weather conditions, and heavy loads.
- **Versatility:** Epoxy based paste for metal repair (EPM™) can be used on various metal surfaces, including aluminum, brass, and steel.

Some can repair and be machined back to OEM tolerances.

- **Easy to Use:** Epoxy based paste for metal repair (EPM™) is easy to mix and apply, making them a convenient repair solution for metal surfaces and metal based components that need a strong metal bond.
- **Cost Effective:** Epoxy based paste for metal repair (EPM™) is value-based solution compared to replacing damaged metal components or surfaces entirely. For example, an epoxy metal putty can repair pitting and pitting corrosion quickly and conveniently.

TYPICAL USES

CTech-LLC® EPM™ can be used to restore a wide range of metal made items and surfaces. The metal repairs with these type of epoxy systems include:

- **Cracks:** Fill cracks and holes in metal surfaces, restoring them to their original shape or specified tolerance.
- **Corrosion:** Repair and prevent corrosion in metal surfaces.
- **Wear and Tear:** Repair metal surfaces that have been worn down due to constant use.
- **Broken Parts:** Repair broken metal parts, such as machine parts, automotive parts, and other industrial mechanical components.

INSTALLATION PROCEDURE

Using metal filled epoxy to repair metal surfaces is a straightforward process.

Below are simplified steps to follow:

- Clean the surface: Before applying the metal repair epoxy, ensure that the metal surface is clean and free of any dirt, oil, or rust.
- Mix the epoxy: Mix the two components of the epoxy together.
- Apply the Epoxy Based Paste: When applying to the damaged area, use a spatula or putty knife. Ensure that the material is spread evenly across the surface.
- Curing: Allow the epoxy to cure.
- Sand and paint: Once the epoxy has cured, sand the surface down to a smooth finish and paint it to match the surrounding area.

STORAGE & SHELF LIFE

- Epoxy Based Paste (EPM™) can be stored for two years in its original packaging.
- EPM™ should be stored in a dry and cool place at 15° to 35° C. Avoid freezing the product and keep it away from direct sunlight, flame or other hazards.

CAUTION

All adhesives and pastes may cause skin irritation and sensitization. Use of chemical resistant gloves is recommended.

CTech-LLC[®]

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IMPORTANT NOTE:

Before using any CTech-LLC[®] product, the user must review the most recent version of the product's technical data sheet, material safety data sheet and other applicable documents, available at www.ctech-llc.com.

WARANTY:

CTech-LLC[®] warrants its products to be free from manufacturing defects. Buyer determines suitability of product for use and assumes all risks. Buyer's sole remedy shall be limited to replacement of product. Any claim for breach of this warranty must be brought within one month of the date of purchase. CTech-LLC[®] shall not be liable for any consequential or special damages of any kind, resulting from any claim or breach of warranty, breach of contract, negligence or any legal theory. The Buyer, by accepting the products described herein, agrees to be responsible for thoroughly testing any application to determine its suitability before utilizing.
