

TECHNICAL DATA SHEET FOR LOCKFAST EPOXY STICK STEEL

Description

Celmend Steel is a non-rusting steel reinforced epoxy putty used to provide fast, permanent repairs to items made of ferrous metal. It will repair holes, cracks and threads in castings, pipes and tools, and can be used to hold fixtures and signs, to make models and prototypes, to form nuts in situ and to lock threads. Celmend Steel is a hand kneadable epoxy putty supplied as a two-part concentric stick of contrasting colours; when mixed it sets to a hard, dark grey material which can be drilled, tapped, machined or filed as required.

Basic uses

Celmend Steel can be used in many industrial and home maintenance applications. Use it to repair leaking iron pipes and tanks; rebuild stripped threads; fill blow holes, cracks and voids in metal; for molds, patterns and casting; and to repair rust-damaged equipment bodies, metal gutters, downspouts, and ductwork. Celmend Steel can also be used to create proto-type arts, form custom tools and handles, fabricate missing machine parts, and anchor machines.

Packaging

Celmend Steel is supplied in a stick form wrapped in a clear release film. The stick has a nominal 22mm diameter and is available in various lengths. Packaged in a reusable clear plastic tube with a plastic friction top.

Benefits

- Suitable for interior and exterior use.
- Safe for use with potable water.
- Contains no solvents or VOCs.
- Won't shrink or pull away.
- Non-flammable; releases no noxious fumes.

Shelf Life

Celmend Steel should be stored out of direct sunlight in dry frost-free conditions of temperatures between 5°C and 20°C. Under such conditions shelf life will be 24 months from the date of manufacture. One year minimum from date of shipment when stored in original, unopened container in a dry area at temperatures below 75°F (24°C).

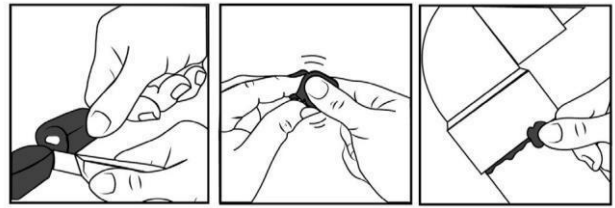
Application limitations

- Does not adhere to polyethylene, polypropylene, or PTFE.
- Not intended for use in structural applications.

Directions of use

1. In order to achieve optimum adhesion, surfaces should be cleaned free of grease, dirt, paint etc., and preferably should be dry. To ensure a good bond, abrade both surfaces followed by additional cleaning.
2. Twist or cut off the required amount of Celmend Steel.
3. If the material is cold mixing may be difficult and warming to room temperature is advised.

4. To mix, knead the putty with the fingers for at least one minute or until it is a uniform colour.
5. Press the putty onto the prepared surface within 2 minutes of mixing.
6. If it is being used as an adhesive, force some putty against each of the two surfaces to be joined, before pressing the faces together, and support the joint as necessary.
7. If it is being used as a filler/repair material force the putty into the area to be filled, and shape and strike off any excess with a tool wetted with clean water.
8. For a smooth appearance rub with water or a damp cloth within the working life of the putty.
9. After 5 - 10 minutes the epoxy putty will harden like metal and start to form a bond. After 60 hours the material will be cured sufficiently to allow a repaired water system to be put back into service. Full cure will be achieved after 24 hours.



Health precautions

- Contains Epoxy Resin. Epoxies are skin/eye irritants and known sensitizers. Direct product contact may cause an allergic reaction in some individuals. Avoid skin/eye contact. Wear impermeable gloves when mixing or handling uncured product.
- Inhalation of dust may be harmful. Avoid inhalation of dust. Wear dust mask and protective eyewear when sanding cured product.
- Ingestion of product may be harmful. Avoid ingestion.
- Turn off power when doing electrical repairs.
- KEEP OUT OF THE REACH OF CHILDREN.

For additional health and safety information, consult a Safety Data Sheet.

Important Note

Whilst all reasonable care is taken in compiling technical data on the Company's products, all recommendations or suggestions regarding the use of such products are made without guarantee, since the conditions of use are beyond the control of the Company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it, that the actual conditions of use are suitable and that in the light of our continual research and development programme the information relating to each product has not been superseded.

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Properties	Results	Test Methods
Work life	3 to 5 Minutes @ 24°C	
Shore D Hardness	80	ASTM D2240
Lap shear strength on Steel	6.2N/mm ² @ 24°C	ASTM D1002
Temperature Limitations	-40°C to +121°C Continuous -40°C to +121°C intermittent	
Dielectric strength	11,800 V/mm	ASTM D149
Compressive strength	55N/mm ²	ASTM D695

Chemical resistance:

Resistant to hydrocarbons, Ketones, alcohols, esters, halocarbons, aqueous salt solutions, dilute acids and bases.

*Typical properties are for information only, not for purposes of specification. The data above represents product performance in ideal laboratory conditions. Individual users' experience may vary depending on application conditions.

CYANOTEC LTD

Bay 2, Building 62, Third Avenue, Pensnett Trading Estate, Kingswinford, DY6 7XT
TEL 01384 294753 FAX 01384 297908 EMAIL sales@cyanotec.com

**EPOXY
STICK
STEEL
V1.0
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