TECHNICAL DATA SHEET

PIONEER EPOXY CLAY STEEL

(Steel-Reinforced Epoxy Putty)

PRODUCT DESCRIPTION

Pioneer Epoxy Clay Steel is hand-mixable, non-rusting, steel-reinforced epoxy putty that quickly repairs or rebuilds anything made of steel.. After mixing, it forms an industrial strength polymer compound that can be molded into shapes or used to build up, patch and repair steel components. Each handy stick contains pre-measured portions of base and activator throughout – no measuring or mixing tools are necessary. The consistency (like modeling clay) eliminates drips and runs, facilitates adhesion to the substrate. After 60 minutes the application can be drilled, tapped, ground, machined, filed and painted. **Pioneer Epoxy Clay Steel** cures to a dark grey metallic color. Suitable for interior or exterior use, it is resistant to chemicals, water, and temperature extremes. **Pioneer Epoxy Clay Steel** contains no solvents or VOCs. It is non-flammable and releases no noxious fumes. It will not shrink or pull away. The unused portion stays fresh for future use when saved into its original packaging.

TYPICAL USES

REBUILD

- Stripped threads
- Small machine parts
- Rust-damaged metal

FORM

- Custom tools, handles
- Prototype parts
- Anchor machines

REBUILD

- Leaking pipes
- Ductwork
- Cracks and voids in metals

❖ The ultimate solution for small and emergency repairs

❖ Easy-to-use and mistake proof

❖ Bond instantly with superior strength

❖ Saves hundreds of dollars in repairs

❖ Belongs in very toolbox

PERFORMANCE DATA

Color	
Outer	Grey
Core	Black
Mixed	Dark Grey metallic color
Consistency	putty
Solids Content	100%
Potlife	3 -5 minutes
Cure Time **Initial Strength**	60 minutes
Full Cure **Maximum Strength**	24 hours
Shore D Hardness at Full Cure (24hrs)	80
Lap Shear Tensile Strength **- On steel(1"x1"x1/16")**	900 lbs(6.2MPa)
Compressive Strength	8,000psi (55Mpa)
Density	18.5 lb/gal (2.2g/cc)
Shrinkage	<1%
Electrical Resistance	30,000 megaohms-cm
Dielectric Strength	300 volts/mil
Temperature Limits **- Continuous** **- Intermittent**	-40° to 250°F (-40° to 121°C) -40° to 300°F (-40° to 149°C)
Chemical Resistance	Resistant to hydrocarbons, ketones, alcohols, esters, halocarbons, aqueous salt solutions and dilute acids and bases
Shelflife	1 year from date of manufacture
Not intended for structural applications	
**Not to be used for specification purposes*	

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HOW TO USE

Before applying, roughen and clean the area to be repaired. Wear impervious gloves when mixing or handling uncured Epoxy Clay Steel. Then follow these steps:

1. Cut or twist off required amount.
2. Mix by kneading with gloved fingers to a uniform color. If mixing is difficult, warm Epoxy Clay Steel to room temperature or slightly above.
3. 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.

   When applying to a damp, wet or slowly leaking area, work the mixed material forcefully into the surface and apply pressure until adhesion begins to take effect.

   For best results. Use damp fingers for easier mixing, application, and a smooth appearance of the cured compound. Remove excess material before hardening begins.

WARNING

Contains Epoxy Resin and Triethylenetetraamine. Skin and eye irritant/sensitizer. Direct product contact may cause allergic reaction in some individuals. Wear impervious gloves when mixing or handling uncured product. Avoid contact with eyes. Inhalation of dust may be harmful; wear dust mask and protective eyewear when sanding cured product. Ingestion of product may be harmful. KEEP OUT OF REACH OF CHILDREN. See SDS for additional information.

PACKAGING

BLISTER PACK

28.5g (1.5 inches)	24 pcs/box
50g (3 inches)	24 pcs/box