Technical Datasheet
HOLDIT STEEL STICK
Epoxy Putty

Revised Date: June 2011

Description

Steel Stick is a hand kneadable, non rusting, Steel reinforced Epoxy Putty that mixes in one minute to provide fast, permanent repairs to items made of ferrous and aluminium metals. It comes in a handy rod form with the curing agent encapsulated in the contrasting colour base material. It's putty-like consistency eliminates drips and runs, providing "no mess" application with no tools required to use. Steel Stick is black in colour after use.

Applications

After proper mixing, Steel Stick moulds like clay and may be used in many Industrial and Home Maintenance applications, including repair of iron pipes, tanks, tools and equipment, repair blow holes, holding and placement of fixtures and signs, repairs to moulds, patterns and castings, making prototypes, threadlocking, repair cracked castings, repairs to down spouts and gutters, light fixture installations, repairs to duct-work, anchor bolts, as well as countless other uses.

Instructions for Use

In order to achieve optimum adhesion, surface should be cleaned free of grease or dirt. Scuffing or sanding the surface prior to cleaning helps to ensure a good bond.

Mixing: Twist or cut off required amount. To mix, knead with fingers to a uniform colour. If mixing is difficult, warm Steel Stick to room temperature or slightly above. Apply to the surface to be repaired (within 2 minutes of mixing). The mixed Epoxy does not exhibit high bond strength at this point, but appears to be merely lying on the surface. Force into any cracks or holes to be filled and strike off excess material, preferably with a tool wetted with clean water. Work the material forcefully into the surface and apply pressure until adhesion begins to take effect.

For a smooth appearance of the cured compound, hand rub with water or a damp cloth prior to hardening. Remove excess material before hardening begins. After 15-20 minutes the Epoxy will harden like metal and start to form a tenacious bond. After just 45 minutes Steel Stick is completely cured and can be drilled, sawed, carved, sanded, stained or painted.

Storage

Store in cool conditions, preferably away from direct sunlight or excessive heat. Shelf life at least 12 months @ 25°C.

Technical Features

Resin	Epoxide
Colour	Grey
Epoxy Resistance	Hydrocarbons, ketones, esters, halo-carbons, alcohols, aqueous salt solutions and dilute acids and bases.
Electrical Resistance	30,000 mega Ohms
Dielectric Strength (Steel)	300 Volts/mil
Shelf Life	12 months
Shrinkage:	<1%
Non-Volatile Content	100%

Performance of Cured Material

Initial Cure	1 Hour
Full Cure Time	24 Hours
Lap Shear Strength	6.2 N/mm2
Shore D Hardness	80
Max. Temperature Resistance	120°C continuous 150°C intermittent
Compressive Strength	84 N/mm(2) - 12,000 psi

Presentation

Packaged in a 180 gram clear plastic reusable tube with a plastic end cap.

Conversions

(°C x 1.8)+32 = °F
N/mm x 5.71 = lb/in
MPa x 145 = psi
N/mm2 x 145 = psi
N x 0.225 = lb
N·m x 8.851 = lb·in
N·mm x 0.738 = lb·ft
mPa·s = cP

Heath & Safety in Use

IRRITANT: Contains epoxy resin and may cause skin irritation in sensitive individuals. Unnecessary skin contact should therefore be avoided. If skin contact occurs, wash with a proprietary hand cleaner such as Swarfega, followed by washing with soap and water. In case of eye contact, flush with clean water for at least 15 minutes, then seek medical attention. When fully cured, the product can be considered non-toxic. Always keep Steel Stick away from foodstuffs and food utensils.