

TECHNICAL DATA SHEET EDITION: 1 - 16/04/08

PRODUCT CODE: D315 TITANIUM STICK EPOXY REPAIR

D315 TITANIUM-STICK EPOXY REPAIR PUTTY

PRODUCT DESCRIPTION

D315 **TITANIUM-STICK** Epoxy Repair Putty is a hand kneadable, titanium-reinforced epoxy putty that mixes in one minute to provide fast and permanent repairs. TITANIUM-STICK comes in a handy rod form with the curing agent encapsulated in the contrasting colour base material. Its putty-like consistency eliminates drips and runs providing "no mess" application with no tools required for use.

When mixed it provides an easy to apply repair compound for many engineering applications, especially where temperature resistance is advantageous.

TITANIUM-STICK has a simulated titanium colour after cure.

AREAS OF USE

D315 **TITANIUM-STICK** Epoxy Repair Putty is a mouldable putty ideally suited for repairing cracks, breaks, blowholes and threads in metal castings, pipes, tools, patterns and moulds. It can be used to hold fixtures and signs, to make models and prototypes, to form nuts in situ and to lock threads. **TITANIUM-STICK** bonds to damp, wet and slowly leaking surfaces. It contains no solvents, is non-toxic and will not shrink after cure. After full cure it can be drilled, filed, tapped, sanded, painted and machined.

DIRECTIONS FOR USE

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

Mixing - twist or cut off the required amount of **TITANIUM-STICK**. If the material is cold mixing may be difficult and warming to room temperature is advised. 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 tools wetted with clean water. When applying to a damp, wet, or slowly leaking area, 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 5-10 minutes the epoxy will harden like metal and start to form a tenacious bond.

After just 2-3 hours **TITANIUM-STICK** is completely cured and it can be drilled, sawn, carved, sanded, stained, or painted. Repaired parts can be put back into service once the repair is fully cured.

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PROPERTIES

The predetermined mixing ratio of base and hardener gives perfect results every time. Exhibits an excellent adhesion profile to a wide range of ferrous metals and metal alloys. Cures at room temperature and has excellent environmental resistance in terms of humidity, temperature and chemicals.

TECHNICAL DATA

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Working life	2 minutes at 20°C
Shelf stability	12 months minimum stored at 25°C
Shore D Hardness (full cure 24hrs)	85 at 20 °C / 48 at 260°C
Lap Shear Tensile Strength on steel	5.1 N/mm ² @ 20°C 1.7 N/mm ² @ 260°C
Temperature limitations	245°C continuous 280°C intermittent
Chemical resistance	Resistant to hydrocarbons, ketones, alcohol, esters, halocarbons, aqueous salt solutions and dilute acids and bases.
Electrical resistance	30,000 megohms
Dielectric strength	300 volts/mil
Shrinkage	Less than 1%
Non-volatile content	100%
Compressive strength	84N/mm² (12,000psi)

HEALTH AND SAFETY

Classification: Xi IRRITANT

Contains epoxy resins and hardeners which can cause skin irritation, therefore the use of suitable protective gloves is highly recommended. Wash hands after use. Keep out of reach of children.

Refer to the relevant Material Safety Data Sheet (MSDS)

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LEGAL NOTE

The data contained within this Technical Data Sheet is furnished for information only and is believed to be reliable at the time of issue. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the responsibility of the customer to determine the products suitability for use. Delta Adhesives Ltd accepts no liability arising out of the use of this information or the products described herein.

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