# **Technical Data Sheet**

B2001 – METAL EPOXY STICK Revised 03.08.10



# B2001 Metal Epoxy Stick

#### PRODUCT DESCRIPTION

A hand kneadable, specialty epoxy putty that mixes in 1 minute for permanent repairs to many substrates. Contains fading black dye that becomes grey after mixing. May be applied under water (fresh or salt). Bonds to Fiberglass, metal, wood, concrete and glass. Will not yellow to UV exposure. Hardens in 10 minutes, back in service in an hour, full strength in 24 hours.

# **APPLICATIONS**

Repairing tanks and drums, patching holes in pipes, stopping leaks and repairing porosity holes in castings.

# **INSTRUCTIONS FOR USE**

Proper surface preparation is essential to a successful application. The following procedures should be considered: Degrease the surface, oil, grease and dirt must be removed before applying any epoxy material.

All surfaces must be thoroughly roughened ideally by grit blasting (8-40 mesh grit), or by grinding with a coarse wheel or abrasive disc pad. An abrasive disc may be used provided white metal is revealed. This creates increased surface area for better adhesion. A 3-5 mil profile is desired for an application. Do not "feather edge" epoxy materials. Epoxy materials must be "locked up" by defined edges and a good 3-5 mil profile. Metal that has been handling sea water or other salt solutions should be grit blasted and high pressure water blasted and left overnight to allow any salts in the metal to "sweat" to the surface: repeat blasting to "sweat out" all the soluble salts. A test for chloride contamination should be performed prior to any epoxy application. The maximum soluble salts left on the substrate should be no more than 40p.p.m (parts per million).

Under cold working conditions, heating the repair area to 38°C - 43°C immediately before applying is recommended. This procedure dries off any moisture, contamination or solvents and assists the epoxy in achieving maximum adhesion to the substrate. All prepared surfaces should be repaired as soon as possible, to eliminate any changes or surface contaminants

Epoxies are very good in water, saturated salt solutions, leaded gasoline, mineral spirits, ASTM # 3 oil and propylene glycol. Epoxies are generally not recommended for long term exposure to concentrated acids and organic solvents. For immersion applications this product is not recommended.

Twist or cut off required amount from stick. Then knead with fingers to a uniform colour. All black colour dye must be gone and a uniform pure grey colour is left. Apply to surface to be repaired within 2 minutes of mixing. The mixed epoxy does not show much bond strength at this time, but can be kneaded or formed into any cracks or holes to be filled.

#### **TECHNICAL FEATURES**

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Typical properties	7 days cured at 24°C	
Colour	Black - changes to grey after mixing	
Viscosity	putty/hand kneadable	
Pot life @24°C	20 mins	
Comprehensive strength	83 N/mm2	
Adhesive tensile shear	5 N/mm2	
Cured hardness shore D	75	
Dielectric strength volts/mil	300	
Solids	100%	
Temperature resistance	121°C Continuous 149°C Intermittent	

## **CHEMICAL RESISTANCE**

7 days room temperature cure (30 days immersion)

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10% Sulphuric acid	Fair
10% Hydrochloric acid	Fair
Chlorinated solvents	Very good
Methanol	Very good
Toluene	Very good
Ammonia	Very good
10% sodium hydroxide	Excellent
Kerosene	Very good

# **HEALTH & SAFETY**

This technical information sheet does not constitute a Material Safety Data Sheet (MSDS). Before using this product ensure you have read and fully understood B2001 MSDS.

### **PRESENTATION**

Tubes	.50g,	114g
Clam Packs	.50g	

PRECAUTIONS: This product and the auxiliary materials normally combined with it are capable of producing adverse health effects ranging from minor skin irritation to serious systemic effects. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheets (MSDS) for this and all other products being used are understood by all persons who will work with the product. Warranty: All products purchased from or supplied by Bondloc are subject to terms and conditions set out in the contract. Bondloc warrants only that its product will meet tho se specifications designated as such herein or in other publications. All other information supplied by Bondloc is consider accurate but are furnished upon the express condition the customer shall make its own assessment to determine the product's suitability for a particular purpose. Bondloc makes no other warranty, either express or implied, including those regarding such other information, the data upon which the same is based, or the results to be obtained from the use thereof; that any product shall be merchantable or fit for any particular purpose, or that the use of such other information or product will not infringe any patent.