

Technical Data Sheet

B2004 COPPER EPOXY STICK Revised

03.08.10



BARNWELL

THE SEAL OF APPROVAL

B2004 Copper Epoxy Stick

PRODUCT DESCRIPTION

B2004 is a hand-mixable, fast-setting, copper-reinforced epoxy putty that quickly repairs pipes, tanks and vessels made of copper, brass, bronze and other non-ferrous metals. After mixing, it forms a polymer compound that is extremely tough and durable and offers exceptional adhesion. Each handy stick contains pre-measured portions of activator and base throughout no measuring or mixing tools are necessary. The consistency (like modeling clay) eliminates drips and runs, facilitates adhesion to the substrate, and allows the material to be shaped as needed before curing begins. After 60 minutes the application can be drilled, sawed, sanded, and painted. Household hot water pipes and vessels can be restored to service after 1 hour. Cured B2004 has the same appearance and texture of metal. Suitable for interior or exterior use, it is resistant to water, chemicals, and temperature extremes. It contains no VOCs or solvents. It's non-flammable and releases no noxious fumes. It won't shrink or pull away. The unused portion stays fresh for future use when stored in its original packaging

APPLICATIONS

B2004 can be used to repair freeze breaks, leaking household hot waterlines and other plumbing problems. B2004 will seal copper gutters, downspouts, pipes, elbows, joints, sleeves and traps, and will bond to damp, wet and slow leaking surfaces.

USEFUL HINTS/NOTES

Mixing: Twist or cut off required amount. To mix, knead with fingers to a uniform colour. If mixing is difficult, warm B2004 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 B2004 is completely cured and can be drilled, sawed, carved, sanded, stained or painted.

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.

TECHNICAL FEATURES

Colour	Copper
Chemical resistance	Hydrocarbons, Ketones, esters, halo-carbons, alcohols, aqueous salt solutions, dilute acids and
Electrical resistance	30,000 mega Ohms
Dielectric strength (steel)	300 Volts/mil
Shrinkage	<1%
Non volatile content	100%
Shelf life	24 months @ 24°C

CURED PERFORMANCE

Initial cure	1 hour
Full cure time	24 hours
Lap shear strength (steel)	4.5 MPa
Shore D Hardness	80
Compressive strength	8,000 psi

PROPERTIES

Opening time	5 mins
Max temp resistance	120°C CONTINUOUS 149°C INTERMITTENT

STORAGE

Store in cool conditions, preferably away from direct sunlight or excessive heat. Shelf life at least 24 months @ 24°C.

PRECAUTION

For complete safety and handling information, please refer to the appropriate Material Safety Data Sheets prior to using this product

HEALTH AND SAFETY IN USE

IRRITANT: B2004 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, and then seek medical attention. When fully cured, the product can be considered non-toxic. Always keep B2004 away from foodstuffs and food utensils.

PRESENTATION

Tubes.....50g, 114g

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 those specifications designated as such herein or in other publications. All other information supplied by Bondloc is considered accurate but is 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.