

PRODUCT DATA SHEET

BIO-FIX 911 is based on a unique blend of liquid epoxy polymer and proprietary curing agents, which is able to displace water from wet surfaces in order to make a permanent bond. The formulation is solvent-free to ensure safety and maximum technical performance. Kevlar^{TM*} fibers are incorporated for reinforcement and viscosity management to assure reliable application even under adverse conditions.

BIO-FIX 911 is supplied in a standard white base, which is mixed with an equal volume of black curing agent to yield approximately US Navy Haze Gray when thoroughly mixed. The formula is uniquely field-friendly using advanced low toxicity ingredients and can be shipped "Non-Regulated" by USDOT, IATA and IMO.

*Kevlar is a trademark of the E.I. DuPont de Nemours Co.

RECOMMENDED USES

FIBERGLASS REPAIRS: Use with fiberglass tape for patching and reinforcing.

REPAIR COMPOUND: Patching, leak sealing etc. under all conditions.

ADHESIVE: Excellent all purpose adhesive for use above and below water

TECHNICAL INFORMATION

VEHICLE TYPE PIGMENTATION COLORS FINISH	. Color/Inert/fibrous reinforcement Standard US Navy Haze Gray
THINNER CLEANER	
MIXING RATIO	1
INDUCTION TIME	
POT LIFE	
FLASH POINT	Over 200'F
SOLIDS BY VOLUME	. 100%
SPREADING RATE/GAL	. 1604 mil/sq.ft./gal, 53.5 sq.ft./gal @ 30 mils
DRY TIME, (Dust free)	.5 mins. at 77°F
DRY TIME, (Service)	
APPLICATION METHOD	Spatula
STORAGE CONDITIONS	. Normal, Freezing OK
VOC	. Essentially zero

APPLICATION NOTES

INITIAL PREPARATION: Before beginning to mix the BIO-FIX 911 components make a mental "run-through" of the job and prepare as much as possible beforehand. A pot life of 3 minutes gives ample time to take care of most situations but time quickly runs out if tools have to be found or valves turned off during a job.

SURFACE PREPARATION: Scrape or remove all loose contamination around the immediate repair site. Abrade the area using coarse abrasive paper or a mechanical grinder to provide a firm anchor for the repair material.

MIXING PROCEDURE: BIO-FIX 911 is supplied in equal volumes of white epoxy base and black curing agent. Remove equal quantities of base and curing agent from their cans and place them side-by-side on a surface of plastic, fiberboard etc. Mixing is easily accomplished by folding the components into each other using a spatula. Once mixing begins there will be about 3 minutes of working time available at 80° F, mixing will consume not more than 1 minute of this time. When mixing is complete the product will be a uniform Haze Gray color with no streaks of unmixed white or black components. Pot life will be extended underwater by immediately immersing the mixed materials.

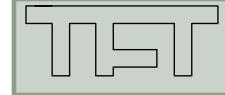
APPLICATION:

1) UNDERWATER Take the mixed BIO-FIX 911 underwater in a can or bucket, it will free up a hand to have a hook on a belt to hold the can during application especially if visibility is poor and a lantern has to be carried. Applicators such as broad putty knives or plastic straight-edged glue spreaders work well on most surfaces but painter's mitts work well on small diameter tubular sections such as risers. BIO-FIX 911 is resistant to the effects of wave application during curing and will be found to be easier to apply than traditional "splash-zone" compositions and much less messy than lower viscosity underwater "paints".

BIO-FIX 911 has a strong tendency to stick to underwater surfaces and expensive equipment should be protected using plastic suits or sacks to cover exposed surfaces. If fiberglass tape is to be wrapped into the repair it is recommended to saturate the tape then wrap it tightly around circular section members such as pipes with a 1/2" minimum overlap at the edge. Several thickness of glass are recommended for strong repairs, smooth excess resin at surface to seal the repair.

2) ABOVE WATER: Use as a regular adhesive by mixing the quantity desired and applying to clean surfaces until set in 4 - 5 minutes. When used with glass fiber tape for leak sealing it is recommended to saturate the tape by "buttering" mixed BIO-FIX 911 onto one side using a spreader or spatula. Leave a couple of inches of tape uncoated at the free end. Apply the tape to the repair area sticky side down and wrap around holding firm pressure on the free end" as the tape wraps around the pipe it will become possible to pull down very tightly so forcing the BIO-FIX 911 through the tape up to the surface. Over- lap previous wraps by at least 1/2" in a spiral fashion and avoid wrinkles. At least three (3) wraps are recommended for excellent strength around a pipe repair. (Three wraps have been tested to well over 1,000 psi over a 1/4" hole in a 1" diameter test piece 24 hours after application).

WE URGE YOU TO READ THE MATERIAL SAFETY DATA SHEET (MSDS) BEFORE USING AND TO CALL THIN FILM TECHNOLOGY, INC., AS NECESSARY FOR ADVICE OR INFORMATION BEFORE ANY ACTUAL OR CONTEMPLATED APPLICATION.



Thin Film Technology, Inc. • P.O. Box 580669 • Houston, TX 77258-0669 (713) 910-6200 • Fax: (713) 910-6210 • Mobile: (281) 82-0723 Email: info@thinfilmtech.net • Website: www.thinfilmtech.net

SAFETY: This is a hazardous material if misused. Read and understand the Material Safety Data Sheet (MSDS) before use. WARRANTY DISCLAIMER: The technical data given herein has been compiled for your help and guidance and is based upon our experience and knowledge. However, as we have no control over the use to which this information is put, no warranty, express or implied, is intended or given. We assume no responsibility whatsoever for coverage, performance or damages, including injuries resulting from use of this information or of products recommended herein.