



TuffEpoxy™ 9

Crack Injection Epoxy

DESCRIPTION

Epoxy9™ is a unique formula developed for structural concrete repair by crack injection, gravity feed or patching. It can be used as a liquid binder for sand, aggregate or any other mineral filler to patch or resurface damaged concrete slabs. This material may be used to repair masonry, wood, and other rigid construction materials. Epoxy9™ is 100% solids, VOC free and Butyl Glycidyl Ether (BGE) free.

USES:

- Patch or resurface damaged concrete slabs
- Repair masonry, wood, or other rigid construction materials

ADVANTAGES:

- 100% solids
- No Volatile Organic Compounds (VOC's)
- No Butyl Glycidyl Ether (BGE)
- Low viscosity
- Friendly 2:1 mix ratio
- Excellent adhesion
- High strength
- Longer working time

STANDARDS:

TuffEpoxy9™ meets or exceeds the ASTM C881, Types I and IV, Grade 1, Class C standard.

INSTALLATION

SURFACE PREPARATION:

To achieve excellent adhesion, the substrate should be free of all loose and foreign material and should be clean. Oils, grease, waxes, or other contaminants must be removed prior to application. Be sure the crack is open where ports are placed. Set ports with Putty.

MIXING:

Mix 2 parts A (resin) to 1 part B (hardener) for 3 minutes using a "Jiffy" Mixer and a slow speed drill. Mix at slow speed (less than 850 rpm) to avoid air entrainment. Do not mix more material than can be used within the stated working time. Remember - you will have less working time at higher temperatures.

APPLICATION:

Open and clean cracks. Set ports between 4 and 6 inches using putty. Open all ports before beginning. Fill cracks to each port using Putty. Let Putty cure. Using proper application methods, i.e. dual cartridges, slowly pump **TuffPoxy 9** into lowest port until **TuffEpoxy9** flows from next port above the first. Close port and remove cartridge from first port and move to next port, always move UP so that all air escapes. Remove until you have filled and closed all ports.

CLEAN-UP:

Epoxy 9™ and sealing pastes, before they are fully cured (hard), may be removed from tools with warm soapy water.

LIMITATIONS:

Always test a small amount to insure that the product is mixed thoroughly and that the material will harden properly before proceeding. Do not thin with solvents. Minimum age of concrete must be 3-7 days, depending on curing and drying conditions.

HANDLING PROPERTIES @ 77°F:

Components	Resin & Hardener
Mix Ratio, PVB	2:1
Color	Clear
Density (Mixed)	9.1 lb/gal
Mixed Viscosity (ASTM D2196)	550 CP
Working Time	30 min
Gel Time	45 min
Application Temperature Ideal	70-80°F

TECHNICAL DATA:

Hardness, Shore D (ASTM D2240)	86
Adhesion to Concrete	>800 psi (100% failure in concrete)
Compressive Strength (ASTM D695)	10,800 psi
Compressive Modulus (ASTM D695)	262,000 psi
Tensile Strength (ASTM D638)	8,500 psi
Elongation @ Break (ASTM D638)	3.8%
Water Absorption (ASTM D570)	0.37%

CAUTION:

Avoid breathing of vapors. Forced local exhaust is recommended to effectively minimize the exposure. NIOSH approved, organic vapor respirators and forced exhaust are recommended in confined areas, or when conditions (such as heated polymer, sanding, etc.) may cause high vapor concentrations. Do not weld on, burn or torch the **TuffEpoxy 9** or any epoxy material. Hazardous vapor is released when an epoxy is burned. Avoid skin or eye contact. Wash skin with soap and water if contact occurs. If eye contact occurs flush with water for 15 minutes and obtain medical attention. Read and understand all caution on can labels and material safety data sheets before using this material.

KEEP OUT OF REACH OF CHILDREN.

WARRANTY:

Due to the use of this product beyond our control, we assume no liability for damages of any kind, and the user accepts the product "as is" and without warranties, expressed or implied, from either **Poly-Tuff Systems International** or its agents. The suitability of the product for an intended use shall be solely up to the user. Our only obligation shall be to replace or pay for any material proved defective, with our liability limited to the purchase price of materials supplied by us.

Please read all information in the General & Safety Guidelines, Technical Data Sheets, Guide Specifications and Safety Data Sheets (SDS) before applying material. PSI Products are for "Professional Use Only" and preferably applied by professionals who have prior experience with the PSI Products or have undergone training in application of PSI Products. Published technical data and instructions are subject to change without notice. Contact your local PSI representative or visit our website for current technical data, instructions, and project specific recommendations.

LIMITED WARRANTY

PSI warrants its products to be free of manufacturing defects and that they will meet PSI current published physical properties. PSI warrants that its products, when properly installed by a state licensed waterproofing contractor according to PSI guide specifications and product data sheets over a sound, properly prepared substrate, will not allow water migration for a period of 12 months. Seller's sole responsibility shall be to replace that portion of the product which proves to be defective. There are no other warranties by PSI of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. PSI shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. PSI shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. PSI reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

DISCLAIMER

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