



## 3.06 XPRT PASTE EPOXY

### Thixotropic Two Component Epoxy Resin Adhesives

#### PRODUCT DESCRIPTION

XPRT Paste Epoxy is a trowel able, sag resistant patching compound for concrete and other substrates. This compound is two components, 100% non-volatile filled epoxy/amine resin system. Sand and coarse aggregate or fillers can be used in this system as an extended to permit more economical compounding. As much as two parts of sand (by volume) can be used with one part of the mixed binder.

#### USES

- Heavy duty Epoxy Adhesive Use to fix **CFRP Plate/Strip** (for structural re-strengthening).
- Bridge decks & highway repair: Patching and dowel bar inserts.
- Drum and tank linings: Plastic tooling
- Electrical potting: Protective coatings
- Floor and wall coatings: Resurfacing
- Grouting dowels and holes: Swimming pools
- Vertical patching: Secondary confinement area, as a cover where a wall and floor connect.
- Maintenance coatings: Waterproofing

#### TECHNICAL DATA

CATEGORY	PART A	PART B
Composition	Base = Filled epoxy resin	Catalyst = Filled amine curing agent
Density lbs/gal	11.16 lb	10.72 lb
Specific Gravity	1.34	1.0
% Non-Volatile	100%	100%
Material VOC	0 G/L	0 G/L
Pot Life @ 70°F	30 minutes	
Tack Free	4 hours	

CATEGORY	PARAMETERS
Appearance	Thick Grey Paste
Compressive strength: ASTM D695	≥ 70 MPa @ 7 days
E-Modulus (compression): ASTM D695	≥ 12000 MPa @ 7 days
Tensile strength: ASTM D638	≥ 27 MPa @ 7 days
Adhesive strength: ASTM D4541	≥ 3.5 MPa (Concrete Failure)
Pot life (F.I.P.)	50 - 70 min @25°C
Mixing ratio	1:1 (Base: hardener)
Slant shear bond strength: AASHTO T-237-73	≥ 25 MPa (Old / New Concrete)
Heat deflection: ASTM D648	≥ 50° C

#### PACKAGING

XPRT PASTE EPOXY is packaged in twin component packs of 05-kg.

**COVERAGE:** One gallon of 100% solids = 231 cubic inches or .134 cubic feet.

#### BENEFITS

- Have great resistance, particularly to de-icing salts, petroleum products, and certain chemicals and acids, such as fertilizers, pesticides, and many other strong chemicals.
- It is approved for use by the USDA in federally inspected meat and poultry processing areas.
- It provides a skid-proofing medium when mixed with coarse sand and/or aggregate.



## LIMITATIONS

Shelf life is approximately 12 months from date of manufacture when stored in unopened containers. Apply in temperature above 35°F.

## APPLICABLE STANDARDS

XPERT Paste Epoxy is manufactured to comply with the following ASTM tests and federal specifications:

- ASTM C-811: Type 1,2 & 3 Grade 3, Class A, B & C
- ASTM D-1652-59T: Epoxy Content
- ASTM D-1484-59T: Cure Rate
- ASTM D-638: Tensile strength, ultimate elongation, modules of elasticity and toughness, heat aging.
- ASTM D-570: Water absorption
- ASTM D-676: Hardness, Shore D
- AASHTO epoxy resin guide specifications: Bond strength
- U.S. Navy M11-C 16423 A: Impact strength
- Corps of engineers CRD-C-595-87
- A.I.M. Category-Nonflat coatings
- Exterior maximum allowable VOC:380 G/L

## APPLICATION PROCEDURES

Before buying and using this product, read completely this product's label, technical data sheet, and material safety data sheet (MSDS), Before buying and using this product, read completely this product's label, technical data sheet, and material safety data sheet (MSDS), available where product is purchased. Be familiar with application instructions before use. They are on the container label. The compound can be used at a range of temperatures. The colder the temperature, the longer the pot life and cure time. The hotter the temperature, the shorter the cure time and pot life. At 70oF (20oC), pot life is approx. 35 min.: at 35oF, pot life is approx. 60 minutes. Spreading the material immediately after mixing will increase the available working time.

## APPLICATION

Surface must be clean, sound and dust-free. Remove unsound concrete with small pneumatic or electric hammer. Light sandblasting is recommended. Repairs made on marginal concrete may not be successful and are not usually recommended. Apply a thick coat of XPERT Paste Epoxy to the area to be patched to enhance the adhesion of the epoxy mortar and to prevent binder "starvation" at the interface. Tack coat coverage should be applied as sparingly as possible. Air and pavement temperatures should be 50oF or higher when any work is done. Limit depth of application to 1". Applications beyond this depth must cure for 2 hours before a second layer can be applied.

## MIXING

This formulation is supplied in two separate containers (Part A & B) to be mixed together by hand or paddle powered by a low-speed electric drill, at the job site immediately before combining the liquid with the sand, or aggregate filler, etc.

Mixing ratio of the components is one to one by volume (not weight). The presence of moisture will not affect the cure of XPERT Paste Epoxy.

It does not contain volatile solvents and none should be added in the field.

Aggregate to be used should be graded and washed sand suitable for Portland cement. Concrete must be surface dry when used. For feather edged repairs, use #8 sieves to remove particles. Sand meeting ASTM c-144 graduation may be used.

## SAFETY PRECAUTIONS

Safety goggles/glasses, gloves and a respirator (to minimize the intake of the fumes) should be worn when handling this material. Avoid skin contact, if contact accidentally occurs, remove immediately with solvent then wash with soap or lanolin cleaner.



### WARRANTY

This product is warranted to be free of defects in material and workmanship, and conform to XPERT Construction Chemicals ("XPERT") quality control standards. All recommendations, statements and technical data herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty or guaranty of any kind, expressed or implied including but not limited to, an implied warranty of merchantability or an implied warranty of fitness for a particular purpose.

Satisfactory results depend upon many factors beyond XPERT's control. User shall rely on his or her own information and tests to determine suitability of the product for the intended use and user assumes all risk, loss, damage, expense and liability resulting from his or her direct use, indirect use or consequential to their use of the product.

- XPERT shall not be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use or inability to use the product.
- XPERT's sole responsibility shall be to replace that portion of the product, which proves to be defective.
- Any warranty claim must be made within six (6) months from the date of the claimed breach.
- This limited warranty applies only if the product was properly installed and used according to all instructions.
- This limited warranty applies only if the was properly stored prior to use.