

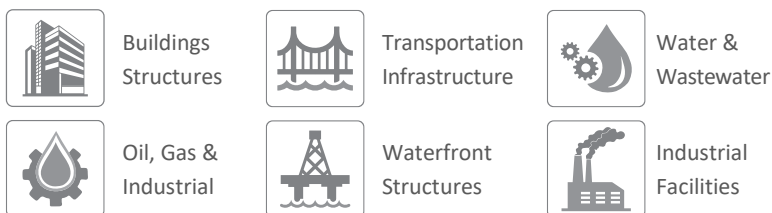
TechnoDur™LE

FRP Epoxy Resin Saturant

TECHNOPOL
مقاوم سازی تکنوپل

PRODUCT DESCRIPTION

TechnoDur™LE is a two-component, high-strength, high-modulus epoxy paste system used to fill and transition irregular substrates and adhere Composite Strengthening Systems (CSS) laminates in both surface-mounted and near-surface-mounted (NSM) applications. This product has been evaluated per ICC-ES AC125 for concrete and unreinforced masonry strengthening using externally bonded fiber-reinforced polymer (FRP) composite systems. This product is NSF-listed safe for potable water.



TECHNICAL DATA

	Unit	TechnoDur™LE
Chemical Base	-	Epoxy Resin
Density	kg/l	1.1
Mixing Ratio	-	100:50 Part A:100 Part B:50
Color	-	Part A: Clear light yellow liquid Part B: Clear Mixed: Clear light yellow liquid
T _g	°C	65
Application Methods	-	Hand lay-up Spray machine Robot processes
Shelf Time	month	18
Storage Conditions	-	Store dry at 4°C -40°C

ADVANTAGES

- Long working time
- High elongation
- Ambient cure
- Minimal odor
- High versatility
- High fatigue and final compressive strength. They also have high strength.
- Good impregnation due to optimized mixed viscosity for wet lay-up.
- Curing of epoxy resin is very slow and has long pot life.

TYPICAL USES

Seismic Retrofit

- Shear strengthening
- Displacement/ductility

Damage Repair

- Deterioration/corrosion
- Blast/vehicle impact

Load Rating Upgrade

- Increased live loads
- New equipment

INSTALLATION PROCEDURE

SURFACE PREPARATION

Repair existing substrate per ICRI Guideline No. 310.1R. Concrete shall be abrasively prepared to achieve an open pore structure in accordance with ICRI Guideline No. 310.2R by means of grinding, sand blasting, shot blasting, or pressure washing. Application surface shall be clean, sound, and free of standing water at time of application. All dust, laitance, grease, curing compounds, and other foreign materials that may hinder the bond must be removed before installation.

MIXING

Premix part A for 1-2 minute. Add the full contents of part B pail to the full contents of part A pail, or use equal fractions of each pail. Blend part A and part B with a mechanical mixer for 1-2 minutes until uniformly blended.

APPLICATION

Apply paste to substrate surfaces using a



trowel. Use a paste profiler or trowel when applying to laminates. This product may also be used for near surface mounted (NSM) applications.

CLEAN UP

ENVIRONMENTAL PRECAUTIONS:

Construct a dike to prevent spreading. Keep out of sewers, storm drains, surface waters and soils.

SMALL SPILLS

Soak up with an absorbent material, such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal.

LARGE SPILLS

Approach suspected leaks with caution. Construct a dike or trench to contain material. Soak up with an absorbent material, such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal.

DISPOSAL

Dispose of container and unused portions in accordance with local, state and federal regulations. Emptied container may contain product residue and should not be reused.

LIMITATIONS

- Only install when the ambient and substrate temperatures are between 7°C and 35°C.
- Do not thin epoxy paste
- Where moisture vapor transmission is expected, note that TechnoDur™LE will create a vapor barrier.
- Do not apply TechnoDur™LE in lifts greater than 25 mm.

CAUTION

COMPONENT A

May cause eye and/or skin irritation. Prolonged or repeated exposure may cause skin sensitization.

COMPONENT B

CORROSIVE! Severe irritation to eyes and skin. Prolonged or repeated exposure may cause skin sensitization. Components of this product may affect the central nervous system.

PROTECTIVE MEASURE

The use of safety glasses and chemically resistant gloves is recommended. Use appropriate clothing to minimize skin contact. The use of NIOSH-approved respirator is required to protect respiratory tract when ventilation is not adequate to limit exposure below the PEL.

FAIRST AID

Skin

Wash fibers off skin with water and soap. If fibers are embedded in the skin, remove with tweezers. Discard clothing that may contain embedded fibers. Seek medical advice if exposure results in adverse effects.

Eyes

Immediately flush with a continuous water stream for at least 20 minutes. Washing immediately after exposure is expected to be effective in preventing damage to the eyes. Seek medical advice.

Inhalation

If there is inhalation exposure to the fibers of this product, remove source of exposure and move victim to fresh air. If victim is not breathing, give artificial respiration. If there is breathing difficulty, give oxygen. Seek medical advice for any respiratory problems.

Ingestion

Ingestion is not a likely means of exposure for this product. If ingestion does occur, do not induce vomiting. Give nothing by mouth if victim is unconscious. Seek medical advice.

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