



# ULTRA INJECTION RESIN

High Modulus, super low viscosity For Thin Cracks

**ULTRA INJECTION RESIN** is a 100% reactive, two component material designed as a moisture insensitive adhesive for numerous injection and sealing needs. This high modulus material is formulated as a super low viscosity for ease of use in penetrating deep into thin cracks.

## PRIMARY APPLICATIONS

- Permanent bonding of
  - structural damage
  - Parking structures
  - Bridge structures
  - Marine structures
  - Retaining walls
  - Earthquake damage
  - Vertical and overhead applications

## FEATURES/BENEFITS

- Excellent adhesive for pressure injection of fine cracks
- Moisture insensitive for bond to dry or damp surfaces
- Provides a tough, weather resistant seal for porous concrete
- Penetrates deep into concrete cracks and fissures
- Formulated in a 3 to 1 mixing ratio for use with most injection equipment

## PACKAGING

ULTRA INJECTION RESIN is packaged in 1 kg & 2 kg Packs

Shelf life is 1 years in original, unopened package.

### Storage:

Avoid to place direct to sun light and always store in shady areas.

### ISO Certification:

Our production facility at Pakistan is  
ISO 9001:2008  
ISO 14001:2004  
by BUREAU VERITAS  
and UKAS Management

## DIRECTIONS FOR USE

**Crack Injection-ULTRA INJECTION RESIN** can be gravity fed or pressure injected into horizontal cracks. Vertical and overhead cracks must be pressure injected. Insert one way polyethylene valves or ports into drill hole at the face of the crack. Areas around the entry port and the crack between ports should be sealed with Ultra Fairing Coat. Inject the neat material with an epoxy injection machine or other mechanical means. Make sure that injection equipment is properly set for a 3 to 1 mixing ratio (Part A to Part B) by volume.

**Mixing-**All materials should be in the proper temperature range of 60°F (16°C) - 90°F (32°C).

Mix parts A and B (resin & hardener) for 2 minutes using a drill and mixing prop. For ease of mixing, add the part B to the part A (not the reverse). The epoxy must be well mixed to ensure proper chemical reaction.

**Crack Healing-**After mixing, pour or squeegee epoxy into cracks and allow to seep in. Continue to apply material until crack is full.

## CLEAN-UP

Clean tools and equipment with solvent such as EUCO SOLVENT, xylene, xylol, toluene or MEK. Do not allow the epoxy to harden on equipment.

## PRECAUTIONS / LIMITATIONS

- This product is primarily intended as an adhesive. While use as a coating is allowed, better performance May be expected from the TUFCOAT or EUCOTHANE product line.
- This product may vary in color and may yellow and chalk in prolonged exposure to sunlight.
- Bring material as close to 70°F (21°C) as possible prior to usage. Store in room temperature environment 24 hours prior to use. Do not heat with an open flame.
- Epoxy components may cause irritation; avoid contact with skin and eyes.
- Always wear protective clothing (rubber gloves, eye protection, etc...) when using product.

## TECHNICAL INFORMATION Typical Engineering Data

### Ultimate tensile strength

ASTMD638 9,000 psi (62 N/mm<sup>2</sup>)

### Tensile elongation at break

ASTMD638 3.5%

### Shear bond strength

ASTMC882 3,800 psi (26 N/mm<sup>2</sup>)

### Tensile modulus of elasticity

ASTMD638 0.46 x 10<sup>6</sup> psi (3172 N/mm<sup>2</sup>)

### Shore D hardness

ASTMD2240 85

### Flexural strength

ASTMD790 14,000 psi (97 N/mm<sup>2</sup>)

**Viscosity** 4.0 poise at 65°F (20°C) and 2.0 poise @35 °C.

**S.G** 1.08

### Gel Time

1 gal (3.8 liter) unit 26 min- one hour.

**Mix Ratio**, Part A to Part B 3 to 1 volume

### Compressive Strength - ASTM D695

1 day 14,000 psi (97 N/mm<sup>2</sup>)

3 days 18,200 psi (126 N/mm<sup>2</sup>)

7 days 20,000 psi (138 N/mm<sup>2</sup>)

14 days 22,000 psi (152 N/mm<sup>2</sup>)