

## U-MIX® 40:1 INJECTION URETHANE WATER STOP RESIN

**PRODUCT DESCRIPTION:** Specco U-Mix® 40:1 Injection Urethane Water Stop Resin is a two component, low viscosity polyurethane resin used for sealing water leaks through cracks in concrete structures. U-Mix® 40:1 Injection Urethane Water Stop Resin reacts with water expanding in a free rise state 10 to 15 times it's original volume. This reaction produces an impermeable, closed cell, hydrophobic type, flexible foam that displaces water and tenaciously adheres to the damp substrate. The flexibility of the cured U-Mix® 40:1 Injection Urethane Water Stop Resin allows movement at the existing crack, thereby preventing transfer of stress to other areas of the structure.

**BENEFITS:** LOW VISCOSITY, IDEAL FOR HAIRLINE CRACKS...MAY BE PUMPED AS A SINGLE COMPONENT LIQUID...CONTAINS NO FREE TOLUENE DIISOCYANATES (TDI)...MAY BE USED ON LOW SURFACE TEMPERATURES...RAPID REACTION TIME

### COMPOSITION:

Part A:	Polymeric MDI type resin blend
Part B:	Amine catalyst solution

PHYSICAL PROPERTIES at 70° F (21 °C):	APPROXIMATE VALUES:
Weight per Gallon (mixed):	8.80 +/- 0.1 lb./ gallon
Color/odor Component A-resin:	Light brown liquid with isocyanate type odor
Color/odor Component B-catalyst:	Clear liquid with strong tertiary amine odor
Viscosity-Brookfield:	275 cps +/- 25 cps
Flash Point:	>440° F (227 °C)-open cup method
V.O.C. Content (% Volatiles):	<1% -Contains no VOC components per EPA Method 24
Mix ratio:	40:1 parts by volume (A to B)
Density:	Approximately 5# per cubic foot
Yield:	1 oz. U-Mix® generates or fills 1 cubic inch of void

**SURFACE PREPARATION:** Remove all loose and deteriorated concrete, mortar and old repair materials from the area to be repaired. Blow debris and residue out of the crack and from the surface with compressed air.

Drill 5/8" diameter port holes for injection ports directly into the crack or at a 45° angle to intersect the crack. Spacing of holes is normally 6 inches up to 24 inches apart depending on the width of the crack. The wider the crack the greater distance of grout travel and the farther apart the port holes may be spaced.

Install the grout injectors into the drilled port holes and tap in place to secure seating. Tighten the injector using a deep set socket wrench. The injector will expand against the port hole and this will prevent leakage of the U-Mix® 40:1 Injection Urethane Water Stop Resin during injection.

Flush the crack with potable water prior to injecting the U-Mix® 40:1 Injection Urethane Water Stop Resin grout. U-Mix® 40:1 Injection Urethane Water Stop Resin requires water to promote the expansion of the grout. Begin the crack flushing operation at the bottom of a vertical crack or at the narrowest point of a horizontal crack. Pump until water flows from the crack. Repeat the procedure at each injector until all have been flushed. Two separate pumping system should be used, one for flushing with water and one for grout.

**MIXING:** One 5 gallon unit of U-Mix® 40:1 Injection Urethane Water Stop Resin consists of 4 7/8 gallons of Part A and 1/8 gallon of Part B. Combine Part A resin and Part B hardener and mix thoroughly using a slow speed motor and paddle mixer. Smaller quantities may be mixed at a ratio of 40:1. The mixed material will have a pot life of 8 hours. Do not mix more material than can be pumped in an eight hour period.

**DIRECTIONS FOR USE:** Typical starting pressure for fine cracks is 300-500 psi. Start the injection application at the lowest point for vertical cracks or at the narrowest point for horizontal cracks. If the grout does not appear after a few minutes increase pump pressure. Continue pumping until the U-Mix® 40:1 Injection Urethane Water Stop Resin liquid begins to flow freely from the crack, then move to the next injector and resume pumping. After all injectors have been pumped with U-mix® 40:1 Injection Urethane Water Stop Resin, pump a small amount of water in each injector to create expansion of the material at the port hole. Clean pump and hose with Specco U-mix ® System Flush Cleaner when the injection work is completed.

Remove injectors from the port holes and patch the holes with Speccoplug or Specco 300 Epoxy Gel Paste. Remove excess cured grout from the surface of the crack with a grinder or wire wheel and clean the surface area. Apply a band of Specco 300 Epoxy Gel Paste over the surface of the crack to ensure a positive seal. For sealing large cracks or active leaks, pack the crack with a fibrous material such as oakum, steel wool or use Speccoplug hydraulic cement to prevent rapid loss of the grout flowing from the crack. Refer to Specco U-Mix® Application Guidelines supplementary data sheet for additional information.

**CAUTIONS:** Do not inject U-Mix® 40:1 Injection Urethane Water Stop Resin into frozen, frost filled or icy cracks. Store away from excessive moisture.

**WARNINGS:** Avoid contact with skin and eyes. Wear protective clothing and safety glasses during application. Keep away from heat, sparks and open flame. Use with adequate ventilation. Keep away from food and drink. Do not take internally. Refer to product M.S.D.S. (Material Safety Data Sheet) for further health and safety information. FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.

**H.M.I.S. CODES:**

Component A: HEALTH = 2, FLAMMABILITY = 1, REACTIVITY = 0, P.PROTECTION = E

Component B: HEALTH = 2, FLAMMABILITY = 1, REACTIVITY = 0, P.PROTECTION = E

**SHIPPING NAMES:**

Component A: Diphenylmethane-4, 4'-Diisocyanate & Modified MDI / CAS# 000101-68-8

Component B: Tertiary Amine catalyst-Benzyl dimethylamine / CAS# 103-83-3 /

**SHIPPING CLASS:** ITEM 43940, SUB 2, LTL 85 Urethane Resin - Two component

**PACKAGING:** 1 gallon (3.78 L) and 5 gallon (18.9 L) units.

**STORAGE:** 40° to 60° F. Keep from freezing.

**SHELF LIFE:** 1 year properly stored

**LIMITED WARRANTY:** This product is warranted to be of merchantable quality when used according to the instruction herein. It is not warranted to be suitable for any purpose or use other than the general purpose for which it is intended. Liability under this warranty is limited to the replacement of the product as purchased, if found to be defective upon inspection by the manufacturer. This limited warranty is issued and accepted in lieu of all other expressed warranties and explicitly excludes liability for consequential damages. Buyer assumes all risk and liability resulting from the use of this product.

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