



# RICH-105 Crack Injection Resin

## TECHNICAL DATA SHEET

### DESCRIPTION

RICH-105 is a dual component, mid-range viscosity, moisture activated MDI/TDI blended polyurethane injection resin. This high quality resin is designed for sealing active water leaks in various cracks or joints in below-grade structures. RICH-105 can withstand high water flows as it can absorb up to 10 times its weight in water. It cures to form resilient and flexible, yet tough, closed-cell foam with excellent adhesive qualities.

### APPLICATION

- Midsize cracks or joints in concrete
- Stops infiltration in manholes, basements, retaining walls, pipe penetrations, etc.
- Use for applications that where the flexibility and variability is desired
- Excellent choice for moving cracks and joints

### ADVANTAGES

- Mid-range viscosity penetrates well
- Expands 400% – 600%
- 100% Solids
- Solvent-free and non-corrosive
- Forms a resilient, flexible foam with superb adhesive properties
- Can accept up to 10X its weight in water

### HOW IT WORKS

RICH-105 is a dual-component resin that reacts within seconds to form a resilient, flexible seal accomplished by three mechanisms: the resin is mixed via a static mixer at the point of injection at a 1:1 ratio and adheres to the surface, then begins to expand forming a tight compressive seal while the network of compressed grout material within all the cracks forms a mechanical lock.

### MIXING

Holding the dual-pack in an upright position, remove tip cover and snap off the tips. Attach nozzle and tightly screw on plastic nut. Insert the duo-pack into the injection gun. No measuring required.

### PROPERTIES\*

#### UNCURED

Appearance: Part A: Amber Color; Part B: White  
 Viscosity: 650-800 cP @ 72°F (22°C)  
 Flash Point: >200°F (>93°C)  
 Specific Gravity: 1.147 @ 72°F (22°C) ± 3%  
 Weight: 9.56 lb/gal ± 3% (1145 kg/L ± 3%)

#### CURED

Appearance: Milky colored flexible foam  
 Tensile Strength: TBD  
 Elongation: TBD

\*Laboratory Results

### PERFORMANCE

For best results, use between 60°F - 90°F (16°C - 32°C). Performance will be influenced by site conditions. If site temperatures are low, use a heat source to warm to ~72°F (22°C) and apply. Do not use open flame as a heat source.

### STORAGE

Store in room temperatures within or near 60°F - 100°F (16°C - 38°C) in a dry, dark atmosphere. Do not expose to direct sunlight. Keep away from combustible products and open flames.

### SAFETY

Always use OSHA-approved personal protective equipment (PPE). Refer to the SDS for complete safety precautions.

### WARRANTY

The data, information and statements contained herein are believed to be reliable, but are not construed as a warranty or representation for which Richtech Industries assumes any legal responsibility. Since field conditions vary widely, users must undertake sufficient verification and testing to determine the suitability of any product or process mentioned in this or any other written material from Richtech Industries for their own particular use. **NO WARRANTY OF SUITABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE.** In no case shall Richtech Industries be liable for consequential, special, or indirect damages resulting from the use or handling of this product.



# RICH-110 Crack Injection Resin

## TECHNICAL DATA SHEET

### DESCRIPTION

RICH-110 is a 100% MDI-based, mid-range viscosity, moisture activated polyurethane injection resin. This high quality water-activated resin is designed for sealing active leaks in below grade structures. It is a mid-range viscosity grout that permeates well in various cracks and joints, but offers added safety in confined spaces or where there is poor ventilation. It cures to become a resilient and flexible, yet tough, closed-cell foam. Certified for use in potable water.

### APPLICATION

- Areas with poor ventilation or confined spaces (utility vaults, sub-grade pump houses, lift stations, mines, tunnels, and basements)
- Medium cracks or joints in concrete structures
- Great for manholes and pipe penetrations

### ADVANTAGES

- ANSI/NSF 61 Potable Water Systems UL Certified
- 100% MDI-based
- Mid range viscosity penetrates well
- Expands 400% – 600%
- Solvent-free system and non-corrosive
- Forms a resilient, flexible foam with superb adhesive properties

### HOW IT WORKS

RICH-110 reacts to moisture to form a resilient, flexible seal accomplished by three mechanisms: the resin seeks out water in the space and adheres to the surface, then begins to expand forming a tight compressive seal while the network of compressed grout material within all the cracks forms a mechanical lock.

### MIXING

Holding the dual-pack in an upright position, remove tip cover and snap off the tips. Attach nozzle and tightly screw on plastic nut. Insert the duo-pack into the injection gun. No measuring required.

### PROPERTIES\*

#### UNCURED

- Appearance: Blue liquid
- Viscosity: 350 – 750 cP @ 72°F (22°C)
- Flash Point: >200°F (>93°C)
- Specific Gravity: 1.12 @ 72°F (22°C) ± 3%
- Weight: 9.32 lb/gal ± 3% (1.117 kg/L ± 3%)

#### CURED

- Appearance: Milky colored flexible foam
- Tensile Strength: TBD
- Elongation: TBD

\*Laboratory Results

### PERFORMANCE

For best results, use between 60°F - 90°F (16°C - 32°C). Performance will be influenced by site conditions. If site temperatures are low, use a heat source to warm to ~72°F (22°C) and apply. Do not use open flame as a heat source.

### STORAGE

Store in room temperatures within or near 60°F - 90°F (16°C - 32°C) in a dry, dark atmosphere. Do not expose to direct sunlight. Keep away from combustible products and open flames.

### SAFETY

Always use OSHA-approved personal protective equipment (PPE). Refer to MSDS for complete safety precautions.

### WARRANTY

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# RICH-115 Crack Injection Resin

## TECHNICAL DATA SHEET

### DESCRIPTION

RICH-115 is a dual component, low viscosity, moisture activated, polyurethane injection resin. This high-quality resin is designed for sealing active water leaks in hairline cracks or joints in below-grade structures. It cures to form resilient and flexible, yet tough, closed-cell foam with excellent adhesive qualities.

### APPLICATION

- Very fine cracks or joints in concrete
- Stops infiltration in manholes, basements, mines, tunnels, pipe penetrations, etc.
- Use for applications that where the flexibility and variability is desired
- Excellent choice for moving cracks and joints

### ADVANTAGES

- Low viscosity penetrates well
- Expands 400% – 600%
- Solvent-free and non-corrosive
- Forms a resilient, flexible foam with superb adhesive properties

### HOW IT WORKS

RICH-115 is a dual-component resin that reacts within seconds to form a resilient, flexible seal accomplished by three mechanisms: the resin is mixed via a static mixer at the point of injection at a 1:1 ratio and adheres to the surface, then begins to expand forming a tight compressive seal while the network of compressed grout material within all the cracks forms a mechanical lock.

### MIXING

Holding the dual-pack in an upright position, remove tip cover and snap off the tips. Attach nozzle and tightly screw on plastic nut. Insert the duo-pack into the injection gun. No measuring required.

### PROPERTIES\*

#### UNCURED

- Appearance: Part A: Pale Yellow Color; Part B: White
- Viscosity: 50-200 cP @ 77°F (25°C)
- Flash Point: >200°F (>93°C)
- Specific Gravity: 1.03 @ 72°F (22°C) ± 3%
- Density: 1.030 kg/m<sup>3</sup> ± 3%
- Weight: 8.56 lb/gal (1145 kg/L) ± 3%

#### CURED

- Appearance: Milky colored flexible foam
- Tensile Strength: 100 psi
- Elongation: 250%
- Toxicity: Non-toxic

\*Laboratory Results

\*\*Cured properties vary depending on application and field conditions.

### PERFORMANCE

For best results, use between 45°F – 90°F (7°C – 32°C). Performance will be influenced by site conditions. If site temperatures are low, use a heat source to warm to ~72°F (22°C) and apply. Do not use open flame as a heat source.

### STORAGE

Store in room temperatures within or near 45°F - 95°F (7°C - 35°C) in a dry, dark atmosphere. Do not expose to direct sunlight. Keep away from combustible products and open flames.

### SAFETY

Always use OSHA-approved personal protective equipment (PPE). Refer to the SDS for complete safety precautions.

### WARRANTY

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