

# AV-350 Multi Gel

## Urethane Gel

### General Specifications

#### Description

AV-350 Multi Gel is a urethane resin that reacts with water to form an impermeable gel material. Typically, AV-350 is injected at a ratio of (8:1) 8 parts water to 1 part resin. The low viscosity at this ratio provides a free-flowing liquid for enhanced penetration into small cracks, void spaces, soil and backfill materials.

#### General Uses

- Stops infiltration into manholes (brick, mortar or precast)
- Seals pipe joints using commercial packer equipment to prevent leakages in sanitary and storm sewer pipes
- Seals service lateral connections
- Stabilizes soil
- Seals any underground structure by external substrate stabilization

#### Viscosity

10 CPS in solution

#### Ratio

8:1 (Water to Resin)

5 Gallon Pail = 45 Gallon batch

#### Additives

AV-257 Icoset – increases compressive and tensile strength

AV-351 Accelerator – reduces set time

#### Packaging

Pail – 5 Gallon – Gross Weight 50 lbs. ea., 24 pails per pallet

#### Shipping

Motor Class 55

Hazard Class: 3

Air Freight available for:



5 Gallon Pail



#### Cleaning Products

AV-208 – Acetone, Technical Grade

AV-284 – Pump Wash

### Technical Specifications

#### Description

AV-350 effectively creates a water barrier in surrounding soil. Reaction time is controllable from 5 seconds to 1 minute.

#### Properties: Uncured

Appearance: Green liquid

Solids Content: 77-83% ASTM D-1010

Viscosity: 600-1200 cps @ 70°F ASTM D-1638

Flash Point: 16°F (-9°C) ASTM D- 93

Corrosiveness: Non-corrosive

#### Properties: Cured Gel (8:1)

- Gel time is 45 seconds at 70°F (ph @ 7). The gel time is independent of water/AV-350 Multi Gel ratio between 6:1 and 10:1. At high water to polymer ratios, the gel time is considerably retarded. Gel time can be reduced by adding accelerator to the water side.
- In shallow, dry locations or to improve the compressive and tensile strengths, AV-257 Icoset may be added to the water side tank in lieu of 5 gallons of water.
- Influence of pH: Polymerization may not occur in highly alkaline (pH>10) or strongly acidic (pH<3) media. The gel time increases with decreasing pH values.
- Cured material is resistant to normal sewer effluents.

#### Mix Ratio

AV-350 Multi Gel is cured by the reaction with water. However, larger quantities of water can be absorbed in the reaction mass, and the properties of the cured product are therefore determined by the mix ratio. In the range of 5:1 to 9:1, a strong gel is obtained.

#### Storage

AV-350 Multi Gel is sensitive to moisture and moderately sensitive to high storage temperatures. Therefore, we recommend long term storage at 40-80°F under dry conditions. Long term storage temperatures should not exceed 80°F. Once a pail has been opened, the useful life of the material is greatly reduced, and it should be used as quickly as possible.

AV-350 Multi Gel should be properly removed from all application equipment due to the high risk of moisture contamination. Immediately after use, hoses and pumps can be cleaned with AV-208 Acetone or AV-284 Pump Wash. A nitrogen blanket moisture barrier is added to the pail of AV-350 Multi Gel to retard premature catalization of resin in the pail due to humidity.

#### MSDS

Available by request, or download at [www.avantigrout.com/MSDS](http://www.avantigrout.com/MSDS)

#### Safety

This product contains Toluene Diisocyanate (TDI) and Acetone. It should be used only in well ventilated areas in order to keep the vapor concentration low. Eye contact and repeated skin contact should be avoided. Normal protective clothing such as gloves and goggles are required. A self-contained breathing apparatus should be worn in confined spaces where there is little ventilation and TDI vapors are likely to be high.

#### First Aid

**Eyes:** Immediately flush eyes with water for 15 minutes. Get medical attention.

**Skin:** Wash affected area with soap and water. Remove contaminated clothing.

**Inhalation:** Remove to fresh air. If breathing is difficult, get medical attention.

**Ingestion:** Drink 2 glasses of water. Call a physician.

Note: Never give anything by mouth to an unconscious or convulsing person.

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