

TECHNICAL DATA SHEET

AV-350 MULTIGEL™

HYDROPHILIC POLYURETHANE

DESCRIPTION

AV-350 Multigel™ is a prepolymer resin with excellent permeation properties. It quickly permeates the soil and cures to create an effective water barrier while providing superb soil stabilization. **AV-350** has the added benefit of containing dimethyl ketone (acetone) – a highly hygroscopic chemical able to attract surrounding atmospheric moisture and dissolve fats, oils, and grease (FOGs) on contact to ensure good adhesion on various surfaces.

APPLICATION

- Stops water infiltration into manholes, sanitary and storm sewer mainlines, joints, tunnels, mines, and other underground structures by stabilizing external substrate.
- Ground modification/slope stability for prevention of landslides, erosion, or any place where site conditions or project requirements dictate modification of the existing soil properties.

FEATURES AND BENEFITS

- Can be injected through remote packer equipment
- Mid-range viscosity penetrates well
- 5 gallons of material will make up to 45 gallons of active solution
- Contains dimethyl ketone (acetone) – VOC exempt, hygroscopic, FOG solvent
- Non-toxic

GROUTING TECHNIQUES

- Probe Grouting
- Curtain Grouting
- Remote Packer

HOW IT WORKS

AV-350 will be injected using a multi-component variable ratio pump. Two containers will be used: one for water, the other for **AV-350**. Injecting an 8:1 ratio (water to **AV-350**) into the soil or external substrate will produce a strong gel/soil matrix. Additives are available to modify the cured gel characteristics.

OPTIONAL ADDITIVES

- **AV-105** Gel Guard™ – reduces freezing point (add to water tank)
- **AV-257** Icoset™ – increases strength, adhesive qualities (add to water tank)
- **Dyes** – used extensively for tracking grout flow (add to water tank)

PACKAGING

Product packaged by weight based on specific gravity.

Drum	Net Wt. 484 lbs. (220 kg)
Pail	Net Wt. 44 lbs. (20 kg)
Gallon	Net Wt. 8 lbs. (3.6 kg)

SHIPPING

- Motor Class 55
- Hazard Class 3
- Packing Group II
- Air freight available

MIX PROCEDURE

Gently shake or stir before using. No pre-mixing required. Determine desired properties of finished product and apply accordingly. Perform the standard cup test with site water to determine the desired properties. An 8:1 ratio of water to **AV-350** produces a strong gel.

PROPERTIES*

UNCURED

Appearance:	Blue/Green liquid
Viscosity:	275 – 450 cP @ 72°F (22°C); 10 cP in solution
Flash Point:	-4°F (-20°C)
Specific Gravity:	1.04 @ 72°F (22°C) ± 3%
Density:	8.68 lbs. /gal ± 3% (1,040 kg/m ³ ± 3%)

CURED

Appearance:	Green resilient gel mass
Tensile Strength:	TBD
Compressive:	TBD
Toxicity:	Non-toxic

*Laboratory Results

PERFORMANCE

Flush equipment with **AV-208** before and after use to remove moisture and clean equipment. For best results, use between 45°F – 80°F (7°C – 27°C). Performance will be influenced by site conditions. If site temperatures are low, use a heat source to warm the product to ~72°F (22°C) and apply. Do not use open flame as a heat source. At temperatures of 45°F (7°C), the viscosity of the product can significantly increase, making the miscibility with the reaction water more difficult.

CLEANING PRODUCTS

- **AV-208** Technical Grade Acetone™ (CAS# 67-64-1) – removes moisture from equipment
- **AV-284** Pump Wash™ (Proprietary Blend) – removes uncured resin from pump and hose
- **AV-222** Cleaner™ (Proprietary Blend) – removes cured resin from equipment

STORAGE

Store in temperatures within or near 45°F – 80°F (7°C – 27°C) in a dry, dark atmosphere. Open container slowly to limit degassing. Do not expose to direct sunlight. Keep away from combustible products and open flame. **Note:** storage of opened/partial containers at the lower range of the recommended storage temperature is not advised. The moisture in the air of the head space above a partial container might condensate and causes the grout to premature gel in the container.

SAFETY

Always use OSHA-approved personal protective equipment (PPE). Refer to the SDS for safety precautions. The SDS is available by request or via download at avantigrout.com.

NOTICE

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