

TECHNICAL DATA SHEET

AV-350 MULTIGEL™

HYDROPHILIC POLYURETHANE FOAM

DESCRIPTION

AV-350 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** does have the added benefit of containing dimethyl ketone (acetone) – a highly hygroscopic chemical able to attract surrounding atmospheric moisture and dissolve FOG (fats, oils, and greases) 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

- **AC-50W** Root Inhibitor™ – inhibits future root growth (add to water tank)
- **AV-257** Icoset™ – increases strength and adhesive qualities (add to water tank)
- **AV-105** Gel Guard™ – reduces freezing point (add to water tank)
- **Dyes** – used extensively for tracking grout flow (add to water tank)
- **AV-351** Accelerator™ – accelerates cure time (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

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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