DESCRIPTION
AV-160 SuperGel is a non-toxic, ultra-low viscosity, chemically activated gel. AV-160 has the same viscosity as water which allows it to permeate anywhere water can travel and cures within a controllable time frame from 5 seconds to ±10 hours. Once it cures, it creates an effective, long-lasting water barrier while providing superb soil stabilization.

APPLICATION
• Stops water infiltration into manholes, sanitary and storm sewer mainlines, joints, laterals, tunnels, mines, and various other geotechnical applications and 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
• Thinnest product on the market
• Can be injected through remote packer equipment
• Controllable reaction times from seconds to hours
• Will not undergo synerisis
• No suspended solids
• Greater longevity compared to silicates

GROUTING TECHNIQUES
• Tube-a-Manchette (TAM) Grouting
• Probe Grouting
• Curtain Grouting
• Remote Packer

HOW IT WORKS
AV-160 is injected using a stainless steel, dual-component pump from two containers (see mix procedure). Injecting a 1:1 ratio into the soil or external substrate will produce a strong, impermeable gel obtained via a copolymerization reaction. Additives are available to modify the reactions and cured gel characteristics.

OPTIONAL ADDITIVES
• AC-50W Root Inhibitor – inhibits future root growth (add to grout tank)
• AV-257 loosen – increases strength and adhesive qualities (add only to catalyst tank)
• KFe (Potassium Ferricyanide) – extends gel time (add to grout tank)
• AV-105 Gel Guard – reduces freezing point (add equal amounts to both tanks)
• Dyes – used extensively for tracking grout flow

PACKAGING
Product packaged by weight based on specific gravity.
• Tote = Net Wt. 2,250 lbs. / Volume 208 – 235 gal.
• Drum = Net Wt. 135 lbs. / Volume 12 – 13.5 gal.

SHIPPING
• Motor Class 70
• Non-hazardous
• Motor freight available
• Air freight available

PROPERTIES*
UNCURED
Appearance: Orange liquid
Viscosity: 1 – 2 cP @ 72°F (22°C) in solution
pH: 6.5-7.5
Flash Point: Does not flash
Bulk Density: ~ 1.15-1.30
Water Solubility: Completely miscible

CURED
Appearance: Orange-tinted gel mass
Hydraulic: < 10⁻⁹ cm/s
Conductivity: Compressive Strength: 120 psi in sand
Toxicity: Non-toxic

*Laboratory Results

MIX PROCEDURE
AV-160 material should be mixed well prior to use to deal with possible settlement.
Tank A: Add 10 gallons (37.8 L) of water and one liquid drum of AV-160. Add 0.5 gallons (1.9 L) of AV-101 to solution and fill with water up to 30 gallons.
Tank B: Add 10 gallons (37.8 L) of water, add 5 lbs. (2.27 kg) of AV-102 or AV-103, and then bring to 30 gallons with water. Makes a 60 gallon (227 L) batch. Note: Ingredients are only compatible with stainless steel or plastic.

PERFORMANCE
Performance will be influenced by site conditions. If site temperatures are low, heat the product to recommended operating temperatures of 40°F – 100°F (4°C – 38°C). Decreasing pH may extend cure time. High minerals/metals content may adversely affect gel time.

CLEANING PRODUCTS
Use water with light detergent.

STORAGE
Store in temperatures within or near 40°F – 100°F (4°C – 38°C).

SAFETY
Always use OSHA-approved personal protective equipment (PPE). Refer to the SDS for complete safety precautions. The SDS, mixing instructions, and Technical Manual are available by request or via download at www.AvantiGrout.com.

NOTICE
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