



**TECHNICAL DATA SHEET**

**AV-560 GEO-LOK™**

**HYDROPHOBIC POLYURETHANE**

**DESCRIPTION**

**AV-560 Geo-Lok™** is a two-component hydrophobic urethane resin designed to consolidate rock and to permeate and stabilize various types of rock/soil. The uncured two-component resin has a low viscosity and is mixed at a 1:1 ratio by volume. The mixed resin will cure into early high-strength dense polyurethane, unaffected by mild corrosive environments and microorganisms.

**APPLICATION**

- Consolidating rock
- Soil nails
- Rock anchoring
- Permeation grouting of various rocks/soils
- Rock fractures

**FEATURES AND BENEFITS**

- Solvent-free system
- Early high-strength
- Withstands wet/dry cycles
- Low viscosity

**GROUTING TECHNIQUES**

- Probe Grouting
- Tube-a-Manchette Grouting

**HOW IT WORKS**

**AV-560** is a two-component hydrophobic urethane resin that must be mixed at a ratio of 1:1 by volume. The temperature of the resin and environment determines how quickly the resin cures.

**NOTE:** Although **AV-560** is a hydrophobic urethane, but like all urethanes, **AV-560** will react with any water/moisture present in the substrate to form an expanding foam. The resulting foam will have a lower final cure strength and density.

**PACKAGING**

Product packaged by weight based on specific gravity.

- AV-560-A Drum Net Wt. 551 lbs. (250 kg)
- AV-560-B Drum Net Wt. 456 lbs. (207 kg)
- AV-560-A Pail Net Wt. 50 lbs. (22.7 kg)
- AV-560-B Pail Net wt. 41 lbs. (18.6 kg)
- AV-560-A Gallon Net Wt. 10.5 lbs. (4.8 kg)
- AV-560-B Gallon Net Wt. 8.6 lbs. (3.9 kg)

**SHIPPING**

- Motor Class 55
- Non-Hazardous
- Air freight available

**CLEANING PRODUCTS**

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

**STORAGE**

Store between 45°F – 95°F (7°C – 35°C) in a dry atmosphere. Avoid water and humidity. Keep spouts closed. Packaged under dry nitrogen.

**SAFETY**

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

**PROPERTIES\***

**AV-560-A** component UNCURED

- Appearance: Amber liquid
- Corrosiveness: Non-Corrosive
- Viscosity: 200 cP ± 5 @ 68°F (20°C)
- Flash Point: C.O.C. 288°F (142°C)
- Solids: 100%
- Specific Gravity: 1.25 @ 72°F (22°C) ± 3%
- Density: 10.43 lbs./gal ± 3% 1,250 kg/m<sup>3</sup> ±3%

**AV-560-B** component UNCURED

- Appearance: Clear liquid
- Corrosiveness: Non-Corrosive
- Viscosity: 400 cP ± 5 @ 68°F (20°C)
- Solids: 100%
- Specific Gravity: 1.03 @ 72°F (22°C) ± 3%
- Density: 8.63 lbs./gal ± 3% 1,034 kg/m<sup>3</sup> ±3%

**AV-560 A/B** NEAT CURED

- Tensile Strength: 7,605 psi (52.43 MPa)
- Elongation @ Break: 3.45%
- Compressive Strength: 13,980 psi (96.39 MPa)
- Density: 20-70 pcf (varies with moisture content in the substrate)
- Hardness Shore D: > 80
- Toxicity: Non-toxic

\*Laboratory Results

**MIX PROCEDURE**

**AV-560 Geo-Lok's** preferred mix procedure is the use of a two-component pump with static mixer at the end at a ratio of 1:1 by volume.

**PERFORMANCE**

Flush equipment with **AV-208** before and after use to remove moisture and clean equipment. Performance will be influenced by site conditions. If site temperatures are low, heat the product to recommended operating temperatures of 60°F – 90°F (16°C – 32°C). Do not use open flame as a heat source. Any water/moisture present in the substrate to be injected will cause the resin to form foam and will lower its final cure strength and density.

**NOTICE**

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