

## TECHNICAL DATA SHEET

# AV-150 ACRYLATE GEL™

### CHEMICALLY ACTIVATED GEL

#### DESCRIPTION

**AV-150** Acrylate Gel is a non-toxic, ultra-low viscosity chemically activated gel. **AV-150** has the same viscosity as water which allows it to permeate anywhere water can travel and cures within a controllable time frame from 20 seconds to ±5 minutes. 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 geo-technical 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

- High solids content grout
- Can be injected through remote packer equipment
- Controllable reaction times from seconds to minutes
- Will not undergo syneresis
- No suspended solids
- Greater longevity compared to silicates

#### HOW IT WORKS

**AV-150** 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.

#### OPTIONAL ADDITIVES

- **AV-105** Gel Guard™ – reduces freezing point (add equal amounts to both tanks)
- **KFe** (Potassium Ferricyanide) – extends gel time (add to grout tank; KFe will precipitate out of solution in less than 1 hr, tank MUST be under continuous mixing or erratic gel times are expected)
- **Dyes** – used extensively for tracking grout flow

#### PACKAGING

Product packaged by weight based on specific gravity.

	Net Wt.
Tote	2,420 lbs. (1,098kg)
Drum	484 lbs. (220 kg)
Pail	44 lbs. (20 kg)

#### SHIPPING

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

#### PROPERTIES\*

##### UNCURED

Appearance:	Clear Liquid
Viscosity:	15 – 20 cP @ 77°F (25°C) liquid resin
pH:	6.5-7.5
Flash Point:	223°F (106°C) CC
Specific Gravity:	~ 1.0735

##### CURED

Appearance:	White tinted gel mass
Toxicity:	Non-toxic
Elongation:	70%
Swelling:	25%

\*Laboratory Results

#### TYPICAL MIX PROCEDURE

**Comp A:** Add 5% by weight (measured on the quantity of the **AV-150**) of **AV-101**® Catalyst T+ to the **AV-150** component.

**Comp B:** Add 5% by weight (measured on the quantity of the **AV-150**) of **AV-102**® Catalyst AP or **AV-103**® Catalyst SP, and complete with water to equal quantity of **AV-150**.

Pump at a 1:1 by volume

**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.

#### STORAGE

Store in temperatures within or near 45°F – 95°F (7°C – 35°C). Keep out of sunlight. **Caution:** keep each ingredient stored separately. **AV-101** will react violently when it comes in contact with **AV-102** Catalyst AP or **AV-103** Catalyst SP.

#### 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 [avantigrout.com](http://avantigrout.com).

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