



TECHNICAL DATA SHEET

AV-258-MV PERMAFLEX™

HYDROPHOBIC POLYURETHANE GROUT

DESCRIPTION

AV-258-MV PermaFlex™ is a moisture activated polyurethane resin whose chemical reaction is catalyzed by mixing **AV-259-MV PermaFlex AC™** with AV-258-MV. **AV-258-MV** is injected as a single component and designed for sealing active and potential water leaks in cracks or small annular spaces where flexibility is needed but is susceptible to wet/dry cycles. **AV-258-MV** cures flexible and impermeable.

APPLICATION

- For use above or below grade in humid or arid atmospheres
- Fills various cracks and pipe penetrations
- Stops leaks in concrete structures
- Designed for tunnels, mines, dams, reservoirs, block walls and structures that may shift

FEATURES AND BENEFITS

- Free rise expands 700% – 1,200%
- Solvent-free system
- Controllable reaction time by adjusting the amount of AV-259-MV PermaFlex AC
- Withstands wet/dry cycles

GROUTING TECHNIQUES

- Expanded Gasket Placement Technique (EGP)
- Variable Pressure Application Technique (V-PAT) – Crack Injection

HOW IT WORKS

AV-258-MV PermaFlex uncured resin must be injected into a confined space. Fill the space completely with unreacted resin. The resin will react with moisture to form a resilient seal accomplished by three mechanisms: the resin seeks out water in the space and adheres to the surface, then begins to expand in the confined space to form a tight, high density compression seal, while the network of compressed grout material within all the cracks/joints forms a mechanical lock.

REQUIRED CATALYST

- **AV-259-MV PermaFlex AC** – 32 fl. oz. (approx. 1.88 lbs.)

PACKAGING

Product is packaged by weight based on specific gravity.

Net Wt.

Drum	484 lbs. (219.5 kg)
Pail	44 lbs. (20.0 kg)
Gallon	8.8 lbs. (4.0 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 in temperatures within or near 45°F – 95°F (7°C – 35°C) in a dry atmosphere. Keep container tightly closed when not in use. Packaged under dry nitrogen to keep moisture out and extend shelf life.

PROPERTIES*

AV-258-MV – UNCURED

- Appearance: Milky white to clear liquid
- Viscosity: 450 – 650 cP @ 72°F (22°C)
- Flash Point: >200°F (>93°C)
- Specific Gravity: 1.073 @ 72°F (22°C) ±3%
- Density: 8.95 lbs./gal. ± 3% (1.073 kg/L ± 3%)

AV-258-MV – CURED

- Appearance: Milky white, flexible
- Tensile Strength: TBD
- Toxicity: Non-toxic

AV-259-MV – UNCURED

- Appearance: Light yellow to white, clear liquid
- Viscosity: 24 cP @ 72°F (22°C)
- Flash Point: >200°F (>93°C)
- Specific Gravity: 0.95 @ 72°F (22°C) ±3%
- Density: 7.93 lbs./gal. ± 3% (0.95kg/L ± 3%)

*Laboratory Results

Cream / Gel (Cure) Times for AV-258-MV PermaFlex (Minute:Seconds)					
Temperature		Half Catalyst	Full Catalyst	Double Catalyst	Triple Catalyst
	40 °F / 4 °C		:39 / 3:06	:28 / 2:41	:20 / 2:37
50 °F / 10 °C		:32 / 2:54	:24 / 2:27	:18 / 2:07	:14 / 1:58
60 °F / 15 °C		:27 / 2:18	:22 / 2:10	:15 / 1:58	:14 / 1:55
70 °F / 21 °C		:23 / 2:16	:20 / 2:03	:15 / 1:51	:12 / 1:48

MIX PROCEDURE

Gently shake or stir both containers before using. Typically, one container of **AV-259-MV** is used per pail of **AV-258-MV**. Depending on the desired reaction time, **AV-259-MV** may be doubled and tripled. Mix thoroughly, but slowly, to avoid creating bubbles in the solution. Perform a standard cup test with site water to determine the desired reaction time.

PERFORMANCE

Flush equipment with **AV-208** Technical Grade Acetone 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) and/or increase catalyst amount by 1% – 2%. Do not exceed more than 96 fl. oz. of **AV-259-MV PermaFlex AC** per pail of **AV-258-MV PermaFlex** resin. Do not use open flame as a heat source. Excess amounts of **AV-259-MV** may adversely affect performance. Because catalyzed resin will react to moisture from the air, use product soon after mixing for best results.

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.

NOTICE

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