

TECHNICAL DATA SHEET

AV-248 FLEXSEAL™

HYDROPHOBIC POLYURETHANE GROUT

DESCRIPTION

AV-248 Flexseal is a moisture activated polyurethane resin whose chemical reaction is catalyzed by mixing **AV-249 Flexseal AC™** with AV-248. **AV-248** 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-248** 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 400% – 600%
- Solvent-free system
- Controllable reaction time by adjusting AV-249 Flexseal AC volume
- Withstands wet/dry cycles
- Unique hydrophobic that cures flexible and closed-cell

GROUTING TECHNIQUES

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

HOW IT WORKS

AV-248 Flexseal uncured resin must be injected into a confined space. Fill the space at least halfway 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.

ADDITIVES

- **AV-249** Flexseal AC – catalyst, 16 oz. (0.5 L) container

PACKAGING

Product packaged by weight based on specific gravity.

Net Wt.

Drum	484 lbs. (220 kg)
Pail	44 lbs. (20 kg)
Gallon	8 lbs. (3.6 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-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 – 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-248 – UNCURED

Appearance:	Milky white to clear liquid
Viscosity:	550 – 830 cP @ 72°F (22°C)
Flash Point:	>200°F (>93°C)
Specific Gravity:	1.036 @ 72°F (22°C) ±3%
Density:	8.64lbs./gal ± 3% (1.054 kg/L ± 3%)

AV-248 – CURED

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

AV-249 Flexseal AC

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:	7.93lbs./gal ± 3% (0.95kg/L ± 3%)

*Laboratory Results

Gel (Cure) Times for AV-248 Flexseal (Min:Sec)				
Temperature		Half Catalyst	Full Catalyst	Double Catalyst
	40 °F / 4 °C		14:30	9:15
50 °F / 10 °C		12:10	7:15	5:34
60 °F / 15 °C		10:54	6:15	3:12
70 °F / 21 °C		9:04	4:40	2:30

MIX PROCEDURE

Typically, one container of **AV-249** is used per 5-gallon container of **AV-248**. Depending on the desired reaction time, **AV-249** may be doubled. Mix thoroughly, but slowly, to avoid creating bubbles in the solution. Perform the standard cup test with site water to determine the desired reaction time.

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) and/or increase catalyst amount by 1% – 2%. Do not exceed more than 32 oz. (1 L) of **AV-249** Flexseal AC per 5-gallon container of the **AV-248** Flexseal resin. Do not use open flame as a heat source. Excess amounts of **AV-249** 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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