



TECHNICAL DATA SHEET

AV-248 FLEXSEAL™

HYDROPHOBIC POLYURETHANE FOAM

DESCRIPTION

Injected as a single component, catalyzed **AV-248** Flexseal is a moisture activated MDI-based polyurethane resin. The chemical reaction is catalyzed by using **AV-249** Flexseal AC™ and uses moisture as an initiator. Like other hydrophobics, **AV-248** withstands wet/dry cycles and reacts with moisture. **AV-248** it forms a resilient, impermeable *flexible* foam. This high quality resin is designed for sealing active and potential water leaks in various cracks, and annular spaces where flexibility is needed but is susceptible to wet/dry cycles. Avanti's **AV-248** is one of the most versatile products on the market.

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

- Expands 400% – 600%
- Solvent-free system
- Controllable reaction time by adjusting **AV-249** Flexseal AC volume
- Withstands wet/dry cycles
- Unique hydrophobic that cures into a flexible, closed-cell foam

GROUTING TECHNIQUES

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

HOW IT WORKS

AV-248 is a moisture-activated reaction. When injected into a concrete structure, the low viscosity resin will react with moisture and begin to expand. The final product is a very dense, closed cell foam impermeable to water yet flexible in nature.

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 foam
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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