



TECHNICAL DATA SHEET

AV-248-LV FLEXSEAL LV™

HYDROPHOBIC POLYURETHANE GROUT

DESCRIPTION

AV-248-LV Flexseal LV™ is a low viscosity, moisture-activated, MDI-based polyurethane resin whose chemical reaction is catalyzed by mixing **AV-249-LV Flexseal Cat LV™** with **AV-248-LV**. Injected as a single component, **AV-248-LV** is designed to seal active and potential water leaks in various cracks and annular spaces where flexibility is needed but is susceptible to wet/dry cycles. **AV-248-LV** cures resilient, impermeable, and flexible.

APPLICATION

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

FEATURES AND BENEFITS

- NSF/ANSI/CAN 61 Drinking Water Systems Component Certified
- Very low viscosity
- Free rise expands 400% – 1,000%
- No VOC
- Controllable reaction time by adjusting **AV-249-LV Flexseal Cat LV**
- Withstands wet/dry cycles

GROUTING TECHNIQUES

- Variable Pressure Application Technique (V-PAT) – Crack Injection

HOW IT WORKS

AV-248-LV Flexseal LV 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.

CATALYST

- **AV-249-LV Flexseal Cat LV** – 32 fl. oz. container (approximately 1.88 lbs (0.84 kg))

PACKAGING

Product packaged by weight based on specific gravity.

Drum	Net Wt. 484 lbs. (220 kg)	
Pail	Net Wt. 44 lbs. (20 kg)	
Gallon	Net Wt. 8 lbs. (3.6 kg)	
Dual Cartridge	AV-248-LV - 25.3 fl.oz. (750 ml)	AV-249-LV - 2.5 fl.oz (75 ml)

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 between 45°F – 95°F (7°C – 35°C) in a dry atmosphere. Keep lid tightly closed when not in use. Packaged under dry nitrogen to keep moisture out and extend shelf life.

PROPERTIES*

AV-248-LV – UNCURED*

Appearance:	Milky white to clear liquid
Viscosity:	150–250 cP @ 77°F (25°C) ASTM D-4889
Flash Point:	255.2°F (124°C)
Specific Gravity:	1.03 @ 72°F (22°C) ± 3%
Density:	8.6 lb./gal. (1,030kg/m³) ± 3%

AV-248-LV – CURED *†

Appearance:	Milky white, flexible	
Tensile Strength:	150 psi	ASTM D-3574
Elongation:	250%	ASTM D-3574
Linear Shrinkage	<1%	ASTM D-1042
Toxicity:	Non-toxic	

†Cured properties vary depending on application and field conditions.

AV-249-LV*

Appearance:	Light yellow to white, clear liquid
Viscosity:	15 cP @ 72°F (22°C)
Flash Point:	>200°F (>93°C)
Specific Gravity:	0.894 @ 72°F (22°C) ±3%
Density:	7.4 lbs./gal ± 3% 894 kg/m³ ± 3%

*Laboratory Results

Gel (Cure) Times for AV-248-LV Flexseal LV (Min:Sec)				
Temperature		Half Catalyst	Full Catalyst	Double Catalyst
	40°F / 4°C	9:29	5:44	3:55
	50°F / 10°C	7:42	5:08	3:10
	60°F / 15°C	6:52	3:59	2:42
	70°F / 21°C	5:00	3:22	1:53

MIX PROCEDURE

Typically, one container of **AV-249-LV** is used per 5-gallon pail of **AV-248-LV**. Depending on the desired reaction time, **AV-249-LV** 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 – 95°F (16°C – 35°C) and/or increase catalyst amount by 1% – 2%. Do not exceed more than 64 fl. oz. (1.9 L) of **AV-249-LV** per 5-gallon container of **AV-248-LV**. Do not use open flame as a heat source. Excess amounts of **AV-249-LV** may adversely affect performance. Because catalyzed resin will react to moisture from the air, use product soon after mixing for best results.



AV-248-LV Flexseal LV™ is tested and certified by WQA against NSF/ANSI/CAN 61 Drinking Water System Components
 For product use restrictions visit www.wqa.org

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AVANTI
Stop leaks. Stabilize soil.
Control groundwater. **Permanently.**

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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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