



TECHNICAL DATA SHEET

AV-248-LV FLEXSEAL LV™

HYDROPHOBIC POLYURETHANE FOAM

DESCRIPTION

AV-248-LV Flexseal LV™ is the low viscosity version of the original **AV-248** Pump Wash™. Injected as a single component, catalyzed **AV-248-LV** is a moisture activated MDI-based polyurethane resin. The chemical reaction is catalyzed by using **AV-249-LV** Cat-LV™, using moisture as an initiator. **AV-248-LV** withstands wet/dry cycles and reacts with moisture. It forms a resilient, impermeable *flexible* foam. This high quality resin 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. Avanti's **AV-248-LV** is one of the most versatile products on the market.

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

- Very low viscosity
- Expands 400% – 600%
- No VOC
- Controllable reaction time by adjusting **AV-249-LV** Cat-LV 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-LV is a water-activated reaction that forms a resilient, flexible seal accomplished by three mechanisms: the resin seeks out water in the space and *adheres* to the surface, then begins to expand forming a tight *compressive* seal while the network of compressed grout material within all the cracks forms a *mechanical* lock.

CATALYSTS

- **AV-249-LV** Cat-LV – catalyst, 32 oz. (0.95 L)

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)

SHIPPING

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

PROPERTIES*

AV-248-LV – UNCURED*

Appearance:	Milky white to clear liquid
Viscosity:	150–250 cP @ 77°F (25°C) ASTM D-4889
Flash Point:	>200°F (>93°C)
Specific Gravity:	1.03 @ 72°F (22°C) ± 3%
Density:	8.6 lb./gal (1,030kg/m ³) ± 3%

AV-248-LV – CURED *†

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

†Cured properties vary depending on application and field conditions.

AV-249 Cat-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/m ³ ± 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
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 container 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.



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



TECHNICAL DATA SHEET

AV-248-LV FLEXSEAL LV™

HYDROPHOBIC POLYURETHANE FOAM

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.

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 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.

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

The data, information and statements contained herein are believed to be reliable, but are not construed as a warranty or representation for which Avanti International assumes any legal responsibility. Since field conditions vary widely, users must undertake sufficient verification and testing to determine the suitability of any product or process mentioned in this or any other written material from Avanti for their own particular use. **NO WARRANTY OF SUITABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE.** In no case shall Avanti International be liable for consequential, special, or indirect damages resulting from the use or handling of this product.