

TECHNICAL DATA SHEET

AV-315 MICROFOAM™

HYDROPHILIC POLYURETHANE FOAM

DESCRIPTION

Avanti's specialized **AV-315** Microfoam is a single component, moisture activated, polyurethane injection resin. This high quality resin has an extremely low viscosity and is designed for sealing active water leaks in very fine cracks or joints in below-grade structures. It cures to form a dense, resilient, and impermeable closed-cell flexible foam.

APPLICATION

- Stopping active leaks originating from fine cracks or joints in concrete
- Stop leaks in mines, tunnels, subways, and other dense formations
- For use in below-grade structures: basements, tunnels, utility vaults, etc.

FEATURES AND BENEFITS

- Low viscosity for excellent penetration
- Expands 300% – 600%
- Solvent-free and non-corrosive
- Forms a resilient, flexible foam with good adhesive properties

GROUTING TECHNIQUES

- Variable Pressure Application Technique (V-PAT)

HOW IT WORKS

AV-315 Microfoam reacts in the presence of water or moisture to form 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.

RATIOS

Preferred ratio is 1:1 (water to resin), however no pre-mixing is required. Pumped as a single component.

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

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

PROPERTIES*

UNCURED

Appearance:	Pale yellow resin	
Viscosity:	50-100 cP @ 72°F (22°C)	ASTM D-4889
Flash Point:	>200°F (>93°C)	
Specific Gravity:	1.03 @ 72°F (22°C) ± 3%	
Density:	8.6 lb./gal ± 3% 1,031 kg/m ³ ± 3%	

CURED*†

Appearance:	Milky colored, dense, flexible foam	
Tensile Strength:	100 psi	ASTM D-3574
Elongation:	250%	ASTM D-3574
Toxicity:	Non-toxic	

*Laboratory Results

†Cured properties vary depending on application and field conditions.

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). Do not use open flame as a heat source. At temperatures of 45°F (7°C), the viscosity of the product can significantly increase, making the miscibility with the reaction water more difficult.

STORAGE

Store in temperatures within or near 45°F – 95°F (7°C – 35°C) in a dry atmosphere. **Note:** storage of opened/partial containers at the lower range of the recommended storage temperature is not advised. The moisture in the air of the head space above a partial container might condensate and causes the grout to premature gel in the container.

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.



AV-315 Microfoam is tested and certified by WQA against NSF/ANSI 61 Drinking Water System Components
For product use restrictions visit www.wqa.org