

# MOUNTAIN GROUT - FLEXIBLE

## POLYURETHANE SYSTEM

### Description

Mountain Grout Flexible is a low viscosity hydrophobic polyurethane formulation. The system is comprised of a base resin along with an accelerator component. Flexible is typically used to repair cracks or failed joints in concrete structures. Flexible is also used in tunneling and mining operations to seal fractures in rock formations. Mountain Grout Accelerator is used by the experienced installer to manipulate the reaction profile as warranted by job site conditions. Being a hydrophobic formulation, when reacted with minimal amounts of water, the resulting foam will maintain its physical form and not be subject to shrinkage due to wet/dry cycles. Flexible produces a closed cell polyurethane grout.

### Typical Application

- Water Related Facilities
- Waste Treatment Plants
- Storm Water Systems
- Underground Vaults
- Manhole Facilities
- Concrete Dams
- Tunnels
- Earthen Dams
- Elevator Pits
- Parking Garages

### Advantages

- 100 % solids
- Expands up to 30 times initial volume
- Pumps as a single component
- Controllable reaction times
- Excellent resistance and durability
- Outstanding adhesion
- Non-hazardous shipping
- Non-flammable
- Cures inert, non-toxic permanent seal

### Technical Information

Physical Properties - Liquid			
	Flexible	Accelerator	Test Method
Viscosity	500 cps	35 cps	ASTM D-4016
Specific Gravity	1.15	0.95	ASTM D-1475
Color	Amber	Pale Yellow	
Flash point	>250°F	216°F	ASTM D-93
Physical Properties – Cured			
Elongation	62%		ASTM D-3574
Tensile	24 psi		ASTM D-3574
Shear	17 psi		ASTM C-273
Water Absorption	<1%		ASTM D-2842
Toxicity	Non-toxic		



NSF/ANSI Standard 61 Drinking Water System Components  
 File: MH16470 Control: 3L39  
 Maximum Surface Area to Volume ratio 10cm<sup>2</sup> /L

### Use of MG Accelerator Component

The reaction profile may be adjusted prior to pumping by the addition of Accelerator into the base resin and is affected by temperature and the amount of moisture encountered. At 1.25 % (1/2 pint per five gallons) the expansion will start in about 50 seconds and be complete in about 4 minutes after encountering water. At 2.5 % (1 pint per five gallons) the expansion will start at 15 seconds and be complete at about 65 seconds. These reaction times were determined at 77° F with the addition of 2.5 % water.

### Standard Packaging

Mountain Grout Flexible is available in 250 gallon totes, 50 gallon drums and 5 gallon pails.

**Read and understand the SDS prior to use.**



# Green Mountain International, LLC

**Application Equipment:** Contact Green Mountain International, LLC for equipment recommendations for the particular application and conditions.

**Personal Protection:** Read SDS for complete details. For professional use only. Avoid breathing vapors – use in well-ventilated area only or use self-contained respiratory protection in confined spaces. Avoid skin contact – wear protective gloves. Avoid eye contact – wear eye protection. Do not ingest.

**First Aid:** In case of eye contact, flush with large amounts of water and get medical attention. For skin contact, wipe excess liquid from skin and wash with soap and water. If breathing is difficult, give oxygen and get medical attention.

**Safety Precaution:** During the chemical reaction, polyurethane products release heat via an exothermic reaction. When polyurethane products are applied in substantial quantities, exothermic reactions may generate enough heat to become a fire hazard. All necessary precautions should be taken to avoid the creation of a situation in which a fire could occur. Contact Green Mountain International, LLC for further information.

**Storage and Shelf Life:** Product is moisture sensitive. Store in original sealed containers at temperatures between 60°F and 90°F (15°C-32°C). Opened containers must be handled properly to prevent moisture contamination. Shelf life is 12 months when properly stored.

**Clean-Up of Spills or Leakage:** With adequate ventilation and appropriate personal protective equipment, cover the spill area with absorbent material such as clay, or vermiculite and transfer to metal waste containers. DO NOT RESEAL CONTAINER AS REACTION OF CONTAMINATED MATERIAL CAN CREATE PRESSURE. Wash area with decontamination solution (5-10 % solution of sodium carbonate). Dispose of waste in accordance with Federal, State and local regulations.

**Shipping Information:** Shipping Class USDOT Class 55; USDOT Hazard Classification: Non-Hazardous.

**Warranty Information:** This limited warranty is limited to the replacement of the materials which are defective. Green Mountain International, LLC makes no other warranty, expressed or implied, and makes no warranty of merchantability or fitness for a particular purpose. This limited warranty does not include any transportation charges or costs of installation or any liability for direct, indirect, consequential, or punitive damages or delay, whether or not the undersigned has been advised of such claims. THE FOREGOING LIMITED WARRANTY IS THE SOLE WARRANTY FOR THE PRODUCT. THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

**Physical Property Values:** PLEASE NOTE, this Technical Data Sheet is intended as a *general guide* to provide assistance regarding typical physical characteristics of the product. However, the specific values are affected by various factors, including, but not limited to, ambient temperature, water temperature, humidity, water pH, reaction under confinement, and the presence of chemicals or debris in the reaction area. Applicators are encouraged to perform sample tests with the variables found on site to get the best possible indication of the product's physical properties for the specific job.



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