



SealBoss® 2850 SilFlex Applications

- Coal mining corridors
- Stabilization of pillar support structures
- Consolidation of fissured mountains, rocks, soils
- Rehabilitation and sealing of corridors and shaft extensions
- Repair of concrete and underwater structures
- Subsoil and rock mass stabilization
- Tunnel face stabilization and crack filling
- Umbrella grouting in TBM areas

Product Description

SealBoss® 2850 SilFlex is a fast-reacting, non-foaming, solvent-free, two-component urea-silicate resin system with outstanding sealing and consolidation properties. The product hardens in approximately three minutes at 25°C. To achieve most satisfying and permanent results, a combination of **SealBoss® GT 2800** with other systems of our product line may be advised. Ask your SealBoss® technician for details. The product is for professional use.

Installation Guidelines

SealBoss® 2850 SilFlex volume mixing ratio is 1 Part-A to 1 Part-B.

Before application, pre-mix Part-A and Part-B. All equipment, pumps and hoses must be dry. Avoid moisture contact with the mixture to prevent premature reaction. Plural component equipment with static mixing provision is highly recommended for optimal results.

Component A must be stirred separately and thoroughly with a low-speed paddle mixer before use immediately before application. The prepared 1:1 ratio material is to be injected with the **SealBoss® IP2C Gel Injection Pump** with a silicate mixing tube of 8mm diameter, and 500mm length.

A static mixer blends both components and injects them into the mountain side, rock or soil. The curing reaction time of the urea-silicate foam formulation is significantly depending on temperature.

Maintenance of Equipment

Tools and equipment must be cleaned immediately after use. Remove all excess product. Cured product is hard to remove. **SealBoss® R70 Pump Flush** is a solvent free, non-flammable cleaner, lubricator, pump and hose conditioner. Please refer to the product data sheet for detailed information.

SealBoss® 2850 SilFlex Description

Fast-curing, non-foaming, elasticized silicate injection resin to consolidate and seal fissured and fractured geotechnical formations.

- Penetrates fine cracks
- Suitable for underwater application
- Very low viscosity
- Does not absorb water
- Suitable for cutting and planing
- No foaming and environmentally sound
- Great adhesion and final strength
- High plastic ductility under pressure

Recommended Applications and Limitations

Per the SealBoss GeoTech application ranges, SealBoss® 2850 SilFlex is recommended for Rock Stabilization, Consolidation, Tunnel Face, and Umbrella Grouting. It is not used for a permanent sealing grout.

The low viscosity and non-foaming characteristics of SealBoss® 2850 SilFlex make it ideal for creating cohesive substrates well suited for cutting and planing in tunnel and mining applications.

Health and Safety

Protect your health! Always use safety gear in compliance with OSHA and all applicable local and job-site regulations while working with products. Handling of this product may result in spills, splashes, and airborne substances. Wear appropriate safety goggles, gloves and safety clothing at all times. During the pressure injection process a full face shield is advised for anybody within reach of product spill or blowout. Consider property in proximity of the application to prevent loss or damage. Protect jobsite from unauthorized persons. Store all materials and equipment safely and out of reach of children and animals! Observe container labels, SDS, applicable laws and regulations and all instructions before using the product and equipment. In case one of the components comes in contact with the skin, wash thoroughly with soap and water. Provide adequate ventilation in volume and pattern in working area. Further protection: emergency showers and eyewash stations. Get immediate medical attention as needed.



Technical Properties

	2850 A	2850 B	
Appearance	Brown Liquid	Opaque Liquid	
Solids	100%	100%	ASTM D 1010
Density, lb/gal	10.2	12.4	ASTM D 1638
Flash Point, °C / °F	200°C / 392°F	N/A	ASTM D 1638
Viscosity, cps	160-250	290-490	ASTM D 1638
Mixing Ratio	1	1	
Packaging	5 gal 55 gal	5 gal 55 gal	
Storage / Shelf Life	Unopened Containers Only at 15-30°C / 58-85°F in dry, sun free indoors 1 year - 5 gal / 55 gal	Unopened Containers Only at 15-30°C / 58-85°F in dry, sun free indoors 1 years	
Reaction			
Application Temperature	+4°C to +40°C		
Gel time, 23°C / 72°F	1-3 min (flow limit - tack free - solid)		
Properties Cured			
Compressive Strength	>7000 psi	7 Day Cure	



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Revised 201705