

SealBoss® 4040 LV-Epoxy-Resin

100% Solids / Low Viscosity Epoxy Resin For Structural Repairs

TYPE OF MATERIAL

SealBoss® 4040 LV-Epoxy-Resin is a 100% solids (solvent free), high modulus, non-shrink two component epoxy injection resin with outstanding features.

- High Strength
- Low Viscosity

RANGE OF APPLICATION

- Crack Injection
- Welding Cracked Concrete
- Bolt Grouting
- Plate Grouting
- Delaminated Slab Welding
- Repairing Wood Beams

4040 LV-Epoxy-Resin is designed for the injection of cracks and voids in concrete. Due to the low viscosity of the material good penetration is achieved even at lower injection pressures. **4040 LV-Epoxy-Resin** has superior water displacing properties and bonds well in moist conditions.

Due to the high tensile and compressive strength of the cured product, **4040 LV-Epoxy-Resin** is ideal for structural repair.

To achieve best results a combination of several products may be recommended in some applications.

PROCESSING

SealBoss® 4040 LV-Epoxy-Resin is composed of two components. The mixing ratio by volume is 2:1 (A:B). The product is formulated to be pumped with our Injection equipment and other quality epoxy injection machines.

The product may be filled with additives, such as silica flour, sand or thixotropic fillers. A mixing ratio of 1:1 (**4040 LV-Epoxy-Resin** : Additives) should not be exceeded. Physical properties of the modified product may change. **4040 LV-Epoxy-Resin** can be processed with single component equipment but two component equipment is recommended for extensive injection work.

The gel time of premixed material is determined by the quantity of the batch and the temperature. Since the reaction of the epoxy resin produces heat, a large batch is likely to react much faster than a small quantity of material. This fact should be closely observed by the user of single component equipment to prevent premature reaction in the pump and grout line system. If reaction of the batch occurs while pumping, immediately shut down the machine and flush with a cleaner to avoid built up and clogging of the equipment. The coverage is 231 cubic inches per gallon. To achieve most satisfying and permanent results in certain applications, a combination of **4040 LV-Epoxy-Resin** with other systems of our product line may be advised. Ask your **SealBoss** technician for details.

MAINTENANCE OF EQUIPMENT

Remove all excess product and any smears. Tools and mixing equipment must be cleaned immediately after use. **R70 Pump Flush** is good to your equipment and should always be used. For best results please follow our recommendations. **First Step** is conditional - Omit if in conflict with regulations on the jobsite or the equipment you use: Flush first with a very small amount of solvent (not supplied by us) to cut remaining material. Caution: Xylol, Toluol, Acetone, M.E.K. are hazardous, combustible, aggressive towards the environment, equipment, seals and hoses. Immediately follow second step.

Second Step: Flush with **R70 Pump Flush** circulate cleaner through pump and hoses for several minutes at higher flow rates. **R70 Pump Flush** is a solvent free, non-flammable cleaner, lubricator and pump and hose conditioner. The product ships without any hazard label. We assume no responsibility for equipment damaged by use of material.

PRECAUTION

Protect your health! While working with this material, safety goggles, gloves and safety clothing must be worn at all times. While injecting, a full face shield is strongly recommended. Spills and blow-outs do happen! Protect yourself and others on the jobsite. Consider property in proximity of the application area to prevent loss or damage. Protect your jobsite from unauthorized persons. Store all materials and equipment safely and out of reach of children! Observe container labels, MSDS, and instructions in the Product Catalog 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.

STORAGE

Good storage stability of unopened containers at temperatures between 15 - 30 C (58 - 85 F). Store indoors.



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TECHNICAL DATA

	Comp. A	Comp. B	
Form / Color	Natural or colored		
Solids	100%	100%	ASTM D 1010
Density, g/ml	1.14	0.93	ASTM D 3800-79
Mixing Ratio by Volume	2 parts	1 part	
Viscosity, cps 77F	approx. 400	approx. 100	
Packaging	5 Gal	5 Gal	
Viscosity mixed, cps 77F	approx. 280		
Gel Time (24C / 75 F)	20-30 min.		
Initial Set	40-60 min		
Initial Cure	2-8 hours		
Final Cure	>24hrs		
Storage	Good storage stability for unopened containers at 15 - 30 C 58 - 85 F. Store indoors.		

Cured Product

Compressive Strength, psi	14,000 - 15,000	ASTM D-695
Tensile Strength, psi	8,500 - 9,000	ASTM D-638
Tensile Modulus, psi	510,000 - 550,000	ASTM D-638
Tensile Elongation at Break	4-6%	ASTM D-638
Flexural Strength, psi	15,000 - 17,000	ASTM D-790
Shore D Hardness	85-90	ASTM D 2240-75
Bond Strength, psi	4000-5000	ASTM C-882
Slant Shear Strength, psi	4000	ASTM C-882
Bond Strength Concrete Crack in Concrete		
Heat Deflection Temp.	>190 F	ASTM D-648
Shrinkage	Passes	ASTM C-883
Adhesion to Concrete	100% Failure in Concrete	ASTM D-4514

ASTM C-881-87

TYPE I, II, IV, V, GRADE 1, CLASS B & C

Epoxy Resin Adhesive

Appearance	Yellowish-Clear
Resistance to Chemicals	Resistant to Most Organic Solvents, Mild Acids, Alkali and Micro Organisms

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