

SRS 4000 Concrete Guard is a clear, water-based solution that enhances concrete strength and reduces porosity. Ideal for weak and contaminated surfaces. Improves durability and adhesion for materials like Carbon Fiber and surface coatings.

Powered By



- ✓ Environmentally Friendly
- ✓ Restricts Water Ingress
- ✓ Improves Structural Integrity
- ✓ Inhibits Chloride Mitigation
- ✓ Extremely Durable
- ✓ Improves Structural Integrity

## KEY BENEFITS

STRENGTHEN & RESTORE

- **Increased Strength:**  
Enhances compressive, tensile, and flexural strength of the concrete.
- **Reduced Porosity:**  
Decreases concrete porosity, improving overall durability.
- **Enhanced Adhesion:**  
Provides a stronger surface for the adhesion and application of carbon fiber and coatings.
- **Comprehensive Protection:**  
Chemically active ingredients work to protect and extend the lifespan of concrete structures.



1-888-292-2592  
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## CONCRETE GUARD

### STRENGTHEN & RESTORE

SRS-4000 Concrete Guard is a clear water-based formulation containing chemically active ingredients designed to enhance concrete performance. By reacting with the cement phase of the concrete, SRS-4000 significantly increases compressive, tensile, and flexural strength while reducing porosity.

Concrete is inherently strong in compression but weak in tensile and flexural strength. SRS-4000 addresses this by reinforcing the concrete's tensile strength, which is critical for the durability and performance of bonded surface-applied materials such as polymer fiber-reinforced laminates (FRP) and surface coatings. By enhancing the tensile strength, SRS-4000 ensures better adhesion and effectiveness of these materials, contributing to the overall longevity and integrity of concrete structures.

### PHYSICAL PROPERTIES

#### Tensile Strength:

- Measures the force required to pull a 1 inch steel disc glued to concrete surface where failure is the concrete surface reported as pounds per square inch (psi) as run by ASTM C1538:

- Before application: 333 psi
- After Application: 495 psi
- Measure the force required to pull-off a 2 in2 piece of FRP from a concrete surface as run by ASTM D7522 for FRP Bond Strength:
  - Before Application: 105 psi
  - After Application: 355 psi

### TECHNICAL PERFORMANCE

#### Compressive Strength:

- Compressive Strength By Core Compression ASTM C-42:
  - Before Application: 3400 psi
  - After Application: 4300 psi
- Surface Strength By Schmidt Hammer

#### Method:

- Before Application: 38
- After Application: 45
- Relative Compressive Strength By Capo Pull-Off Method ASTM C900: (Measures dynamic force need to pull a 1X1inch concrete plug for the surface. Force measured in kilo Newtons kN can be converted into compressive strength by relative comparison. Can be considered as the best measure of overall strength of the concrete.)
  - Before application: 24 kN force or 3400 psi relative compressive
  - After application: 30 kN force or 4500 psi relative compressive

#### Flexural Strength:

- Laboratory test measuring the force placed in middle of concrete bar to cause fracture AS run by ASTM C78:
  - Before Application: 1066 psi
  - After Application: 1277 psi

Boiling point: 212F

Specific gravity: 1.094

Flashpoint: none pH: 12(+/- .5)

Appearance and odor: clear liquid with mild chemical odor

Shelf life: 24 months in an unsealed factory container

**Storage:** protect from freezing



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### APPLICATION PROCEDURE

**Surface preparation:** Prior to applying SRS-4000 Concrete Guard the surface must be clean, sound, and reasonably dry.

**Application:** SRS-4000 Concrete Guard is applied by roller, brush or spray onto the concrete surface. When spraying, use conventional airless spray system or hand-pressure equipment. A minimum of two applications is usually required. Apply liberally until substrate is saturated. Spread with squeegee, brush or roller until adsorbed. Waiting time between applications, will vary depending on environmental conditions and absorbency of substrate, is typically one hour.

When applying prior to installation of a repair mortar, concrete overlay, coating or membrane, care must be taken to remove any SRS-4000 Concrete Guard residue before the mortar or concrete is applied. This can be achieved by rinsing with water, pressure washing or grit blasting. After application, allow substrate to dry before applying coating or membrane.

**Distribution rate:** should be about 100-120 sf/gal. It can be adjusted depending on project requirements.

**Clean Up:** In case of spills or leaks, wear suitable protective equipment. Contain spill and collect with absorbent material or process and transfer to a suitable container, ventilate area. Avoid contact. Dispose of in accordance with current, applicable local, state and federal regulations.

### CAUTION AND FIRST AID

**Inhalation:** If breathing is difficult due to inhalation of vapor or mist, move person to fresh air and administer oxygen. If breathing has stopped give artificial respiration. Keep person warm, quiet, and get medical attention. Eye

**Contact:** Rinse eyes with cool water for 15 minutes. Hold eyelids open during flushing with water. Get medical attention.

**Ingestion:** If swallowed, immediately drink two glasses of water and induce vomiting. Get medical attention immediately. Do not give anything to an unconscious or convulsing person. For additional information on personal protective equipment, first aid, and emergency procedures, refer to the product Material Safety Data Sheet (MSDS) on the job site or contact the company at the address or phone number given below.

**Disposal of container:** Triple rinse inside of container, seal opening and dispose of properly. Handling: SRS-4000 Concrete Guard is to be applied by professional contractors only. All applicators should wear OSHA and NIOSH recommended protective equipment. Do not use or dilute the product in closed areas without adequate ventilation. Immediately close the container after removal of the solution. Avoid contact with skin, eyes and clothing. Do not smoke, eat or drink during application. Wash thoroughly after handling. Keep out of reach of children. Do not inhale or ingest or modify the solution. Refer to MSDS.

**Precautions:** KEEP OUT OF REACH OF CHILDREN. DO NOT SWALLOW. Use with adequate ventilation. Avoid mist and direct contact with eyes, skin and clothing. Wear suitable protective goggles, gloves, and clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel ill, seek medical advice. Wash clothing prior to re-use.

