



**Specification Document
Product: LithSeal SC**

**DIVISION 3 - CONCRETE
Section 03 39 00 - Concrete Curing
Section 03 05 00 - Concrete Mixing
Section 03 35 50 - Polished Concrete Floors**

Part 1 - General

1.01 Summary

- A. This specification covers the use of LithSeal SC, a lithium silicate sealer/densifier/hardener for concrete surfaces, suitable for both freshly placed and existing (cured) concrete surfaces.
- B. LithSeal SC deeply penetrates and reacts with concrete to produce a durable, hardened surface that remains breathable and resistant to dusting and water permeability.

1.02 Quality Assurance

- A. Manufacturer qualifications: SpecChem must have an ongoing quality assurance program, independently audited regularly.
- B. Comply with all safety and environmental conditions as recommended by SpecChem and local, state, and federal regulations. Refer to Safety Data Sheets (SDS) for safety and handling practices.

1.03 Delivery, Storage, and Handling

- A. Deliver materials in original, unopened containers with labels intact.
- B. Store materials off the ground, protected from the elements.
- C. Follow manufacturer's recommendations for product conditioning.



1.04 Job Conditions

- A. Environmental Conditions: Apply only when the temperature is between 40°F and 95°F.
- B. Protect adjacent areas to prevent damage during application.

1.05 Submittals

- A. Provide SpecChem Technical Data Sheets (TDS) and Safety Data Sheets (SDS).

Part 2 – Products

2.01 Manufacturer

- A. LithSeal SC as produced by SpecChem.

2.02 Materials

- A. Lithium silicate-based concrete sealer, densifier, and hardener.
- B. Appearance: Clear liquid; Specific Gravity: 1.04; Weight/Gal: 8.67 lbs; VOC Content: 0 g/L.

2.03 Performance Criteria

- A. Achieves deeper penetration than conventional silicates.
- B. Improves abrasion resistance, reduces porosity and dusting, and enhances light reflectance and gloss.
- C. USDA accepted for indirect food contact environments.

Part 3 – Execution

3.01 Surface Preparation

- A. Ensure cleanliness: Surface must be free of cures, bond breakers, oil, dirt, grease, or debris.
- B. Cleaning: Use SpecChem Orange Peel citrus cleaner followed by a neutral pH detergent and a thorough water flush.



3.02 Mixing and Application

- A. Requires no mixing; apply with a low-pressure sprayer and a fan tip.
- B. Spread uniformly with a soft broom or microfiber applicator, maintaining the surface wet for 15-20 minutes.

3.03 Placement Procedure

- A. Apply enough material to saturate the surface, addressing porous areas that dry quickly.
- B. Remove excess material and any powdery residue after drying with a stiff broom, power sweeper, or floor scrubbing machine.

3.04 Finishing/Curing

- A. LithSeal SC is fast-curing, ready for traffic in one hour for most floors.
- B. Final shine enhancement can be achieved by buffing or burnishing with specific cleaning pads.

3.05 Cleaning

- A. Clean tools and equipment with water before the product hardens.