

**Technical Data Sheet****DESCRIPTION**

Surtreat TPS II is a multi-phase, inorganic, surface applied corrosion inhibitor for use on typical (3000-5000 psi), hardened concrete. It will protect reinforcing steel in concrete from corrosion on multiple fronts by penetrating the concrete surface and migrating to the steel. TPS II forms a passivating film on the steel surface which provides protection from the corrosion process, thereby extending the service life of the structure.

**FEATURES/ADVANTAGES/BENEFITS**

- Provides corrosion protection for new and existing structures. The chemically reactive TPS II can be easily applied to prevent deterioration in a corrosive environment. It significantly reduces the corrosion rate, and may stop further damage, on structures where corrosion has taken place. TPS II will provide any concrete structure protection from the harmful effects of corrosion.
- TPS II performs at both the anodic and cathodic sites. Multi-functional performance ensures better protection against corrosion. This provides reinforcing steel protection from chloride ions and carbonation.
- Purges and stabilize chloride ions and other contaminants. TPS II will washout or chemically bind up to 40% of chloride ions and other harmful contaminants. This eliminates the harmful agents that cause corrosion and deterioration.
- Reduces porosity of concrete. By minimizing the amount of potential water and air absorbed, TPS II reduces the potential of the corrosion process.
- Proven effective in laboratory and field analysis.
- Easily applied corrosion inhibition system by use of spray, roller, squeegee or brush to any concrete surface. Does not require the removal of sound concrete or use high-cost labor and installation equipment.
- TPS II is inorganic, safe and environmentally friendly. It is water-based and non-flammable for easy handling.
- Allows concrete to breathe and vapor to diffuse. TPS II is not a vapor barrier.
- No cure time is required. Traffic on wet surface will not adversely affect performance.

**WHERE TO USE**

TPS II is recommended for

- Reinforced, precast, prestressed, or post-tensioned concrete structures
- Concrete bridges, roadways, parking facilities, buildings and other structures exposed to corrosive environments
- Industrial or commercial structures
- Concrete marine structures such as piers, piles, docks and seawalls
- For optimum corrosion inhibition, apply TPS III or IV after applying TPS II.

**COVERAGE**

Typically 100 square feet per gallon. Two applications are usually required. Concrete finishing, such as steel trowel, that reduces surface density and porosity may require additional applications. Severe deterioration may require higher concentration of material.

**PACKAGING**

5 gallon pail and 55 gallon drum.

**PHYSICAL/CHEMICAL CHARACTERISTICS**

Boiling Point: 212° F

Specific Gravity: 1.094

Flash Point: N/A (Water-based)

pH: 12 (+/- .5)

Solubility in Water: 100%

Appearance and Odor: A clear liquid with a sweet odor.

Shelf Life: 24 months in sealed container.

Storage: Store at 40-95F. Protect from freezing

**HOW TO USE****Surface Preparation:**

Prior to applying TPS II, the surface must be clean and sound. Remove all dirt, debris, oil, grease, compounds, sealers, coatings and membranes from the concrete surface. Use of steam cleaning, water blasting, sandblasting, shot blasting and/or scarification may be required.

**Application:**

TPS II 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 absorbed. 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 TPS II 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. Drying time will depend on environmental conditions, absorbency of substrate and maximum recommended moisture content for the subsequently overlay or applied system.

## CAUTION

### Risks:

May cause lung irritation. May cause eye irritation. May cause skin irritation. Harmful if absorbed through skin. Harmful if swallowed.

### Precautions:

KEEP OUT OF REACH OF CHILDREN. 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.

### First Aid:

**Inhalation:** If breathing is difficult due to inhalation of vapor or mist, move person to fresh air. If you feel ill, seek medical advice.

**Eye Contact:** In case of eye contact, flush immediately with plenty of water for 20 minutes and seek medical advice.

**Skin Contact:** Wash thoroughly with soap and water. If irritation persists, seek medical advice.

**Ingestion:** If swallowed, do not induce vomiting. Drink plenty of water. If unconscious, do not give anything. Seek medical attention immediately.

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.

### Proposition 65:

This product does not contain materials listed by the state of California as known to cause cancer, birth defects, or reproductive harm.

### Limited Warranty Notice

Every reasonable effort is made to apply Surtreat<sup>®</sup> exacting standards both in the manufacture of our products and in the information that we issue concerning these products and their use. We warrant our products to be of good quality and will replace any products proved defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement, SURTREAT<sup>®</sup> MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, RESPECTING ITS PRODUCTS, and SURTREAT<sup>®</sup> shall have no other liability with respect thereto. Any claim regarding product defect must be received in writing within one (1) year from the date of shipment. No claim will be considered without such written notice or after the specified time interval. User shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith. Any authorized change in the printed recommendations concerning the use of our products must bear the signature of the Surtreat<sup>®</sup> Technical Manager.

## LIMITATIONS

- Minimum ambient temperature and substrate temperature of 35F.
- Do not apply when temperature is expected to fall below freezing within twelve hours.
- TPS II will not penetrate sealers, coatings, paints, and membranes.
- Avoid contact with glass, aluminum and painted surfaces. May cause permanent spotting.

### For Best Performance:

- Do not apply to hot surfaces. Cool with water (mist).
- After concrete is saturated, remove any excess or ponding TPS II material.
- If any organic coating or paint is to be applied, the surface should be thoroughly dried prior to application.
- Application should be made when rain is not expected for twelve hours.

### VOC Content:

This product contains no volatile organic compounds.

### 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.

### Disposal of container:

Triple rinse inside of container, seal opening and dispose of properly.

**For medical emergencies only, call CHEMTEL  
800 255 3924 (24 hours)**

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