

**Iso-Flex® 618 – 300 Corrosion Inhibitor**

**PRODUCT DESCRIPTION**

Iso-Flex 618-300 Corrosion Inhibitor is a VOC compliant, surface-applied, 100% silane sealer with a migrating corrosion inhibitor additive. It is a unique system that penetrates the concrete and chemically bonds with silica to form a permanent attachment of the water repellent molecule. The chemical reaction creates a hydrophobic layer deep within the substrate that prevents the ingress of water and waterborne contaminants. The addition of the migrating corrosion inhibitor allows the Iso-Flex 618-300 to be used to reduce corrosion in steel reinforced concrete. The inhibitor has an independent migration rate of 5 to 15 mm per day. This allows the inhibitor to reach the steel and form a protective layer to reduce the active corrosion sites.

**ADVANTAGES**

- Dramatically reduces the chloride-ion induced corrosion rate of concrete steel reinforcement.
- Excellent resistance to water intrusion.
- Mitigation of AAR & ASR deterioration.
- Deep penetration into substrate.
- Breathable system.
- Will not discolor or change the substrate’s surface appearance in most applications.

**Appropriate Applications**

- Steel-reinforced cast-in-place, precast, post tensioned, GFRC, prestressed, or other steel reinforced concrete.
- Parking decks, facades, balconies, walkways, piers, bridge decks, beams, columns, and other steel reinforced structures.
- Marine environments with high relative humidity and areas where deicer salts are used.

**INSTALLATION**

**Preliminary:** Test a small area of the surface before starting general application to establish coverage rates, determine any aesthetic change, and assure desired result. Concrete should be allowed to cure minimum of 28 days. Patching materials, caulking, sealant, traffic paint must all be fully cured before application.

<b>TECHNICAL DATA FROM LABORATORY TESTS</b> (Field Properties May Vary)		
Property	Test Method	Results
VOC	ASTM D5095	<400 g/l
Color		Clear to slight yellow
Density		0.89 g/cm <sup>3</sup>
Dry Time		1 hour
USBR M-82 Corrosion Protocol – 12 MO Cyclic Salt Ponding		83% Reduction minimum
Flash Point		65.5°C (150° F)
Water Absorption	ASTM C 642	48 hours 0.03% 50 Days 0.20%
Alberta DOT	Type 1c	88.4% effective after multiple abrasions
Water Absorption	NCHRP 244 Series II	90% min. compared to untreated control
Chloride Absorption	NCHRP 244 Series II	92% min. compared to untreated control
Chloride Absorption	NCHRP 244 Series IV	99% min. compared to untreated control
90 Day Salt Ponding	AASHTO T259	100% reduction

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**Preparation:** Concrete surfaces must be cleaned to remove all traces of dirt, dust, efflorescence, mold, grease, oil, asphalt, laitance, paint, coatings, curing compounds, and other foreign materials that would inhibit penetration by either shotblasting, sandblasting or water blasting.

**Installation:** Apply the Iso-Flex 618-300 Corrosion Inhibitor to entire concrete surface, including repaired areas. If installing multiple coats allow a minimum of 2 hours dry time between coats and make sure to broom out puddled material. Cooler temperatures may facilitate a longer dry time between coats. The typical net coverage rates are from 100 to 250 ft<sup>2</sup>/gal on horizontal, cast in place concrete surfaces and 200-300 ft<sup>2</sup>/gal on vertical substrates. The coverage rates will vary based on the substrate being treated. Iso-Flex 618-300 Corrosion Inhibitor should be applied to concrete using low pressure pumping equipment with a wet fan type spray nozzle. Alternate methods include roller, brush, or pouring. Do not dilute the material. Do not apply to a wet or damp substrate.

### **Application Conditions**

The proper application conditions are between 40°F and 100°F. Lower or higher applications temperatures require written approval from our technical services department. The substrate should be as dry as possible prior to application. Depending upon weather condition, allow between 24 and 72 hours for the substrate to dry after rain or cleaning with water.

### **PRECAUTIONS**

The product is a combustible liquid and should be kept away from heat, sparks, open flame, or other sources of ignition. To ensure safe installation of Iso-Flex 618-300 Corrosion Inhibitor, please refer to the Material Data Safety Sheet for detailed health and safety information prior to use.

### **WARRANTY**

LymTal warrants that its products are manufactured free of defects and conform to the technical data listed. Under this warranty we will replace, at no charge, any material proven defective when applied in accordance with our written instructions for applications recommended by us as suitable for subject product. LymTal shall not be liable for any injury, loss or damage, direct or consequential, arising out of the use of the product.

### **LymTal International, Inc.**

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