

# **CHEM-CRETE ROAD-LOC**

Anti-skid Epoxy System to Increase Friction & Grip Capacity for Traffic Safety

# **PRODUCT DESCRIPTION**

CHEM-CRETE ROAD-LOC is a two component, 100% solids, low modulus, heavy-duty system designed to increase the friction and grip capacity of concrete and asphalt roads in critical locations of traffics. In addition to the friction affect, its distinguished color provides the drivers with appropriate warning appearances.

# FIELDS OF APPLICATION

CHEM-CRETE ROAD-LOC system is used for high risk areas where friction can minimize the rates of accidents and hence reduce the risk of pedestrian accidents. CHEM-CRETE ROAD-LOC can be used in the following areas:

- □ Intersections.
- □ School Pedestrian traffics.
- Bus Lanes.
- Roundabouts.
- □ Steep curves.

### **PRODUCT FEATURES**

- □ Solvent-Free Epoxy System.
- □ Low Modulus Epoxy System Good Chemical Resistance.
- □ Excellent Abrasion Resistance.
- □ Self leveling.
- □ Ready-To-Use Work Pack.

# PACKAGING

Product	Packaging
CHEM-CRETE ROAD-LOC	1 GAL (3.785 LITERS) UNIT
	5 GAL (18.92 LITERS) UNIT

# **TECHNICAL DATA**

#### Physical properties – Uncured parts:

Property	Resin	Hardener	
	Part A	Part B	
Solids	100%	100%	
Color	Clear	Clear (Amber)	
Density, Lb/Gal (Kg/L)	9.4 (1.12)	8.1 (0.97)	
Mixing Ratio	2A: 1B (by Volume)		
Shelf Life, minimum	2 years	2 years	

#### **Physical properties – Cured parts:**

Binder Property	Value@ 77°F	ASTM
	(25°C)	Method
Mixed Density,		
lb/gal (kg/L)	8.8 (1.06)	D-1475
Gel Time (60 grams)	20 minutes	D-2471
Pot Life, 11 lb (5 kg)	15 minutes	-
Hardness (Shore)	76-D	D-2240
Compressive Strength - 7days,		
Psi (MPa)	6000 (41)	D-695
Tensile Strength - 7days,		
Psi (MPa)	3820 (26)	D-638
Flexural Strength - 7days,		
Psi (MPa)	3230 (22)	D-790
Bond Strength to Asphalt	Asphalt	D-4541
	Failure	Method C
Bond Strength to concrete	Concrete	D-4541
	Failure	Method C
Tensile Elongation	35%	D-638
Water Absorption (24 hrs)	<0.2%	D-570

**Chemical Resistance:** tests are performed according the ASTM D543 –Practice A (Immersion test for 7 days at 77°F/25°C). The fully cured product is resistant to:

- □ Water (Distilled, Tap, chlorinated, sewage, sea).
- Diesel.
- □ Hydraulic Oil.
- Lubricant oils.
- □ Refer to manufacturer for resistance of other reagents.

#### **APPLICATION**

**Limitations:** application at ambient temperature below approximately  $41^{\circ}F$  (5°C) is not recommended. Exposure to temperatures exceeding  $149^{\circ}F$  (65°C) for prolonged periods is not recommended.

**Surface Preparation:** usrface of application should be clean and sound. The surface must be free of any dust, oil, grease, laitance, curing compounds or any other contaminants. New concrete substrate should be minimum 28 days old and must be a minimum of 3626 psi (25 N/mm<sup>2</sup>) concrete.

Mixing: Mixing Ratio 2A: 1B (by volume).

As a common practice, it is recommended to mix part A and part B separately for at least 30 seconds.

Mix two volumes of Part A with one volume of part B in a clean mixing container. Mix for 3-4 minutes before application. Pour the mixed product into different area for the application. Make sure to pour the whole mix within 15 minutes of mixing. (The larger the mixed epoxy product the faster it cures).

Spread the product with notched squeegee over the area of application to make sure that the thickness of the product is at least 50 mils (1.25 ml)

**Aggregates:** the aggregates are colored aggregates or natural colored material of Quartz, Bauxite, or granite types. Spread the aggregates, in abundance, over the binder. Make sure that the binder is not visible.

After the initial cure of the binder, sweep off the excess aggregates, using a strong brush, of the surface and collect them for the next application job.

#### **Precautions:**

- □ Store all materials at 77°F (25°C) during application and for at least 2 days prior to use. Low temperatures will increase viscosity of the product causing poor coverage and retarded cure.
- □ Substrate temperature must not be lower than 41°F (5°C) during installation and during the full 3 to 5-day cure of the floor.
- □ When using solvent containing materials in confined spaces, the applicator should use a NIOSH/OSHA approved self-contained breathing apparatus with a full-face piece operated in a positive pressure mode.
- □ Mask out all areas to be protected. Remove masking tape before the epoxy cures.
- □ Air conditions and heat vents must be sealed to prevent solvents from escaping to other parts of the building.
- Never allow any mix of epoxy resin and curing agent to remain in the mixing container for a prolonged period of time. The reaction of the two causes a <u>heat buildup</u>. This in turn will cause the epoxy mix to decompose! Noxious fumes will be formed! If this occurs, vacate the area, remove the container to the outside and ventilate the area before returning to work.
- □ Use only spark-proof equipment in the area during installation and cure.
- □ Follow all cautionary direction as printed on container labels.

#### CLEANING

Remove uncured CHEM-CRETE ROAD-LOC from tools and equipment with suitable solvents such as Xylene, Toluene or CHEM-CRETE BLENDED SOLVENT immediately after use. Cured material may only be removed mechanically.

# STORAGE

The product can be stored for minimum of twelve months at temperature from 50°F to 95°F (10°C to 35°C) in the unopened original packaging. Protect from direct sunlight.

#### SAFETY PRECAUTIONS

After hardening thoroughly, CHEM-CRETE ROAD-LOC is physiologically harmless. Keep the resin and hardener away from the eyes mouth and skin. Do not breathe in the vapors. The uncured mixture can cause irritation of the skin. For best protection, wear rubber or plastic gloves. In case of contamination, wipe away resin or hardener immediately from the skin using paper towels and then wash with soap and water or hand cleaning detergent. Empty resin and hardener cans must be disposed according to local city code or regulations. Under no circumstances empty cans should be used to store food or drink even if they have been thoroughly cleaned. Follow all cautionary direction as printed on container's labels.

# **TECHNICAL ASSISTANCE**

Please contact International Chem-Crete Corporation for Technical Personnel.

#### WARRANTY

**LIMITED WARRANTY:** International Chem-Crete Inc. warrants that, at the time and place we make shipment, our materials will be of good quality and will conform to our published specifications in force on the date of acceptance of the order.

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# **Manufactured By:**



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