# Technical Data Sheet

LAST UPDATE: (January 2016)

# Protec III (LSF) With Acrylic Membrane

The Complete Strength Gain Material for New Concrete Floors

# DESCRIPTION

Protec III LSF with Acrylic membrane works on 3 levels, which give it the clear and distinct advantage for concrete floors. Protec III LSF with Acrylic Membrane is easy to apply, because we use Liquid Silica Fume Technology and not silicates or siliconates, which are highly temperamental and difficult to work with. Protec III LSF with Acrylic Membrane is easily incorporated into the surface to increase the strength, hardness and micro-density of the concrete. Protec III LSF with Acrylic Membrane incorporates a high-end acrylic component to give a proper cure, virtually eliminating warping and topical cracking. Other products do not have this full cure capability, and the slab will show the telltale damaging signs of topical shrinkage cracking and warping. Winter heating environments often produce dusting of the concrete, using Protec III LSF with Acrylic Membrane will protect the surface from exposure to achieve a proper cure and eliminate dusting.

Protec III LSF with Acrylic Membrane is less costly because the easy to use formulation eliminates the need for expensive and overpriced certified installers.

# **BENEFITS**

Cures concrete to help stop shrinkage cracking and curling

Helps eliminate dusting and stops carbonation of concrete.

Increases the chemical resistance and hardness of concrete.

**Environmentally Safe and Permanent** 

Meets LEED Requirements

Abrasion Resistant (ASTM C418 Increased resistance to abrasion by 67%)

ASTM C309 Curing Type I Class A FOOD SAFE - APPROVED

Non-Toxic

### **USES**

For Interior Use Only Use on all new power trowel concrete floors. Use on interior existing concrete as a hardener and sealer.

Not compatible with flooring adhesives.

# PHYSICAL CHARACTERISTICS

Physical State: Liquid

Color: White Odor: Slight Odor VOC's: 9.5 grams/litre

### **SAFETY**

Protec III LSF With Acrylic Membrane is not toxic or dangerous to the health of installers or surrounding workers unlike solvent based cures or the carcinogenic dust from dry shake hardeners.

# CAUTION

Protect surrounding area from over-spray. In case of accidental contact, rinse thoroughly with water immediately.

Do not apply to frozen surfaces. For best results apply when the substrate and ambient air temperature is above 53°F (12°C). For surfaces not specified, we recommend testing a small area to observe for possible adverse

DO NOT FREEZE Product.

#### **PACKAGING**

18.9 Litre Pail 205 Litre Drum

SHELF LIFE: 2 years in original unopened container.

# **STORAGE**

Optimal storage temperature of material should be between 50-64°F (10-18°C). Agitate if necessary before use.

# **COVERAGE**

Summer Temperatures use at 300 ft<sup>2</sup>/gal (28 m<sup>2</sup>/litre)

Winter Temperatures use at 400 ft<sup>2</sup>/gal (37m<sup>2</sup>/litre)

INTERIOR/EXISTING CONCRETE ONLY Apply at a rate of 250 ft<sup>2</sup>/gal (23 m<sup>2</sup>/litre) **CAUTION:** FOR HEAVY ABRASION FLOORS (ie. Tracked in gravel and dirt that is being ground into the floor by forklifts)

FOLLOW THESE INSTRUCTIONS: Using Protec III Chem RX apply one coat to the areas that will be affected, let product dry. For 2<sup>nd</sup> coat apply Protec III with Acrylic Membrane using the normal application procedure. Normal wear and tear does not include heavy abrasion from gravel and dirt, therefore it is highly recommended to keep your floors clean to avoid unnecessary excessive wear.

#### **STANDARDS**

ASTM C418 Abrasion – 67% increase in hardness of the concrete wear surface. ASTM C309 Curing, Type I, Class A FLOOR CLASSIFICATIONS ACI 302, Class Numbers (1,3,4,5,6,7,8,9) floors Exceptions: #3 second course only, #3,4, no if covered surface, #7 second course only, #8 second course only, #9 if topping please consult Technical Support. Works well for super flat floors. ASTM C642 –72% decrease in absorption.

#### SURFACE PREPARATION

Roll out any puddles that form.

New or existing concrete should be clean.

# **APPLICATION**

Apply product with a low pressure sprayer or roller within 4 - 8 hours once finishing operations are done.

Apply at recommended square foot coverage. Saw cuts need to be coated thoroughly.

Apply 1 coat at the recommended rate.

Roll out any puddles that form.

Drytime: 4 hours at 68°F (20°C)

Either roll or spray.

#### WARRANTY

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. The user shall determine the suitability of the product for the intended use and assume all risks and liability in connection therewith. Therefore, except for such replacement of product, Cornerstone Coatings makes no warranty or guarantee express or implied including warranties of fitness for a particular purpose or merchantability, respecting its products, and Cornerstone Coatings shall have no other liability with respect thereto. This warranty supersedes all other warranties express or implied.