## **TECHNICAL DATA - PRODUCT INFORMATION**

**Con-Spec Industries Ltd.** 

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# **CON-LITH** 3

## **DESCRIPTION:**

**Con-Lith 3** is a waterbased liquid floor hardener, that strengthens, hardens, dust proofs and improves the abrasive wear resistance of new (fresh) and fully cured concrete. Con-Lith 3 is a silica based material that chemically reacts with the weaker calcium hydroxide in the concrete to produce a chemical compound, that is harder and stronger, called calcium silicate hydrate. Con-Lith 3 is a safe, nonflammable water soluble solution with 0 VOC's.

## FEATURES AND BENEFITS:

- Ready to use no mixing required
- Densifies and hardenens concrete surfaces
- Improves abrasion resistance of concrete
- Food Safe
- 0 V.O.C.'s
- · Can be used on new/fresh concrete and old concrete
- Can reduce spalling in concrete
- UV Stable (will not yellow or discolour concrete)
- Eliminates dusting of concrete
- Decreases permeability of the concrete
- Compatible with other concrete coatings or resurfacing materials
- Does not change the colour of the concrete

#### USES:

**Con-Lith 3** may be used as a cure aid for fresh concrete to prevent future spalling and surface delaminations. Use it to dust proof and harden concrete floors in warehouses, industrial plants, commercial and residential buildings. Can be used on concrete countertops (it will not change colour of the concrete surface).

#### CHARACTERISTICS:

**Con-Lith 3** will penetrate down through the pores of the concrete. The deeper the penetration the more effective the treatment. Con-Lith 3 penetrates the surface of the concrete and chemically reacts with the free lime to produce an insoluble crystal with excellent wear resistance. The resulting surface is dust free and resistant to abrasive wear.

## LIMITATIONS:

**Con-Lith 3** is not a stain guard, so spills may stain concrete surfaces. Concrete will remain porous afterward. Con-Lith 3 is not a water repellent or waterproof material. Do not apply to surfaces previously sealed or treated with other materials. Pre-finished floors will inhibit the penetration of Con-Lith 3. **Do not prepare old concrete using an acid wash.** Do not apply to glass, brick or aluminium surfaces as this is a caustic material. In the event of a spill or misapplication, rinse immediately with clean water. Do not use metal containers for mixing or storage.

## SURFACE PREPARATION:

Concrete surface must be structurally sound. All loose dirt, oil, wax, sealers, curing compounds, and and other surface contaminants must be removed prior to application. The pores of the concrete must be opened to allow for best penetration and maximum effectiveness. Dirty concrete should be cleaned and then rinsed with clean water if necessary. After washing allow surface to dry before application of product.

**Con-Lith 3** may be applied to freshly placed concrete after final finishing and installation of the control joints. Remove soft cut saw debris before application. Newly placed concrete should be cured a minimum of 6 hours (hard enough for foot traffic) before application.

## **APPLICATION:**

**Fresh** / **New Concrete: Con-Lith 3** can be applied the same day, once the surface has hardened enough not to damage the concrete surface/finish. Apply Con-Lith 3 after the final trowelling and the surface sheen of water has dissipated, but before any curing compound has been applied. Spray with a low pressure sprayer at a rate of 300-350 square feet per gallon. Remove any puddles or excess material with a soft broom or micro fibre pad. Allow to dry before application of curing compound.

As an alternative, Con-Lith 3 can be applied within 1 to 5 days after the concrete placement, when the peak of hydration and out-gassing has slowed enough to allow sufficient penetration. Ensure no curing compounds have been applied. Spray or roll at a rate of 300-350 square feet per gallon. Remove any puddles or excess material with a soft broom or micro fibre pad. For best results apply 2<sup>nd</sup> coat next day.

**Cured Concrete:** Apply **Con-Lith 3** at 600 square feet per gallon depending upon porosity of the surface. Keep surface wet with material for 20-30 minutes, roll out puddles and apply additional material if product is drying within 15-20 minutes. Application of additional coats will be approximately 1200 square feet per gallon Areas of high porosity will require additional coats of Con-Lith 3. Caution floors may be slippery with wet material. Do not allow puddles to dry as white spots may appear in these areas. Flush with water if any material remains on the surface after 30 minutes.

Notice to User - Con-Spec Industries Ltd. warrants that the product described on the face hereof has been manufactured of selected raw materials by skilled technicians. Con-Spec Industries Ltd. shall not be responsible for any claims resulting from the failure to utilize the product in the manner in which it was intended and in accordance with instructions provided for use of product. The only obligation of Con-Spec Industries Ltd. shall be to replace any quantity of this product which proved to be defective. Con-Spec Industries Ltd. assumes no liability, loss, or damage resulting from use of this product. Your use of this product constitutes your acknowledgment and acceptance of these terms and limitations.

**Polished Concrete: Con-Lith 3** is typically applied after the initial grind. In most cases the first coat is applied after the initial grind or before the 400 grit. Apply at 600 square feet per gallon spread evenly with a micro fibre pad. Keep surface wet with material for 20-30 minutes apply additional product where the surface has dried typically at 1200 square feet per gallon. Allow to dry for 2-3 hours before resuming the polishing operations. Apply the 2<sup>nd</sup> coat after the 800 grit or before the final polish. Spread the Con-Lith 3 uniformly with a micro fibre pad at 600 square feet per gallon, repeat steps outlined above allow to dry 2-3 hours before resuming the polishing operations.

#### CAUTION:

**Con-Lith 3** is considered a penetrating hardener and curing aid; it is not a film forming type sealer thus is not recommended for use as a stain blocker; or as a substitute for a curing agent if one is required. Con-Lith 3 is not a water repellent. Do not use acidic detergents when cleaning before or after application. Over application will cause white deposits that is difficult to remove. Do not apply in hot or windy conditions where the product may dry prematurely thereby leaving white deposits behind. Do not apply in temperatures below  $5^{\circ}C(40^{\circ}F)$ .

#### **COVERAGE**:

Green Concrete: Approximately 300-350 square feet per gallon Cured Concrete: Approximately 300-450 square feet per gallon Polished Concrete: Approximately 400-600 square feet per gallon

#### **CLEAN-UP INSTRUCTIONS:**

Clean up tools and equipment with water immediately. Dried material is very difficult to remove, and may require mechanical abrasion for removal.

## STORAGE AND HANDLING:

**Keep from freezing**. Do not apply in temperatures below  $5^{\circ}C(40^{\circ}F)$ . Clean tools soon after use with water. If swallowed, induce vomiting immediately. If splashed in eyes or on skin flush thoroughly with water. Keep out of reach of children.

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