



HIND ACTCOLOR

PRODUCT DATA SHEET

NANO LITHIUM CONCRETE FLOOR COATING SYSTEM

DESCRIPTION

Hind Actcolor concrete protective coating system is a hybrid Inorganic/Organic Nano Lithium . (Sealed Top & Transparent/Color Coating). This high performance lithium-silicate water based formulation is designed for use in both interior and exterior floor applications and comes in standard colours which are Transparent, Red, Light Grey and Green. The unique treatment is extremely low in VOC's (less than 50 gms/ltr) environmentally friendly (Green leaf and can qualify for LEED points) and has a very low polymer odour. **Hind Actcolor** is an ideal solution for new concrete floor construction and maintenance projects that requires superior protection against abrasion, corrosion and chemical abuse while minimizing losses due to downtime. **Hind Actcolor** protective coating dries to a very hard, coloured semi-gloss coating depending on surface porosity and the ease of re-coat ability. It offers durability, quality and fast installation. The rapid-curing, non-yellowing treatment provides long-lasting surface protection, beautification, ease of maintenance and a perfect system for protecting concrete floors.

USES

Hind Actcolor is recommended to be used on concrete floor which needs to be stain resistant, chemical resistant. It is ideal for concrete courtyards in Real Estate Project, Industrial floors in Car manufacturing factory, Pharmaceutical factory, Food product manufacturing unit, Beverage/Bottling Plants, Dam Power House floors etc. etc. It offers High performance-high solids-high pigment loading-Fast drying. It conforms to ASTM D 870 for blistering, adhesion and discoloration. Passes **ASTM D 2795** standards for gasoline and motor oil resistance. It also conforms to abrasion resistance standard as per **ASTM D 4060**.

ADVANTAGES

- ♣ Out performs epoxies, urethanes and acrylic floor coating in durability, adhesion and low maintenance cost.
- ♣ Excellent bonding and chemically reacts with concrete forming a durable insoluble bond with the substrate that does not peel, flake or delaminate.
- ♣ Creates a stronger, more impenetrable and better looking finish that is dust proof, resistant to staining and deterioration.
- ♣ Produces a tough trafficable surface for high abuse areas that are subject to light trafficking in 2 hours.
- ♣ Reduces maintenance, cleaning costs and costly repairs. Only damp mop, machine scrub or recoating is required.
- ♣ Environmentally friendly, Low VOC content, Non toxic, Non-flammable, Easy water cleanup and Fast-curing.
- ♣ Maximum performance may take up to 14 days to develop, depending on temperature and humidity. Do not allow standing water to be left on the surface.

PROPERTIES

Aspect	Transparent/Colored Aqueous Solution
Total Solids	23%
Active Ingredients	100 % of total solids
Specific Gravity at 27 ⁰ C	1.09 + 0.05
pH	11 - 12
Flash Point	Nil
VOC Content	Less than 50 gms/Ltr.
Freeze point	32 ⁰ F (0 ⁰)
Taber Abrasion (Weight, 5N.500 RPM)	1.85 g (Mortal, 2.26g)
Drying Time	3-5 hours.
Depth of Surface Penetration	1-2 mm

STAIN RESISTANCE

Smooth –troweled concrete treated with **Hind Actcolor** coating was tested for stain resistance from various substances. These compounds were checked at regular intervals upto 24 hours to determine the amount of penetration/staining after checking with a non-abrasive, neutral pH cleaner. After cleaning , the stain was evaluated according to the following scale with ‘0’ indicating no change in the appearance of the stain and ‘10’ indicating the stain was completely removed.

SUBSTANCES	30 min	60 mins	90 mins	24 hours
Balsamic Vinegar	10	10	8	8
Red Wine	10	10	9	9
Motor oil	10	10	10	10
Transmission Fluid	10	10	10	10
Skydrol	10	10	10	6

CHEMICAL RESISTANCE

Hind Actcolor protective coating provides enhanced chemical resistance on the following, but not limited to:

LIMITATIONS

Table I, ACI Standard 302.1R-89 Chemical hardeners can be used to increase concrete resistance to chemicals including, but not limited to the following:

Aluminum Sulphate	Lead refining solutions	10% Potassium dichromate	Creosote
Ammonium chloride	Potassium per-sulfate	Lignite oils	Cresol
Barium hydroxide	Machine oils	Potassium sulfate	Mustard Oil
Potassium Sulfate	Beef fat	Magnesium chloride	Nickel sulfate
Rapeseed Oil	Calcium nitrate	Magnesium sulfate	Oleic acid 100%
Sea Water	Coal tar oils	Manganese sulfate	Olive oil
Silage	Calcium hydroxide	Manure	Paraffin
Sodium bromide	Carbon dioxide	Mash, fermenting	Tannic acid
Sodium chloride	Carbonic acid	Mercuric chloride	Phosphoric acid, 85%
Sodium carbonate	Castor oil	Mercurous chloride	Pickling brine, 10%
Cottonseed Oil	Mine waste	Sodium nitrite	Poppy seed oil
Potassium aluminum sulfate	Zinc sulfate	Zinc nitrate	Mineral oil
Molasses	Sodium thiosulphate	Soybean oil	Sugar
Sulfite liquor	Tallow & tallow oil	Phenol, 25%	Walnut oil
Tanning liquor, 10%	Tobacco	Zinc chloride	Iodine
Lactic acid, 25%	Sodium sulfate, 10%	Distillers slop	Ethylene glycol
Ferric chloride	Ferric sulfate	Fish oil	Fruit juices
Glucose	Glycerin	Hydrogen sulfide, 10%	Potassium carbonate/chloride

Note: This information contained herein, is to the best our knowledge and belief, accurate and is to be used as a guide to product selection. However, since the conditions of handling, installation and use are beyond our control, we make no guarantee of results.

Special conditions for application: Horizontal masonry & concrete substrate only. Keep dry for 24 hours after installation. Do not allow standing water to dwell on surface for 7 days. do not allow traffic until protective coating surface is completely dry, generally 30 – 60 minutes under typical interior conditions.

APPLICATION PROCEDURES & INSTRUCTIONS

Substrate Preparation: Cement Concrete/Cementitious products

For long term placement create a rough surface profile using diamond grind about #180 for Clean and neutralization. The surface must be dry, free of surface containments and in sound condition. Grease and oil should be removed as per **ASTM D 4258-83** and release agents should be removed as per **ASTM D 425-88**.

Refer to **SPC-SP13/NACE No. 6** mechanical or chemical surface preparation methods for preparing concrete to suitable cleanliness for intended service. Surface preparation methods should impart sufficient surface profile for mechanical adhesion to occur. Ensure surface is thoroughly rinsed and dry prior to preparation and application. Uneven concrete substrate, scratches and cracks are to be repaired with polymer mortar to achieve the smoothness. Mask Areas that do not receive the coating topcoat finish and surface hardener is to be protected from over spray.

Important Instructions:

- ♣ Complete mixing is essential for good product performance. It is necessary to use a paint-mixing tool mounted on a drill motor or machine agitation (paint shaker) to mix this paint. Mix well and after mixing the coating to be applied immediately.
- ♣ Spray first coat and work in surface with stiff broom or scrubbing pad on a scrubbing machine.

STEPS FOR APPLICATION

At first concrete is to be poured mixed with surface hardener and allowed to cure for 28 days to achieve the targeted compressive strength. Secondly application of **Hind Actcolor** top to be done by rake attached sponge brush. Consumption varies from **0.03 ~ 0.04 Kg/m²**. More than 2-3 hours curing under 20⁰ C make the surface ready for next coating stage. In case the application is done in high moisture environment ventilation must be provided to dry and curing of the coating. The second coat of **Hind Actcolor** to be applied by rake attached sponge brush and the consistency of the coated color to be ensured as like the first coat. Consumption varies from **0.025 ~ 0.03 Kg/m²**. After curing for 2-3 hours under the same conditions like the first coat the surface becomes ready for application of the **Hind Actcolor** Sealed coat. The application of the sealed coat is done by the same method and allowed to full cure. Consumption varies from **0.02 ~ 0.25 Kg/m²**. Finally the fully cured surface is polished properly by the floor polishing machine attached with scrubbing pad.

COVERAGE

200 ~ 250 m² / 18 kg (0.09kg/m²) depending on the porosity of the substrate and the finish.

MAINTENANCE

Routine sweeping, mopping, washing and mechanical scrubbing of floor with water and neutral pH cleaners (if necessary) are recommended. Water only is sufficient for most environments.

Note: Do not use cleaners that are acidic or that have citrus(de-limonene) or Butyl compounds. Although **Hind Actcolor**, coating is chemically resistant and helps reduce staining, its application in specific chemical environments and some acidic concentrates, may etch the surface causing a residual stain. If unsure check with a conversant concrete technical representative. Regular maintenance and cleaning will help prolong surface shine. Wipe up any chemical spills as soon as possible. Always test adhesion and performance for suitability and desired results before application.

Primary Markets Served

Substrate

Concrete, Concrete blocks, Food Processing Facilities, Pulp and paper Mills, Refineries, Material Handling Equipment, Marine/Port Facilities, Chemical Processing, Waste water treatment facilities , Offshore Platforms and Helipad.

SHELF LIFE

Best before 6 months from the date of manufacture. Should be stored in a cool and dry place away from **direct** sunlight at temperature ranging between 2⁰ C (Min.) and 50⁰ C (Max.)

PACKING

In **18 Kg HDPE Container**. Available in **Green, Red & Light Grey** colour shades. On request **Transparent, Yellow, Pink & Blue** colour shades will be available.

HANDLING PRECAUTION

Hind Actcolor is an aqueous Lithium Silicate solution and alkaline in nature and may cause eye & skin irritation. Use hand gloves and goggles while applying the same. Avoid ingestion and prolonged skin contact. If contact with eyes occur wash immediately with clean water and seek medical advice. At the time of application workmen should be cautious because **Hind Actcolor** applied wet surfaces are slippery.

Note:

- **Hindcon Chemicals** maintains a team of technically trained professionals to provide full support to your problems in construction, and recommend the correct product to suite your specific requirements. Our authorized applicators can attend your site for application of the products.
- The content of the Technical datasheet are for general information and guideline. The result shown here are generated from our laboratory or from our site experiences.
- Quality of our products are maintained as per ISO9001:2008 recommendations and continuous researches. The behavior can change as per the prevailing conditions at the time of applications.
- Since **HINDCON CHEMICALS LIMITED** has no control over the use to which the users may put the material, it does not claim or warrant that in the user's particular circumstances, the result that the user will obtain from the product will be the same as those described in this communication or that the user will find the information or recommendations complete, accurate or useful. The client must test and ascertain the safety and fitness for the product for use.
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