

# **Magnesium Fluorosilicate**

Chemical Hardner and Dustproofer for concrete

#### **DESCRIPTION**

Brix florhard cr is a magnesium silicofluoride that reacts chemically with the free lime and calcium salts in hardened concrete to male a more dense and durable surface. It will effectively penetrate a concrete and make it hard, free from dusting and highly resistant to corrosion and abrasion. The addition of a patented penetrating agent to florhard cr makes it possible for its penetrating properties and hardening action to proceed to a greater depth than with conventional hardeners.

#### PRIMARY APPLICATIONS.

- Horizontal and vertical surfaces
- Schools
- Industrial floors
- Commercial buildings
- Home basements
- Storage silos in coal scrubbing facilities.

#### **FEATURES & BENEFITS**

- Hardens and dust proofs concrete surfaces
- Prolongs floor life
- Resists acids, alkalies, oils and salts
- Simplifies cleaning
- Can be used without interrupting production schedule

# **SPECIFICATIONS / COMPLIANCES**

Florhard cr complies with General Services Administration and U.S. Army Corps of Engineers Specifications for magnesium silicofluoride floor hardeners.

## **PACKING**

Florhard cr is packed in 20 ltr, 200 ltr drums

#### **TECHNICAL INFORMATION**

TYPICAL PERFORMANCE

APPLICATION : CURE TIME

Foot Traffic 4 – 6 hours Wheel Traffic 24 hours Florhard cr helps protect concrete against the harmful effects of

\* Soap Solutions \* Sugar Solutions

#### APPEARANCE:

Florhard cr is a clear liquid which dries transparent. After placing, the colour of the concrete may initially appear darker than the surrounding concrete. As the sealer cures and dries out, the treated concrete will have little change in appearance. Treated concrete will slightly bead water and other liquids.

#### **COVERAGE**

Extremely porous concrete will require an application rate upto 2.5m<sup>2</sup>/litre diluted per the instructions below. Florhard cr is applied in up to three coats per the following recommended dilutions:

COAT DILUTION

1<sup>st</sup> Coat 1 part florhard cr – 2 parts water

2<sup>nd</sup> Coat 1 part florhard cr – 1 part water

3<sup>rd</sup> Coat 2 parts florhard cr – 1part water

Note: All three coats may not be necessary to harden the floor. If the floor should show patches of white on drying, immediately flood with water and scrub the floor with a mechanical scrubber, rinse and dry. Do not attempt further treatment.

#### **DIRECTION FOR USE**

**SURFACE PREPARATION:** The surface to be treated should be clean, free of dust, oil and paint and preferably dry. New concrete surfaces should be at least 7 days old prior to application of florhard cr. Membrane forming curing compounds should be used on new concrete if florhard cr is to be applied.

Extremely soft and porous surfaces should be saturated with water prior to application of hardener. Six hours later or when the surfaces is dry, apply the 1<sup>st</sup> coat of florhard cr and proceeds as indicated previously. This pre-wetting concentrates the chemical at the top level of the concrete rather than at the bottom. The final coat will then harden at the top surface and yield maximum wearing and resistance qualities. In some instances or in some selected areas, a surface may require an additional application of undiluted florhard cr to complete hardening and dustproofing.

**MIXING**: Florhard cr is easily diluted in water with mild agitation.

**PLACEMENT:** Flood each coat of florhard cr onto the surface and spread with a soft fiber broom. Squeege, or mop. Allow the solution to soak into the concrete for 10-15 minutes and redistribute any puddles that remain. Treated surface should be thoroughly dry between coats. Drying time may vary from 4-12 hours depending upon the temperature, humidity and whether the concrete is indoors or outdoors.

As the various coats of florhard cr are applied, each succeeding coat will yield increased coverage because the concrete surface is in the process of hardening and becoming more dense. After the third coat the floor should be thoroughly flushed with water and scrubbed with a stiff broom to remove any residual material. If the floor should show patches of white upon drying, immediately flood with water and scrub the floor with a mechanical scrubber, rinse and dry. Do not attempt further treatment.

**CLEAN UP:** Clean brushed, tools equipment and flush sprayer with potable water immediately after use.

## PRECAUTIONS/LIMITATIONS

- Florhard cr is not recommended for application to colored concrete surfaces.
- Allow the product to dry 4-6 hours before exposure to traffic.
- Florhard cr is water-based material and must be kept from freezing.
- If excess florhard cr is left on the concrete surface, a white residue may form and should be removed by scrubbing immediately.