

KEMCURE 30D

Resin-Based, Transparent, Concrete Curing Compound

1 .Description:

KEMCURE 30 D is a resin – based, transparent, curing compound of a solution of resinous solids in petroleum solvents. It is suitable for spray application to freshly poured concrete. The resultant film retains sufficient moisture in the concrete to ensure full hydration of the cement; essential for optimum strength development.

KEMCURE 30D will form a film on concrete assembly which will eventually dissipate after the critical intermediate curing stage is completed, after 30 days, begins to naturally deteriorate upon regular exposure to sunlight and abrasion that's allow subsequent applications of materials as paint, coatings, or other finishing's.

Standards:

It Complies with ASTM C 309 – Type 1 or 1-D class A or B

2 .Scope:

Curing compounds and surface hardeners are used to seal the surface of fresh concrete and prevent rapid loss of moisture. These consist of liquids containing film-forming polymers (curing compounds) and metallic and non-metallic materials (surface hardeners).

There are basically two types of curing compounds:

- 1) Permanent, impervious curing compounds and
- 2) temporary curing compounds, also known as chemically dissipating or oxidizing compounds.



Permanent curing compounds will inhibit the bond of any mortar used for installing ceramic tile and stone because the curing compound has filled all of the pores of the concrete; this means the mortar gets little or no mechanical bond to the concrete.

Complete removal of the permanent curing compound is the only way to ensure a successful ceramic tile installation using a portland cement based setting material. The only way to achieve complete removal of the permanent curing compound is to scarify the concrete down to a level below the penetration of the curing compound. The scarifying action opens pores of the concrete so that the mortar can achieve a strong mechanical bond. Some examples of mechanical scarification include shot blasting, bead blasting, high-pressure water blasting, and abrasive blasting.

Temporary curing compounds (also known as chemically dissipating or oxidizing curing compounds) will gradually dissipate through chemical reaction or oxidation from solar exposure when allowed to do so. Relying on oxidation is not a feasible alternative unless it is exterior concrete construction that is exposed to the sun for an extended period of time. Temporary curing compounds can leave behind a film even after the compound has fully dissipated. The film that is left behind from the curing compound must be completely removed before attempting to install ceramic tile with a mortar. Mechanical abrasion can be used to get rid of temporary curing compounds. Some examples of mechanical abrasion are bush hammering, planers and grinders and if these methods do not remove the curing compounds adequately; there will be a need to resort to mechanical scarification.

There is one simple field test that can tell if there is potentially a curing compound or sealer on concrete. One can place drops of water on the concrete and see if the water beads up. If the water does not readily absorb, there will be a need to scarify or abrade the concrete before starting a ceramic tile or natural stone installation. It is always recommended to conduct a small test area to determine the quality of adhesion onto the concrete substrate.

3 .How to Use:

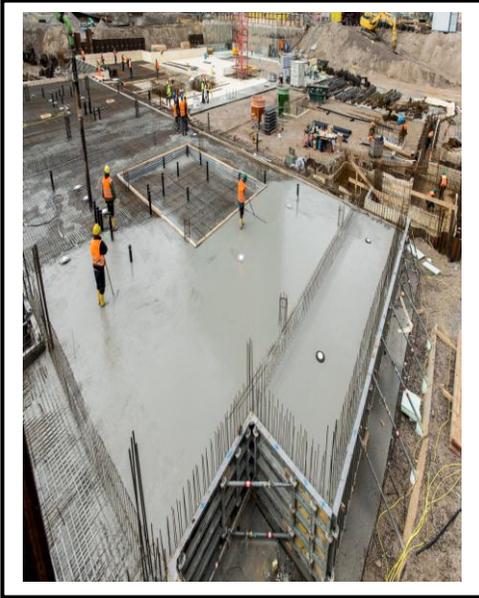
3.1. Application:

3.1.1. Uniformly apply **KEMCURE 30D** directly to the concrete surface by spray or roller at the rate specified.

3.1.2. In the case of formed concrete, **KEMCURE 30D** should be applied immediately on removal of the formwork.

3.1.3. Apply in a uniform film of **KEMCURE 30D** to the horizontal surfaces as soon as the surface water disappears and the surface will not be marred by walking workmen.





3.1.4. For floor areas, the curing compound must be removed prior to applying subsequent finishes.

3.1.5. After application of the **KEMCURE 30D** membrane, the surface should be left undisturbed for at least 3 hours.

3.1.6. Do not apply **KEMCURE 30D** to dry or semi dry concrete, to ensure the breakdown of the **KEMCURE 30D** film, heavier coating must be avoided.

3.1.7. For the application of **KEMCURE 30D** various types of spraying equipment can be supplied.

3.1.8. The spray nozzle should be held approximately 450 mm from the surface and passed back and forth to effect complete coverage. The pressure on the pump must be maintained at all times to produce a fine spray.

3.2. Cleaning:

Immediately after using **KEMCURE 30D** the spraying equipment should be cleaned out specially the line and nozzle with white spirit.

4. Theoretical coverage rate:

The recommended rate of application is 0.20-0.25 Kg/m² .