

INCRADENS HF31

concrete curing & densifier

INCRA®

INCRADENS HF31 is a ready-to-use curing and impregnation agent composed of polysilicates (a.o. lithiumsilicate) and special mineral additives for the treatment of concrete floors. Integrated activators and catalizers speed up the reaction inside the concrete at nano and microscale, reacting with e.g. the free lime and the uncured cement. During this process a crystalline structure of calcium-silicate-hydrate is formed. Pores will be closed by the crystals to avoid excess water evaporation. The treatment contributes highly to the densification and to a strong increase of the abrasion resistance and compression strength of the concrete. The product hardens, seals and abrades concrete structures preserving the water vapour permeability. After application the impregnation is invisible and the concrete surface will stay compatible with other coatings.

APPLICATIONS

- ◆ Curing fresh concrete structures.
- ◆ Densifying concrete surfaces.
- ◆ Reducing lime run and efflorescence.
- ◆ Making concrete floors more hydrophobic.

FEATURES & BENEFITS

- ◆ Unique formula
- ◆ Curing and densifying with 1 product and in 1 work progress
- ◆ Ready to use
- ◆ Waterbased and solvent free
- ◆ Safe to handle and virtually odourless
- ◆ Application at low temperatures of 5°C
- ◆ Invisible after application
- ◆ Excellent penetration in substrate
- ◆ Surface stays vapour permeable
- ◆ Breathes, does not keep moisture fixed
- ◆ Reduces or even eliminates efflorescence
- ◆ Increases the life span of the concrete structure
- ◆ Accelerates the densifying and hardening of the concrete
- ◆ Increases the compression strength
- ◆ Reduces micro-cracks
- ◆ Reducing ASR (alkali silica reaction)

PRODUCT PROPERTIES

base	polysilicates and additives
components	1
solvent	water
colour	clear transparent
spec. weight	ca. 1,15 g/cm ³ at +20° C
solids	ca. 22%
pH-value	ca. 11,5 at +20° C
viscosity	ca. 3,5 mm ² /sec dynamic at +20°
flash point	non flammable
cured	after 21 - 42 days
condition	fluid
usage	100 - 150 gr/m ₂
storage	store in closed original packaging above +5° C, protect against sun, frost and extreme temperatures
packaging	25 Kg Jerrycans, 200 Kg Drums en 1.000 Kg IBC-Re-Collectcontainer
removal	according to local/regional/national regulations
shelf life	24 months after production date at +5° C to +30° C

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HOW IT WORKS

INCRADENS **HF31** is a ready-to-use curing and impregnation agent composed of polysilicates (a.o. lithiumsilicate) and special mineral additives for the treatment of concrete floors. Integrated activators and catalyzers speed up the reaction inside the concrete at nano and microscale. The silicate and other mineral compounds will react with e.g. the free lime and the uncured cement. During this process a crystalline structure of calcium-silicate-hydrate is formed. Pores will be closed by the crystals to avoid excess water evaporation and will cure the concrete in this way. The treatment contributes also highly to the densification and to a strong increase of the abrasion resistance and compression strength of the concrete. The product hardens, seals and abrades concrete structures preserving the water vapour permeability. After application the impregnation is invisible and the concrete surface will stay compatible with other coatings.

Thanks to innovative technology INCRADENS **HF31** is extremely fast responsive and penetrates deeply into the concrete because of its very small molecules. It doesn't form a film and unactivated molecules remain latent in the concrete matrix to be able to react with released hydroxides, tri-calcium-silicates and all sorts of ions. In the end the reaction with INCRADENS **HF31** will mean that the crystal growth process will densify the concrete structure more and more and the absorption of penetrating liquids will be reduced extremely or even be eliminated.

Floors treated with INCRADENS **HF31** will be highly fluid resistant, but could be extra sealed with INCRASEAL **EF62**. Cleaning will be made easier by adding 2-3% INCRASEAL **EF62** to the mopping water.

HOW TO USE

All surfaces to be treated should be cleaned thoroughly with a high-pressure water cleaner. Everything which can negatively influence a good penetration, e.g. curing compound, oil, fat, wax, solvents, soap, lime run, etc. needs to be removed. Preferably using a high pressure cleaner.

INCRADENS **HF31** is ready to use and should not be diluted further. Shake well before use.

The surface should be dry to assure sufficient penetration. Floors should not have been treated with any wax-containing product. The air, surface and product temperature must be $\geq 5^{\circ}\text{C}$ and $\leq 50^{\circ}\text{C}$. Do not start treatment when lower or higher temperatures are to be expected within 48 hours.

The product has a relatively high pH-level and can etch certain materials such as glass, aluminium, ceramics and wood. Protect parts or objects, e.g. glass, window frames, plants etc. that should not be affected by the product with plastic sheets against overspray.

INCRADENS **HF31** can also be applied as curing agent to fresh concrete floors or just before the concrete can be walked on.

Always apply the product on a test area to determine porosity, coverage and the most suited application method before starting general application.

1. INCRADENS **HF31** should be liberally applied, using low pressure airless spray equipment (e.g. Gloria) with a 0,5-1,0 mm nozzle (output: 1-2 ltr/min.). After that, spread the product equally using a microfiber-pad-wiper.
2. The floor should still be wet at least 15 minutes after application. If the floor gets dry within this period immediately apply the product again.
3. Remove excess of the product with a wiper or move it to areas that dry or absorb faster. Never leave surplus product on the surface to prevent delayed densification or white residue. Remove residue immediately.

Safety Data Sheet according to REACH 1907/2006/EU and CLP 1272/2008/EU available on request.