INCRADENS HF30

concrete densifier

INCRADENS **HF30** is a ready-to-use impregnation agent composed of polysilicates (a.o. lithiumsilicate) and special mineral additives for the treatment of concrete floors. It reacts with 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. 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 abrases concrete structures preserving the water vapour permeability. After application the impregnation is invisible.

APPLICATIONS

- Densifying of concrete structures
- Reducing lime run and efflorescense.
- To make concrete floors more hydrophobic.
- As a longwearing top layer after polishing the concrete surface.

FEATURES & BENEFITS

- Unique formula
- 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 efflorescense
- Increases the life span of the concrete structure
- Accelerates the densifying and hardening of the concrete
- Increases the compression strength
- Reduces micro-cracks

PRODUCT PROPERTIES

INCRA®

| base | polysilicates and additives |
|--------------|---|
| components | 1 |
| solvent | water |
| colour | clear transparent |
| spec. weight | ca. 1,1 g/cm ³ at +20° C |
| solids | ca. 15% |
| pH-value | ca. 11,5 at +20° C |
| viscosity | ca. 3,0 mm ² /sec dynamic at +20° |
| flash point | non flammable |
| cured | after 14-56 days |
| condition | fluid |
| storage | store in closed original packaging above +5° C, protect against sun, frost and ex- treme temperatures |
| packaging | 25 Kg Jerrycans, 200 Kg Drums en 1.000 Kg IBC-Re-Collectcontainer |
| removal | according to local/regional/national re- gulations |
| shelf life | 9 months after production date at +5° C to +30° C |

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HOW IT WORKS

INCRADENS **HF30** is a ready-to-use impregnation agent composed of polysilicates (a.o. lithiumsilicate) and special mineral additives for the treatment of concrete floors. It reacts with concrete at nano and microscale, reacting with a.o. the free lime and the uncured cement. During this process a crystalline structure of calcium-silicate-hydrate is formed. The treatment contributes highly to the densification and so to a strong increase of the abrasion resistance and compression strength of the concrete. The product hardens, seals and abrases concrete structures preserving the water vapour permeability. After application the impregnation is invisible.

Thanks to innovative technology INCRADENS **HF30** is extremely 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 **HF30** 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 **HF30** can be sealed with INCRASEAL **EF60.** Cleaning will be made easier by adding 2-3% INCRASEAL **EF60** to the mopping water after the normal cleaning.

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 **HF30** 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 waxcontaining product. The air, surface and product temperature must be \geq 5°C and \leq 50°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 **HF30** can be applied to fresh concrete floors or just before the concrete can be walked on. In this case a dilution of 1:1 with water is advised.

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

1. INCRADENS **HF30** 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-padwiper.

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. <u>Do not let the floor</u> <u>dry completely</u> otherwise the next layer will penetrate insufficiently.

3. Remove excess of the product with a wiper or move it to areas that dry or absorb faster. <u>Never</u> leave surplus product on the surface to prevent delayed densification or white residue. Remove residue immediately.

4. On fresh concrete after drying apply a suitable curing compound, e.g. INCRACURE.

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

Ingwio BV | Niersenseweg 25 | NL-8076 PW Vierhouten T: +31 577 411 168 | E: info@incra.nl | I: www.incra.nl All information in this product data sheet, conforms to the current state of development and knowledge of Ingwio BV. It serves only as a guideline for the processing, uses and properties of the product. There can be no legal obligations resulting from this in respect to the properties of this product. Above that our current terms are applicable. Changes reserved.