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DRS-FLOOR HDP



## **DRS-FLOOR HDP**

# Primer, Hardener, Densifier & Dust Proofer for concrete and masonry structures

## **Product description**

**DRS-FLOOR HDP** is a highly reactive lithium silicate. The product is used as densifier/hardener or primer on trowelled concrete as well as on polished concrete or between the grinding steps.

Working principle of **DRS-FLOOR HDP** is based on chemical interaction of silicates with calcium hydroxide, which is available in concrete as a lime. The product of the reaction - calcium hydro-silicate - is the main bonding material in concrete. Such a way the process of concrete hardening occurs on the whole depth of penetration of **DRS-FLOOR HDP** (up to 3-6 mm depending on type of concrete).

In contrast to other various floor coatings (epoxy, polymers, hard aggregate toppings, dry shakes etc.), which build up only a thin layer on the concrete's surface, the *DRS-FLOOR HDP* doesn't create any external coating, but modifies the concrete itself, improves its technical properties without any risk of delamination between the layers.

#### **Application**

For trowelled, grinded or polished concrete surfaces (fresh or old).

## **Benefits**

- Hardens the structure of the concrete
- Increases the impact strength of concrete
- Increases the abrasion resistance of concrete
- Increases the flexing and compressive strength of concrete
- Increases water repellence
- Increases stain resistance
- Makes surface cleaning easier
- Increases the chemical resistance
- Keeps ability of water steam to pass through concrete
- Prevents condensate formation within concrete
- Improves the natural appearance
- Prevents dusting of the surface
- Decreases risks of micro-cracking



concrete without treatment



concrete after treatment with DRS-FLOOR HDP



## **Product data**

**Physical state** liquid

Color transparent

info@dr-schulze.de

Smell neutral

20 | plastic canister, 30 | plastic canister, **Packaging unit** 

200 | plastic barrel, 1000 | plastic container

Storage

Keep the product tightly sealed at a room temperature higher than 2°C. The loss of **DRS-FLOOR HDP** characteristics is possible after freezing.

Storage life in factory-sealed container is 12 months

# **Physical characteristics**

8% **Content of active ingredients** 

**Flammability** No

0 °C Freezing point

## System preferences

1 liter for 10 - 15 m<sup>2</sup> Consumption Polished concrete

> Trowelled concrete 1 liter for 6-9 m<sup>2</sup> Old concrete, plaster, ceramic brick, masonry 1 liter for  $5-15 \text{ m}^2$

Primary drying time 1-2 hours

Time of the reaction with concrete The main improvement of concrete performance characteristics are effected

> within 24 hours after surface processing with DRS-FLOOR HDP. However in the long-time period after processing, further concrete hardening and

surface glance improvement occurs.



## **Conditions of application**

Minimal temperature of surface +2 °C

Optimal temperature of surface +5 - +35 °C

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## **General application instructions**

#### Surface preparation

Application

Always test each concrete surface for suitability and desired results. Let surface dry before inspection and approval of desired application.

DRS-FLOOR HDP can be used on fresh and old trowelled and/or grinded, polished concrete surfaces. Before applying the **DRS-FLOOR HDP** collect the dust from the surface (wet cleaning is recommended). Make sure, that water is fully removed from the surface.

**DRS-FLOOR HDP** is applicable on all calcareous/cementitious floors such as grinded/polished and trowelled concrete, cementitious screeds, terrazzo tiles / terrazzo etc.

DRS-FLOOR HDP is optimal to be used as a primer on concrete floors of lower or middle strength to improve the hardness and make the subsequent floor grinding more efficient. The floor pretreatment with DRS-FLOOR HDP reduces the product consumption of following treatments (DRS-FLOOR HDS+ or DRS-FLOOR HDSP) essentially.

Shake DRS-FLOOR HDP well before using. The best way of application of **DRS-FLOOR HDP** is spraying over the surface. We recommend to use a hand sprayer. **DRS-FLOOR HDP** must be sprayed in the quantity to form an equal layer without puddles.

On rough, untrowelled surfaces we recommend to let the compound soak into the concrete and roll the surface using roller with a fiber mop.

After spreading DRS-FLOOR HDP on well-leveled and dense surfaces, the solution must be dispersed using special microfiber mop.

The optimal quantity of sprayed DRS-FLOOR HDP should soak into the surface in less than 1 minute and dry within 20 minutes. If the surface dries out too fast, it's recommended to spray additionally some compound on the still wet surface. If some solution remains on the surface after 20 minutes, it can be removed by cleaning machine or a vacuum cleaner.

For very high absorbent floors a double treatment with **DRS-FLOOR HDP** is recommended. Is the product applied between or before the grinding steps, continue grinding next day.

For high-quality densifying with integrated basic stain protection we recommend treatment with DRS-FLOOR HDS+ (lithium silicate with salt protection) with optional subsequent polishing with resin tools and application of **DRS-FLOOR HDSP** as a final sealer for best possible level of stain protection.

For detailed instructions for various surfaces, please read the Application booklet of DRS-FLOOR **HDP** or contact vour Dr.Schulze **DRS-FLOOR** consultant.

For safety, toxicological, ecological information please read the safety datasheet.



