

Product Datasheet

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DRS-FLOOR HDS/HDS+

**DRS-FLOOR HDS / DRS-FLOOR HDS+****Lithium based Hardener, Densifier, Dust Proofer and Salt Protection (HDS+ only) for concrete and masonry structures****Product description**

Working principle of **DRS-FLOOR HDS/HDS+** is based on chemical interaction of Lithium silicate 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 HDS/HDS+** (up to 7-8 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 HDS/HDS+** doesn't create any external coating, but modifies the concrete itself, improves its technical properties without any risk of delamination between the layers.

Furthermore **DRS-FLOOR HDS+** contains special additives, which ensure effective long term protection of the concrete surface against salts and any salt based products. Therefore **DRS-FLOOR HDS+** is recommended to be applied on outdoor surfaces, such as car parkings, pedestrian ways etc., which receive salt treatment in the winter period.

Application

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

Benefits

concrete without treatment



*concrete after treatment with
DRS-FLOOR HDS/HDS+*

- Hardens the structure of the concrete
- Protects the surface against salt penetration (only HDS+)
- 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



Product data

Physical state	liquid
Color	transparent
Smell	neutral
Packaging unit	10 l plastic canister, 25 l plastic canister, 30 l plastic canister, 200 l plastic barrel, 1000 l plastic container
Storage	Keep the product tightly sealed at a room temperature higher than 2°C. The loose of DRS-FLOOR HDS/HDS+ characteristics is possible after freezing. Storage life in factory-sealed container is 12 months

Physical characteristics

Total solid content	DRS-FLOOR HDS: 11% / DRS-FLOOR HDS+: 17%
Content of active ingredients	100%
pH	11
Flammability	no
Freezing point	0 °C

System preferences

Consumption	Trowelled concrete	1 liter for 8 - 14 m ²
	Untrowelled concrete	1 liter for 6 - 9 m ²
	Old concrete, plaster, ceramic brick, masonry	1 liter for 5 - 15 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 HDS/HDS+ . 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 +4 - +38 °C

General application instructions

Surface preparation

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

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

Application

Shake **DRS-FLOOR HDS/ HDS+** well before using. The best way of application of **DRS-FLOOR HDS+** is spraying over the surface. We recommend to use a hand sprayer. **DRS-FLOOR HDS/HDS+** 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 HDS/HDS+** on well-leveled and dense surfaces, the solution must be dispersed using special microfiber mop.

The optimal quantity of sprayed **DRS-FLOOR HDS/HDS+** 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 better results the subsequent polishing with resin tools and application of the sealer **DRS-FLOOR HDSP** is recommended.

For detailed instructions for treatment of various surfaces, please read the Application booklet of DRS-FLOOR HDS/HDS+ or contact your Dr.Schulze DRS-FLOOR consultant.

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