

ZNR™ HARDCRETE

Water Based Concrete Surface Hardener

Product Description	Water based concrete surface hardener product that reinforces the concrete by chemical reaction with the concrete, contains special silicon derivatives that prevent dust-emission, and provides a perfect abrasion resistance and resistance against water and chemical materials when applied correctly.																
Product Number	603																
Areas of Application	<ul style="list-style-type: none"> • All factory floors; especially ideal for all food (meat, milk, drinks, etc.) factory floors because it does not contain any material harmful to health. • Warehouse floors • Parking lots and parking garages • Museums, hospitals, sports fields • Airports • Treatment facilities • All buildings with exposed concrete surfaces. 																
Characteristics /Advantages	<ul style="list-style-type: none"> • The material is water-based, colorless and odorless, and inflammable. • Does not contain unhealthy or flammable solvents. • Easy to apply. The surface can be opened for pedestrian and vehicle traffic in a few hours after application. • ZNR Hardcrete, which penetrates deep into the concrete, creates very strong micro crystals by immediate chemical reaction, and as a result of this reaction, a layer like paint film do not occur on the concrete surface. • Natural appearance of the concrete does not get spoiled. The surface does not turn yellow or the color does not change. • It is resistant against ultraviolet lights. • Economic. 																
Technical Data	<table border="1"> <tr> <td>Appearance</td><td>Colorless and odor-free.</td></tr> <tr> <td>Package</td><td>30 kg</td></tr> <tr> <td>pH</td><td>12</td></tr> <tr> <td>Density</td><td>~1.15 gr/cm³</td></tr> <tr> <td>Viscosity</td><td>20 – 30 KU (~65 mPa.s)</td></tr> <tr> <td>Danger class</td><td>No</td></tr> <tr> <td>Consumption</td><td>Approximately 0,100 kg/m² (variable, depending on surface conditions)</td></tr> <tr> <td>Storage</td><td>The product can be stored for approximately 1 year in a cool and dry environment in the original close package.</td></tr> </table>	Appearance	Colorless and odor-free.	Package	30 kg	pH	12	Density	~1.15 gr/cm ³	Viscosity	20 – 30 KU (~65 mPa.s)	Danger class	No	Consumption	Approximately 0,100 kg/m ² (variable, depending on surface conditions)	Storage	The product can be stored for approximately 1 year in a cool and dry environment in the original close package.
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Surface Preparation	No surface treatment is needed for new concrete. If the concrete is aged, any material such as paint, coating, grease, dirt, etc. that may prevent adhesion of ZNR Hardcrete must be removed from the surface.																
Preparation Instructions	The product is ready for use.																
Application	<p>New Concrete: Preferably, 7 days of setting time should be completed; however, in case of urgent cases, ZNR Hardcrete can be applied when the concrete gets hard enough to walk on. Application Temperature can be between 5° – 40 °C.</p> <p>ZNR Hardcrete can be applied using a low pressure spray gun or by pouring on the surface. If poured on the surface, spread the material on the surface using a soft brush or a suitable spreading tool by letting the material absorbed by the surface. Wet the surface thoroughly and ensure that the material penetrates into the concrete by reducing surface tension.</p> <p>Keep the surface wet for approximately 30 minutes and wait for the surface to gelate and become slightly oily. Gelling time extends in cold weather and shortens in hot weather. Additional ZNR Hardcrete application may be required to keep the surface wet in hot weather. Do not leave any dry area on the absorbent surfaces and wet the surface by adding ZNR Hardcrete.</p> <p>After the material gelates and the surface gets slippery, spray water mist to the surface using a spray gun so that the gelated and slippery material melts and gelation and slipperiness disappears. Let the material absorbed well by the surface using a brush or a suitable tool. Wait again for gelling and getting slippery of the material for the second time. If surplus</p>																

material remains on the surface, spray water on the surface and let the surface absorb the material using a brush and remove surplus material from the surface.

Existing (Aged) Concrete: After making the concrete surface ready for application, the application should be same as it is with new concrete.

Considerations

- Do not thin the material with water or solvent by any means because the material is offered as off-the-shelf product.
- If spray application is considered, apply with low pressure. Do not use wire brush. Pay attention to avoid contact of the material with metal, glass, aluminum and other enamel surfaces.
- Pay attention to avoid frost of the material at cold temperatures. If frozen, the material must be re-expanded in a warm ambient.
- Do not apply on highly porous concretes.

General Matters

Abovementioned product data and descriptions are prepared for guiding purposes as a result of our experiences and diligent studies. We, individually, cannot control or affect the variety of the related materials and various construction and working conditions. Warranty is limited to only quality of the purchased material for the applications that are not under our control. No warranty is committed for application, but only for product manufacturing. This technical flyer overrides former flyers. Quality of the work may vary depending on how professionally the product is used. In case of hesitation, please perform a small test or ask for technical help.

Disposal

Empty packings can be disposed to collection bins according to regional/local regulations or recycling rules. Dispose used waste materials as construction waste materials after drying and hardening. It is dangerous to dispose by burning the product remnants.

Safety Information

Keep the products out of reach of children. Keep the lids of the products closed. It is recommended to use gloves and goggles during application. In case of contact with skin, wash immediately with soap. In case of contact with eyes, immediately consult a doctor. For more information, please refer to the material safety data sheet.