



TECHNICAL DATA SHEET (TDS) HS PROTECT ®

PRODUCT DESCRIPTION

HS Protect® is a waterborne, single component, low sagging peel able coating created for the protection of surfaces against damage without affecting the underlying surface.

Upon drying, HS Protect® forms a tough, flexible and durable film, providing excellent resistance and strength without blocking problems.

HS Protect® is available in a throtrophic grade (approx. 110 KU).

HS Protect® comes standard as a colorless version (slightly milky) but is also offered in high-covering white. Custom base colors are negotiable.

USES

HS Protect® is designed to protect all non-porous surfaces against scratches, abrasion, debris, dirt, dust, oil, grease, fly rust, corrosion, paint overspray, natural sand blasting, etc. There are also a number of porous surfaces that can be protected with HS Protect such as concrete and natural stones.

Examples of application: windows and doors, sanitary and kitchen ware, polished concrete (stairs, pillars, statues, flooring, etc.), (natural) tile flooring, furniture, new cars and buses while being transported to dealers or stalled out in parking lots, protection of automotive and aerospace spare parts during storage or transportation, cranes, protection of coated metals during manufacturing or maintenance, gas and oil pipes during transportation or storage, spray booth protection, etc.

HS Protect® offers excellent protection for a multitude of materials: plastic, glass, rubbers, metals, ceramics, acrylics, concrete, etc.

Remark: Treated wood with water based paint needs to be tested prior to application, since the water in the paints tends to bound with the water in HS Protect

SURFACE PREPARATION

- The surface should be dry and clean from contamination.
- The recommended surface temperature during spraying is between 5°C and 35°C.
- Applications on surfaces that measure a higher temperature than 35°C is possible, but should be tested and checked prior to applying the product on large scale.
- Do not apply during rain or when rain is expected the next 24 hours; do not apply when frost is expected within 24h.
- In case of application in closed areas, make sure there is adequate ventilation to ensure the drying process.
- Always check the compatibility of HS Protect with the substrate. Apply a test on a material sample or hardly visible area; Let cure, and remove after 3 days to evaluate for any surface colour differences or incompatibility.
Remark: This recommendation is mandatory for wooden surfaces; the water in paint or varnish finishes on wood can connect with the water content of HS Protect.
- Cover (ventilation) grilles, brushes of sliding doors and screen guides with protective tape. Remove the tape shortly after the application to avoid burned-in adhesive residues
- Cover bluestone against overspray or spillage, color differences may occur on bluestone.
- Vaseline or a vaseline spray can be applied locally with a cloth, on rubbers or silicone between the glass and the profiles to remove the HS Protect film more easily afterwards.
- Silicone sealing must be sufficiently cured before applying HS Protect
- Stir HS Protect for homogenization and cover the pail/IBC to avoid skin formation

APPLICATION AND REMOVAL

Method:	HS Protect® is easily applied by airless spray, brush, and roller or dipping.
Airless spray:	Recommended: Tip: 517 - 0,43 mm (17thou) (Graco airless) Output fluid pressure not less than 100 BAR.
Brush:	Suitable: Multiple layers may be required to achieve specified film thickness.
Roller:	Suitable: Multiple layers may be required to achieve specified film thickness.
Thinner:	Dilution with water is possible, but not recommended. Do not use paint thinners
Cleaning:	Immediately clean all equipment with cold fresh water. All surplus materials and empty containers should be disposed of in accordance with





Removal: appropriate regional regulations/legislation.
Peel by hand, starting from one corner. HS Protect® can be peeled off with one single movement, simultaneously removing all underlying gravel and dirt.
Once a small area has been removed, high water pressure can be used to assist the removal. HS Protect® is easily compacted by hand to effectively reduce waste volume prior to disposal. Dispose of HS Protect® in accordance with appropriate regional regulations/legislation.

PACKAGING

HS Protect® is available in 1000 kg IBC's and in 20 kg pails.

THEORETICAL SURFACE COVERAGE

HS Protect spreads from 1 to 6 m² per litre approximately; depending on the substrate and the application method.

To ensure adequate protection of the substrate we advice a minimum of 150 microns dry film thickness (or 300 microns wet film thickness)

For surfaces walked over by pedestrians like staircases or flooring or more porous substrates like concrete, we recommend increasing the layer thickness to avoid premature wear and tear.

For your information: 40 micron dry film thickness equals a consumption of 0,1 litre per m².

DRYING TIME

The drying time depends on the external conditions (temperature, wind and humidity).

After application expect to be touch dry between 15 min (outside, hot and windy) and 2 hours (at normal indoor temperature and humidity).

Full curing depends on ambient temperature, humidity, ventilation and applied thickness and will take 24h to 48 h

LIFETIME

Up to 12 months after application. The maximal lifetime depends on the environmental conditions in which the product is used and the applied thickness.

STORAGE

Shelf life: 18 months minimum. Subject to re-inspection thereafter.

HS Protect® must be protected from freezing at all times during storage. Store at temperatures between 5°C and 30°C. Keep away from sunlight. All unused material should be stored in tightly closed containers. Open or partially filled containers may show a viscosity increase and/or form skinning of the material after storage. In this case the product must be filtered before use. We advice to cover leftovers in a pail against air exposure with for example a plastic sheet placed directly on the coating before closing the lid.

ADDITIONAL INFO

The wet coating begins to dry when exposed to air (meaning that skinning can occur). Therefore keep nozzle moist when spray application is used.

HEALTH AND SAFETY

Local suction: It is recommended to minimize the molar concentration during spray application.

Water disposal: In accordance with state, local, and federal requirements/measures. This product should not be dumped, spilled, rinsed or washed into sewers or public waterways.

Protection: The use of protective clothing is advised. Avoid skin and eye contact.

In case of:

Contact with eyes:	Rinse with water for at least 15 minutes.
Inhalation:	Inhale fresh air.
Contact with skin:	Rinse with water and soap.
Ingestion:	Remove from stomach by induced vomiting or aspiration. Seek medical attention.
Released/spilled material:	Absorb with inert material (e.g. sand, soil, etc.). Caution: Liquid emulsion can be very slippery



TECHNICAL SPECIFICATIONS

SUBJECT	CONTENT	COMMENT
pH	7 - 9	
Stormer Viscosity Brookfield Viscosity, RVT No. 4 spindle, 10 rpm @ 20°C 20 rpm @ 20°C	Approx. 110 KU (Krebs Units) 8000 - 12000 mPa·s 7000 - 10000 mPa·s	Thyrotrophic characteristics with excellent sagging resistance properties
Total Solids % w/w	39 - 50	
Conductivity	The coatings are slightly antistatic.	Extra antistatic agents can be added upon request.
Density	Ca. 1,05 kg/ltr.	
Delivery form	Thyrotrophic grade in: - White - Colourless (slightly hazy)	Filtered 200 Microns
Minimum Film Formation Temperature (MFFT)	0°C	



Application areas	Surfaces: Glass, Upvc, polyesters, metals, smooth coated surfaces, polished concrete, etc.	Temporary, removable coating films with high mechanical resistance properties, excellent flexibility and toughness.
Application methods	Spray, brush, roller, or dipping	For spray applications airless is recommended.
Cleaning of tools	With cold tap water	Immediately after use. Hardened material can only be removed mechanically. Do not use hot water. Hot water hardens the coating inside the machinery.
UV resistance		<ul style="list-style-type: none"> • The water repellent version has a very good UV resistance and absorption. • The film for indoor use is more transparent and therefore less UV absorbing. However, it is UV resistant, so the dry film will not be affected by UV radiation.
Storage stability	To be kept from freezing conditions. Store in closed containers.	Passes minimum one freeze-thaw cycle @ -20°C in 72 hours. After opening skin can form on the wet coating surface. Shelf life in unopened containers is minimum 18 months.

IMPORTANT NOTE

This document does not have a contractual value . In order to ascertain the suitability of the surfaces to be treated with the HS Protect® products, the application of the product to a pre-established test area is mandatory. Our company will not be held responsible for damages that may result from erroneous application of the HS Protect® products.

All advice given or statements made about the product(whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability at all for the performance of the product or for (subject to the maximum extent permitted by law) any loss or damage arising out of the use of the product. We hereby disclaim any warranties or representations, express or implied, by operation of law or otherwise, including, without limitation, any implied warranty of merchantability or fitness for a particular purpose. All products supplied and technical advice given are subject to our Conditions of Sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is liable to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to check with their local representative that this data sheet is current prior to using the product.

This technical data sheet replaces and annuls the previous edition.

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