

SUPREME AL SOFT

ALIPHATIC AND HIGHLY ELASTIC ELASTOMERIC LINING

SUPREME AL Soft is a two component, spray applied, instant curing, high performance highly elastic elastomeric waterproof membrane that can be built to any thickness in one application.

SUPREME AL Soft is UV and colour stable, suitable for pedestrian and vehicular traffic and can be installed with slip resistant surface profile options.

SUPREME AL Soft is specifically formulated for applications where the highest physical performance is required along with colour fastness to ensure functionality and aesthetics.

USES

- A single product, one application, UV and colour stable, seamless waterproof membrane for pools, resort lagoons artificial beaches and all marine applications.
- Furniture industry
- Spa's and leisure and theme parks
- OEM applications
- RIM and Transfer Injection mould industry top coat layer on hard base coat
- Robotic spray applications for high output

FEATURES

- Extremely fast spray applied installation speed.
- Two component, high performance product.
- Completely seamless, even across multiple substrates.
- Excellent adhesion to most common construction materials, concrete, render, steel, aluminium, concrete blocks.
- Resistant to most standard chemicals, salts acids, alkalis and fuel oils.
- Designed for extreme climates.
- 100% solids, VOC and solvent free.
- Excellent crack bridging properties.
- Highly flexible, excellent elongation at break.
- High bond strength to suitably prepared substrates.
- Thermally stable
- Colour fast
- Solvent free

SURFACE PREPARATION

All cementitious substrates must be structurally sound. Surfaces must be entirely free of oil, grease, paint, dust, curing agents, release agents or other surface contamination. Loose or unsound material should be removed. Sweep and vacuum to remove all dust and debris.

Steel substrates should be prepared to a class 2 ½ near white blast finish with a surface profile of 80 microns.

Mask all adjacent surfaces and protect the surrounding area from overspray. Do not apply unless the substrate temperature is 3 °C or greater than dew point.

APPLICATION

SUPREME AL Soft should only be applied by applicators who have been trained and are currently approved by the manufacturer. To obtain optimum results, Supreme AL should be spray applied when the ambient air and surface temperature is between 5°C und 50°C Celsius.

Use high-pressure plural component spray equipment, 2:1 transfer pumps are recommended to transport the material from the storage vessel to the proportioning pump. The plural component proportioning spray machine must be capable of supplying each component within +/- 10% of the desired 1:1 by volume mixing ratio. Hose heaters should be set to ensure material is delivered at 70° C to the spray gun. Hose pressures and temperature will vary dependent on the equipment used and site conditions and temperature.

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PROCESSING PROPERTIES

INFORMATION ABOUT THE USE OF THE PRODUCT

	DATA
Mixing ratio of Comp. A to Comp. B	100 : 100 per volume
Material consumption [kg/m ² /1mm]	Approx. 1 – 1.2kg / m ² / mm thick.
Recommended thickness [mm]	Minimum: 1 mm Maximum: indefinite
Gel time at 20°C [min.]	3 - 4 (dependent on substrate and ambient temperatures)
Tack Free-Time at 20°C [min.]	15 - 30 (dependent on substrate and ambient temperatures)
Over coat cycle [h]	Walkable: 4 Mechanical: 8 Chemical: 24
Temperature range for application (ambient) [°C]	-10 - +50
Temperature range for application (substrate) [°C]	
Material Temperature (Preconditioning) [°C]	25 - 30
Material Temperature (Spraying) [°C]	70 - 80
Maximal relative air humidity for application [%]	98%
Pay attention to the dew point limit	min. 3K > DP (dew point)

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PHYSICAL PROPERTIES

INFORMATION ABOUT THE USE OF THE PRODUCT

	DATA	
Chemical Technology	–	Comp. A: HDI-Prepolymer Comp. B: Polyetheramine mixture
VOC-content	DIN EN ISO 11890-1 / ASTM D-1259	0%
Solids content	DIN EN 827 / ASTM D-2697	100%
Viscosity [mPa*s] @ 25° C	DIN EN ISO 2884-2 / ASTM D-4878	Comp. A: 1.150 – 1.450 Comp. B: 350 – 750
Density [g/cm³] @ 20° C	DIN EN ISO 2811-2 / ASTM D-1217	Comp. A: 1.11 ± 0,02 Comp. B: 1.00 ± 0.02
Density [g/cm³]	EN ISO 1183 / ASTM D-792	0.90 ± 0.02
Tensile strength [MPa]	ISO 37 / ASTM D-638	≥ 3,2
Modul [MPa]		100% Elongation: 0,8
Elongation at break [%]		≥ 400
Hardness [Shore A]	ISO 4662 / ASTM D-2240	35 ± 5
Rebound resilience [%]	ISO 4662 / ASTM D-7121	≥ 32
Tear growth resistance[N/mm]	ISO 34-1 method A	≥ 3
Taber Abrasion [mg]	ASTM D-4060	< 30 (Wheel CS10 / 500g / 500 Cycles)
Peel off strength [N/mm]	ISO 813 / ASTM D-903	Concrete: ≥ 4 Steel: ≥ 8
Min. Process temp. [°C]	ASTM D-2485	Dry: -40
Max. Process temp. [°C]	ISO 11346 / ASTM D-2485	Wet: 45 Dry: 80 Peak temperature dry: 100
Surface resistance [Ohm]	DIN IEC 60167	≥ 1,0*10 ¹¹
Volume resistance [Ohm]	DIN IEC 60093	
Storage conditions [°C]	DIN EN 12701	10 – 30 (in closed original drums, stored at dry and well ventilated place; beware of freezing)
Shelf life	–	Approx. 12 months

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IMPORTANT NOTE

All test results and timings provided are based on tests carried out in laboratory conditions. Substrate and atmospheric temperature, humidity, condition and application thickness will all influence these results and therefore they must be used as a guide only.

SUPREME AL Soft is UV stable, therefore UV light will not affect its functional characteristics. And additional colour-fast, which means it does not take place any discolouration by sunlight beams.

PACKING

20 and 200 Liter drums on request IBC's.

STORAGE / SHELF LIFE

When stored in dry conditions out of direct sunlight in original unopened packaging, this product has a shelf life of approximately 12 months from the date of manufacture. Avoid storing product in temperatures above 35°C as this may reduce the products shelf life. is stored below 35°C.

Drums, including empty drums should always be kept tightly sealed. During storage and processing, avoid any contamination with other liquids and moist air which may cause solids to form leading to blockages in filters, pumps and/or pipelines.

CLEANING

Prior to curing, tools may be cleaned with cleaning solvents. Once hard, by mechanical means only.

TECHNICAL SERVICES

Detailed technical assistance and further information regarding this system and its relevant application specifications are available from VIP Technical Services.

HEALTH AND SAFETY

Respiratory protection is mandatory for all sprayers and workers in the immediate vicinity of spray operations. A copy of the Model Respiratory Protection Program, developed by API is available at www.polyurethane.org and from the supplier. Avoid contact with skin and eyes. Wear safety glasses and gloves when handling these materials. In case of eye contact, immediately flush with copious amounts of water for at least 15 minutes and consult a physician. In case of skin contact, wash area with soap and water if skin rash persist see a physician.

Component A should not be permitted to come into contact with water. This will cause the formation of CO₂ gas, which may pressurise the storage container.

DISCLAIMER

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, at the time of printing. However the accuracy, completeness and repeatability of said tests results are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own information and tests, to determine the suitability of the product / system for his own particular project and application. User assumes all risk and liability resulting from his use of this product / system. We do not suggest or guarantee that any hazards listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or incorrect use of the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and standard application procedures. Test performance results were obtained in a controlled environment and the manufacturer makes no claim that these tests or any other tests, accurately represent all environments.

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This technical specification supersedes all previous data sheets.