

QUICKSPRAY

INDUSTRIAL 101

DESCRIPTION

QuickSpray Industrial 101 is an instant curing, spray applied, seam-less, and flexible protective membrane.

QuickSpray Industrial 101 sits in the middle of VIP's high performance coatings range and is suitable for use in a wide range of generic applications requiring abrasion, impact and chemical resistance.

QuickSpray Industrial 101 is an excellent primary and secondary containment membrane providing seamless, instant curing, flexible containment solutions that require a higher performance level than standard waterproofing membranes. QuickSpray Industrial 101 is an ideal lining for abrasive liquid containment, general purpose industrial chemical and impact applications.

FEATURES

- Can be applied even under extreme climatic conditions. Hot, cold and humid conditions
- Very good abrasion, impact and chemical resistance for most applications
- Resistant to most standard chemicals, acids, oils, and bleaches*
- Very good elongation at break
- Very good tensile strength
- Contains UV stabilisers to reduce surface chalking when exposed to direct UV
- Seamless application and seamless finish. No welded joints or glued seams
- Excellent adhesion to concrete, steel, aluminum, plastics, fibers, wood, foam etc.
- Can be applied across multiple substrates in the same application process
- Remains flexible under a wide range of climatic conditions
- Rapid application to any thickness and very fast cure results in faster turn around times
- Can build to any thickness in one application. Does NOT require multiple coats
- 100% solids, VOC-free, contains zero solvents

TYPICAL USES

- Protection of concrete substrates in water and wastewater treatment plants
- Steel and concrete tank linings subject to corrosion, abrasion and chemical attack
- Waterproofing of areas subject to impact, abrasion, traffic loads, UV exposure Very good elongation at break
- Protection of substrates against abrasion and impact in materials handling applications. – Mining, concrete manufacture,
- Sacrificial wear plates and linings in the mining and transport industries
- Secondary containment linings in the power, petro chemical, oil and gas industries
- Applications where substrates are being subjected to abrasion, impact and corrosion of general nature in normal industrial applications
- For applications involving very high performance requirements of a specific nature refer to our "QuickSpray Supreme" range of products and consult with your VIP Technical team

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PROCESSING PROPERTIES

INFORMATION ABOUT THE USE OF THE PRODUCT

	DATA
Mixing ratio of Comp. A to Comp. B	1 : 1 per volume
Recommended thickness [mm]	Minimum: 1 – Maximum: unlimited
Gel time at 20°C [sec.]	5 – 15 (dependent on the temperature of the substrate)
Tack Free-Time at 20°C [sec.]	15 – 30 (dependent on the temperature of the ambient)
Over coat cycle [h]	0 – 12 (without any pre-treatment)
Curing/loading after [h]	Walkable: 1 Mechanical: 2 Chemical: 12 - 24
Temperature range for application (ambient) [°C]	-10 - +50° C
Temperature range for application (substrate) [°C]	
Material Temperature (Preconditioning) [°C]	25 - 30° C
Material Temperature (Spraying) [°C]	70 - 80° C
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	
VOC-content	DIN EN ISO 11890-1 / ASTM D-1259	0%
Solids content	DIN EN 827 / A STM D-2697	100%
Viscosity [mPa*s] @ 25°C	DIN EN ISO 2884-2 / ASTM D-4878	Comp. A: 300 - 700 Comp B: 250 - 500
Density [g/cm³] @ 20°C	DIN EN ISO 2811-1 / ASTM D-1217	Comp. A: 1,09 - 1,13 Comp. B: 1,00 - 1,04
Density [g/cm³]	EN ISO 1183 / ASTM D-792	1,01 ± 1,05
Tensile strength [MPa]	ISO 37-2005 / ASTM D-638	≥ 22
Modul [MPa]		100% Elongation: ≥ 10 300% Elongation: 20
Elongation at break [%]		≥ 340
Hardness [Shore D]	ISO 868-2003 / ASTM D-2240	45 ± 5
Rebound resilience [%]	ISO 4662 / ASTM D-7121	≥ 32
Tear growth resistance[N/mm]	ISO 34-1 method A	≥ 45
Volume abrasion [mm³]	DIN ISO 4649	≤ 130
Taber Abrasion [mg]	ASTM D-4060	< 6 (Wheel CS17 / 1.000g / 1000 Cycles) < 125 (Wheel H18 / 1.000g / 1000 Cycles)
Peel off strength [N/mm]	ISO 813 / ASTM D-903	Concrete: ≥ 4 Steel: ≥ 8
Pull off strength [N/mm²]	DIN EN ISO 4624 / ASTM D-4541	Concrete: ≥ 1,5 Steel: ≥ 6
Min. Process temp. [°C]	ISO 11346 / ASTM D-2485	Dry: - 40
Max. Process temp. [°C]		Wet: 60 Dry: 130 Peak temperature dry: 150
Water vapour transmission rate [g/m² *d]	ISO 15106-3	6,1 (at 23° C a. 85% relative humidity) 17,5 (at 38° C a. 90% relative humidity)
Permeation coefficient [g*mm/m²*d]		17,3 (at 23° C a. 85% relative humidity) 51,0 (at 38° C a. 90% relative humidity)
Water diffusion air-layer-thickness [m]	-	sd-value =6,5 (at 23° C a. 85% relative humidity) sd-value =6,0 (at 38° C a. 90% relative humidity)
Methane transmission rate [cm³/m²*d*bar]	ISO 15105-1	91,5 (at 23° C a. 0% relative humidity)

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Permeation coefficient [cm ³ ·mm/m ² ·d·bar]	ISO 15105-1	279,1 (at 23° C a. 0% relative humidity)
Heat Conductivity [W/m·K]	–	0,245
Resistance to Root Penetration	EN 14416	Yes (approval)
Crack bridging abilities [mm] (thickness of the sample 2-3 mm)	DIN EN 1062-7 Procedure C.2	+23° C : > 15,5 -10° C : > 6,8 -20° C : > 6,4
Fire protection classification	DIN 4102-Part 1	B2 (normally inflammable)
Coefficient of sliding friction	DIN 51131	Dry (leather): 0,78 Wet (SBR-rubber): 0,04
Sound absorption	–	100% Elongation: ≥ 10 300% Elongation: 20
Cathodic Disbondment depth [mm]	DIN EN 10290-2004 Class: A	23° C (28 days): 2,3 ± 0,7 60° C (2 days): 1,7 ± 0,6 80° C (2 days): 3,4 ± 1,1
Impact Resistance [J/mm]		23° C: 9,0 -5° C : 7,0
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	–	Approximately 12 months unopened and stored correctly

*** VIP recommends that in all applications involving chemicals a pre-test of the linings suitability in the customer's application is conducted. Consult with VIP Technical Team**

*) All data measured at 23°C @ 50%RH. Meanderings at different ambience- and processing parameters have to be taken into account.

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APPLICATION NOTES

The gel times and tack free times depend on the surrounding climatic conditions and the temperature of the substrate, e.g. ambient temperature, substrate temperature, relative humidity and ventilation etc.

Therefore the data specified above can only be used as a guide. Aromatic Polyurea Coating Systems are UV-stable but are not color stable. The cured coating system may exhibit discoloration when exposed to sunlight. **This does not influence the physical properties of the material.**

FORM OF DELIVERY

Please see our price list for respective packaging units.

DISCLAIMER

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests 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 testing, to determine the suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. These products require specialized equipment and skills to apply. It is the purchaser's responsibility to ensure that they have the necessary equipment, skills and experience to apply these products. 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 inability to use, the product. Technical and application information is provided for the purpose of establishing a general profile of the material and application parameters. Test performance results were obtained in a controlled environment and VIP makes no claim that these tests or any other tests can be accurately reproduced in all environments.

The rights of the purchaser regarding the quality of our materials follows completely our general terms and conditions. For requirements, which exceed the scope of the above mentioned applications please contact VIP technical staff.

VIP reserves the right to change or modify the details and data contained herein at any time.

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This technical specification supersedes all previous data sheets.