

**QUICKSPRAY**

**SUPREME HE**

**1. DESCRIPTION**

**QuickSpray Supreme HE** is a high performance, spray applied, instant curing flexible membrane that displays exceptional elongation properties. Due to the products unique and intricate pore density it will provide excellent corrosion protection to all substrates. The product reacts within seconds and once cured, leaves a flexible, durable, exceptionally tough surface that remains highly flexible. Due to its exceptionally high elongation properties QuickSpray Supreme – HE is extremely effective when applied to substrates with excessive flexibility or movement.

**2. FEATURES**

- ✓ Extremely high elongation properties – 655%
- ✓ Can be applied even under extreme climatic conditions
- ✓ Extended gel time allows excellent “wetting out” of the product for maximum adhesion
- ✓ Geometrically complicated designs and construction components can be easily coated in one seamless application
- ✓ Rapid return to service time > long life-cycle > significant savings
- ✓ Anti corrosive & waterproofing
- ✓ Excellent adhesion on concrete, steel, aluminum, plastics, fiberglass, wood, foam etc.
- ✓ Does not exhibit sensitivity to moisture during application and curing process – allows for application in humid environments
- ✓ Resistant to most chemicals, solvents, acids and caustics
- ✓ High impact & abrasion resistance, maintains flexibility
- ✓ Seamless and joint-less membrane, high application thickness possible in one application
- ✓ Very good tensile and structural strength
- ✓ 100% solids, VOC-free, no solvents
- ✓ Excellent noise suppression characteristics
- ✓ UV, chlorine and saltwater resistant
- ✓ High abrasion resistance
- ✓ Excellent Thermal stability

### 3. TYPICAL USES

- ✓ Construction waterproofing particularly where the substrate is subject to movement – construction and expansion joints
- ✓ Water and wastewater tanks and pits
- ✓ Pools and reservoirs
- ✓ Roofs, park decks, garage floors, ramps
- ✓ Bridge deck waterproofing, tunnel waterproofing
- ✓ Helicopter landing decks
- ✓ Vibrating materials handling equipment, conveyer belt repairs and life extension

## QUICKSPRAY

## SUPREME HE

4. PROCESSING PROPERTIES	DATA
Mixing ratio of Comp. A to Comp. B	1 : 1 per volume
Material consumption [kg/m <sup>2</sup> /1mm]	approx. 1 – 1.2
Recommended thickness [mm]	Minimum: 1      Maximum: indefinite
Gel time at 20°C [sec.]	20 – 30 (dependent on the temperature of the substrate)
Tack.Free-Time at 20°C [sec.]	45 – 60 (dependent on the temperature of the ambient)
Over coat cycle [h]	0 – 10 (without any pre-treatment)
Curing/loading after [h]	Walkable: 1      Mechanical: 2      Chemical: 12-24
Temperature range for application (ambience) [°C]	-10 - +50
Temperature range for application (substrate) [°C]	-10 - +50
Material Temperature (Preconditioning) [°C]	25 – 30
Material Temperature (Spraying) [°C]	60 - 70
Maximal relative air humidity for application [%]	98
Pay attention to the dew point limit	Substrate temperature min. 3C > DP (dew point)

5. PHYSICAL PROPERTIES	DATA
Chemical Base	- Comp. A: MDI-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%
Colour	- Straw / Brownish un-pigmented
Viscosity [mPa*s] @ 25°C	DIN EN ISO 2884-2 / ASTM D-4878 Comp. A: 1.500 - 1.800      Comp B: 300 – 600
Density [g/cm <sup>3</sup> ] @ 20°C	DIN EN ISO 2811-1 / ASTM D-1217 Comp. A: 1,11 ± 1,15      Comp. B: 0,99 ± 1,03
Density [g/cm <sup>3</sup> ]	EN ISO 1183 / ASTM D-792 1,01 ± 0,02
Tensile strength [MPa]	ISO 37-2005 / ASTM D-638 ≥ 12
Modul [MPa]	ISO 37-2005 / ASTM D-638 100% Elongation: ≥ 3      300% Elongation: 6

## QUICKSPRAY

## SUPREME HE

5. PHYSICAL PROPERTIES	DATA		
Elongation at break [%]	ISO 37-2005 / ASTM D-638	≥ 655	
Hardness [Shore A]	ISO 868-2003 / ASTM D-2240	75 ± 5	
Rebound resilience [%]	ISO 4662 / ASTM	≥ 35	
Tear growth resistance[N/mm]	ISO 34-1 method A	≥ 25	
Volume abrasion [mm <sup>3</sup> ]	DIN ISO 4649	≤ 250	
Taber Abrasion [mg]	ASTM D-4060	< 49 (Wheel CS17 / 1.000g / 1000 Cycles) < 223 (Wheel H18 / 1.000g / 1000 Cycles)	
Peel off strength [N/mm]	ISO 813 / ASTM	Concrete: ≥ 4	Steel: ≥ 8
Max. Process temp. [°C]	ISO 11346 / ASTM D-2485	Wet: 60	Dry: 130      Peak temperature dry: 150
Heat Conductivity [W/m*K]	-	0,245	
Sound absorption	-	> 10 dB (A)	
Surface resistance [Ohm]	DIN IEC 60167	≥ 1,0*10 <sup>11</sup>	
Volume resistance [Ohm]	DIN IEC 60093	≥ 1,0*10 <sup>11</sup>	
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	

\*) All datas measured at 25° C @ 50%rH. Meanderings at different ambience- and processing parameters have to be taken into account.

**\* 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**

## 6. APPLICATION NOTES

The Gel time and Tack Free times depend on climatic and environmental influences, e.g. ambient temperature, substrate temperature and relative humidity of air and ventilation etc.

Therefore the times specified can only be used as guidelines. The exact times have to be determined by testing on site.

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.**

## 7. FORM OF DELIVERY

Please see our price list for respective packaging units.

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 investigations and testing, 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.

Valid is only the actual version of this technical data sheet in each case.

Also include the following just below all the test data boxes.

\* 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.

© Copyright, VIP GmbH, QSP Supreme HE

Version: April 2016-0010