

## Quick Prime 1K-PU universal (solvent borne) – Primer

### 1. Characteristic:

**Quick Prime 1K-PU universal** is an one component, solvent borne polyurethane primer . After application the PU-primer hardens in thin layers by evaporation of the solvent agent and crosslinks by absorbing the humidity from the air and from the substrate, in case of concrete. Thereby an extremely wear-resistant film with a high impact resistance will be created. These primer-films are brownish-transparent and this colour becomes visible under the effect of UV-radiation. Furthermore **Quick Prime 1K-PU universal** can be used for the production of levelling mortar and scraping compound and also for the pre-treatment of surfaces (generation of a bonding bridge) for repeating coating systems. **Quick Prime 1K-PU universal** acts for metallic surfaces like steel as temporarily corrosion protection layer and as solidification for concrete substrates.

### 2. Features:

- Ideal basic primer for POLYUREA coating systems
- Excellent bonding both on dry to damp mineral undergrounds and also on metallic substrates
- Barrier properties against moisture, but not for water vapour
- Water blocking abilities and prevents capillary activated creation of pores
- Resistant to dilute bases, acids, water-based salt solutions and lubricants
- Good penetration of substrates like carbon steel and concrete
- Low viscosity and therefore a good brushability and practical spreading rate
- Superior Weatherbility
- High impact resistance

### 3. Typical Uses

- Adhesive primer for 1- or 2-component coating systems basd on Polyurethane or Polyurea
- Generation of a good bonding bridge to GRP-composite materials (based on EP- VE-resins)
- Binding agent for mortars and for repair grout made of wood (e.g. refurbishment)
- Moisture barrier for multi-layered wood boards and similar surfaces
- Primer for still damp concrete
- For the following coating or flooring with standard materials like PVC, Linoleum, parquet floor and flags
- Temporary corrosion protection for metal substrates like e.g. abrasive blasted steel

## Quick Prime 1K-PU universal (solvent borne) – Primer

**POLYUREA**

<b>4. Processing properties:</b>	<b>Datas</b>	
Mixing Ratio (A:B)	nA → only one component product	
Consumption on steel / concrete [g/m <sup>2</sup> ]	approx. 50 – 150 / approx. 150 - 350	
Recommended thickness [µm]	Approx. 30 - 100; (dependent of the porosity of the surface)	
Numbers of layer	1	
Gelification time at 68 °F [h]	12	
Over coating cycle [h]	Steel: min. 1 max. 48	Concrete: min.0,2 – 2 max. 72 (dependent of the humidity in the concrete)
Walkable [h]	Dependent of the surrounding conditions and the humidity of the concrete	
Temperature range for application (ambience) [°C]	+5 - +35	
Temperature range for application (substrate) [°C]	+5 - +35	
Maximal relative air humidity for application [%]	98	
Pay attention to the dew point limit	min. 3K > DP (dew point)	
Preconditions of the substrate:		
>> Steel	SA 21/2 / Medium G / R <sub>Z</sub> (min.) = 60 µm	
>> Concrete	min. C20/25 / compressive strength > 25 N/mm <sup>2</sup> / tensile strength > 1,5 N/mm <sup>2</sup>	
>> Floating screed	min. EN13813 CT-C25-F4	
>> Plaster	P III	
>> Residual moisture	< 8 -10%	

<b>5. Physical Properties:</b>	<b>Datas</b>	
Chemical Base	-	MDI-Prepolymer Solvent Agents: Ethylbenzene / Xylene
VOC-content	DIN EN ISO 11890-1 / ASTM D-1259	494 g/l
Solids content	DIN EN 827 / ASTM D-2697	50%
Colour	-	Brownish, transparency
Viscosity [mPa*s] @ 25 °C	DIN EN ISO 2884-2 / ASTM D-4878	100 – 200
Density [g/cm <sup>3</sup> ] @ 20 °C	DIN EN ISO 2811-1 / ASTM D-1217	1,00 ± 0,02
Pull off strength [N/mm <sup>2</sup> ]	DIN EN ISO 4624 / ASTM D-4541	Steel: ≥ 6 Concrete: ≥ 1,5
Max. Process temp. [°C]	ISO 11346 / ASTM D-2485	Wet: 45 Dry: 130 Peak temperature dry: 150
Storage conditions [°C]	DIN EN 12701 / ASTM	10 – 30 (in closed original drums, stored at dry and well ventilated place; beware of freezing)
Shelf life	-	12 months

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

## Quick Prime 1K-PU universal (solvent borne) – Primer

### 6. Hints for the application:

The primer should be applied preferably by roller or alternatively by spraying in a conventional way with air pressure or airless application.

**IMPORTANT: Quick Prime 1K-PU universal has to be „tack free“ before over coating (check by back of the finger)!**

The drying times depend naturally on the climate and environmental influences, e.g. ambient temperature, 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.

### 7. Form of delivery:

Product name	Unit	Ref.-No.
Quick Prime 1K-PU universal	30 l	On Request
Quick Prime 1K-PU universal	10 l	On Request
Quick Prime 1K-PU universal	1 l	On Request

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 users responsibility to satisfy himself, by his own information and test, to determine 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. We do not suggest or guarantee that any hazard listed herein is the only one 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 inability to use, 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 proper application procedures. Test performance results were obtained in a controlled environment and VIP GmbH makes no claim that these tests or any other tests, accurately represent all environments.

The laws of the purchaser regarding of the quality of our materials follows completely our general terms and conditions. For requirements, which exceed the scope of the above mentioned applications, contact our technical staff at any time under the following number +49-(0)89-89 55809 30.

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

© Copyright, VIP GmbH, QPR 1K-PU universal (solvent borne)

**Version: Juni 2011-003**