

## Quick Prime 1K-PU universal SF (solvent free) Ë Primer

**POLYUREA** 

## 1. Charateristic:

**Quick Prime 1K-PU universal SF** is an one component, solvent free polyurethane primer. After application the PU-primer crosslinks by absorbing the humidity from the air and from the substrate, in case of concrete. Thereby an extremly 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 SF** can be used for the production of levelling mortar and scraping compound and also for the pretreatment of surfaces (generation of a bonding bridge) for repeating coating systems. **Quick Prime 1K-PU universal SF** acts for metallic surfaces like steel as temporarily corrosion protection layer and as solidification for concrete substrates.

## 2. Features:

- SF = Solvent free primer system, contains <u>not</u> any organic solvent
- 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 caoting 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



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4. Processing properties:	Datas		
Mixing Ratio (A:B)	nA → only one component product		
Consumption on steel / concrete [g/m²]	approx. 50 . 150 / approx. 150 - 350		
Recomended 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. 2 max. 48	Concrete: min.0,5 . 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 / $R_Z$ (min.) = 60 $\mu$ m		
>> Concrete	min. C20/25 / compressive strength > 25 N/mm <sup>2</sup> /		
- Clasting parand			
Pay attention to the dew point limit  Preconditions of the substrate:  >> Steel	min. 3K > DP (dew point)  SA 21/2 / Medium G / $R_Z$ (min.) = 60 $\mu$ m		

5. Physical Properties:		Datas			
Chemical Base	-	Mod. MDI-Prepolymer Solvent Agents: none			
VOC-content	DIN EN ISO 11890-1	0%			
	/ ASTM D-1259				
Solids content	DIN EN 827 /	100%			
	ASTM D-2697				
Colour	-	Brownish, transparency			
Viscosity [mPa*s] @ 25°C	DIN EN ISO 2884-2 /	150 . 250			
	ASTM D-4878				
Density [g/cm <sup>3</sup> ] @ 20°C	DIN EN ISO 2811-1 /	1,16 ± 0,02			
	ASTM D-1217				
Pull off strength [N/mm <sup>2</sup> ]	DIN EN ISO 4624 /	Steel: 6 Concrete: 1		Concrete: 1,5	
	ASTM D-4541				
Max. Process temp. [°C]	ISO 11346 / ASTM D-	Wet: 45	Dry: 130	Peak temperature dry: 150	
	2485				
Storage conditions [°C]	DIN EN 12701 /	10 . 30 (in closed original drums, stored at dry and well			
3	ASTM	ventilated place; beware of freezing)			
Shelf life	-	12 months			

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



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## 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 SF has to be Ptack freel before over coating (check by the 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	RefNo.
Quick Prime 1K-PU universal SF	10 I	On Request
Quick Prime 1K-PU universal SF	11	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.

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

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