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Zuiveringweg 89
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www.valsparindustrialmix.com

PB500 PU Primer Binder DTM — PB500 / UK

Product Information

Product Description:
PB500 is a tintable 2K Polyurethane Primer DTM (direct to metal) with very good corrosion protection & adhesion properties. Add 20% Color toner to 80% Binder (PB500) according to our CRS (Color Retrieval System) to create any color. This product has been designed for wet-on-wet application, it is easy to spray, with an overcoating window from 45 minutes up to 48 hours, varying based on the color toner, layer thickness, temperature, speed of activator and reducer.

Preparation:
For more detailed information go-to TI-Substrate and Pre-treatment on Colour Retrieval System (CRS) or website www.valsparindustrialmix.com/emea/en/.

Substrates:	Steel, cast iron, galvanized steel, aluminum and glass fiber reinforced composites.
Plastic:	FP600 Plastic Primer (adhesion test recommended)
Other:	E-coat, solvent resistant surfaces, original and cured coatings, cleaned/sanded
Steel:	Recommended abrasive blast to SA 2½ Dry sanding P80 – P180
Aluminum:	P120 – P240
Galvanized steel:	Sweep blasting recommended
Paint finishes:	P240 – P320
Note:	Please, regularly check and change abrasive paper as required
Cleaning:	Surface must be dry and free from any contamination, e.g. oil, grease & release agents. Use AD690 Degreaser Solvent Based

Material Description: PB500		
Application Method	Minimum DFT µm	Maximum DFT µm
Spraying equipment	30-40µm	80-100µm

* Higher thicknesses require extended drying times

Recoating

Primer:	FP510 or FP511 HS Surfacer	
Topcoat:	VOC compliant:	TB500
	Industrial:	TB510/511/512/520/530/532
	More detailed information go-to:	Technical Data Sheet.

Physical properties:

Chemical base	Polyurethane
Density (kg/l)	1,368 (only Binder)
Volume solids (%)	58.5%
Weight Solids (%)	74.0%
Flash point	31°C
Pot life (+20°C)	Approx. 1-3 hours depending on speed of Activator/Reducer used
Shelf life	Min. 24 months under normal storage conditions and unopened tins
Coverage (m²)	Approx. 8.5m²/L at 40µm DFT
Gloss	Semi Matt
Color	Grey Transparent
Temperature Stability	Dry Heat up to 140°C
VOC (g/l) (incl. toner)	Max. 490 g/l see CRS (VOC: 2004/42/IIB(c)540g/l)
Processing temperature	+10°C till max. +40°C, max. Humidity 85%

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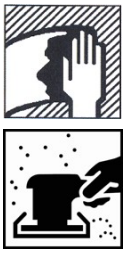
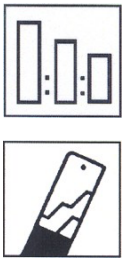
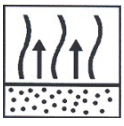
Application Data

	**Preparation/ Cleaning:**	**All surfaces must be properly sanded and cleaned.** Abrasive blast to EN ISO 12944, part 4 (SA 2½) with a uniform blast profile. Dry sanding Steel: P80 – P180 Aluminum: P120 – P240 Galvanized steel: Sweep blasting recommended Paint finishes: P240 – P320 Cleaning: Universal Reducers (only metal surfaces) or AD690 Degreaser Solvent Based for all other substrates. Surface must be dry and free from any contamination, e.g. oil, grease	
	**Handling:**	**Color preparation:** 1. Stir binder until homogeneous 2. Add color toners according CRS 3. Mix mechanically (paint shaker/ mechanically stirrer	**Before use/spraying:** 1. Mix mechanically (paint shaker/ mechanically stirrer) 2. Add Activator and Reducer 3. Stir this mixture well with a mixing stick or a (pneumatic) stirrer
	**Mixing ratio with Colortoner:** (By volume)	PB500 PU Primer Binder DTM CT101 – CT142 of VIM Color toners	80 parts 20 parts
	For mixing machine users:	OEM Formula's see VIM – CRS	(By weight)
	**Mixing ratio with Activator and Reducer:** (By volume)	PB500 PU Primer AU500 PU Activator or AU577 HS Activator Extra Fast or AU576 HS Activator Fast or AU575 HS Activator Medium or AU574 HS Activator Slow RS603/605/607/609 Universal Reducer	8 parts 1 part add 10 – 25%
	Faster process of drying:	AA600 Accelerator (Advice AU500)	Max. 3%
	Mix stick:	Use the Mixing stick **M4 8:1** (74-204 = 8:1/10:1) or **M6 Universal cm-stick** (74-206 standard) / **M7** (74-207 large)	
	**Viscosity:** 18 – 30 sec. (DIN4/20°C)		
	**Gravity or Suction Feed:** Nozzle set Spray gun (HP) Spray gun (RP) HVLP (Air cap pressure) Airless/Airmix Pressure Pot	 1.4 – 1.7 mm 3.0 – 4.5 bar (42 – 65 psi) 1.5 – 2.0 bar (21 – 29 psi) 0.7 bar (10 psi) maximum Not recommended 1.0 – 1.3 mm	
	**Application:** **Film Thickness:** (recommended 40 – 80µm)	**Option 1:** 1 full coat 30 - 40µm (DFT)	**Option 2:** 2 Layers 60 – 80µm (DFT)
	**Between coats at 20°C:**	NA	5 – 10 minutes

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	**Clean up:** (Check the local regulations!)	RS605/607/609 Universal Reducer or Gun cleaner (solvent)	
 	**Dry Times:**	Air–dry at 20°C Dust-free: Dry to handle: Dry to sand: Force–dry 60°C:	 Approx. 30 - 45 minutes 3 – 4 hours 10 – 14 hours 30 – 40 minutes / 60°C object temperature
	*Drying time is dependent on color, layer thickness, and speed of Activator and Reducer used.		
	IR–dry:	12 – 15 minutes (The panel must not exceed 90°C)	
	**Use suitable respiratory protection (air fed respirator is strongly recommended).**		
	**Recoating time:** **Recommended:** **Topcoat:**	1 Layer Primer Application – Flash-off FP500 sprayed up to 40µm can be recoated with recommended Topcoat after 45 minutes at 20°C. 2 Layer Primer Application – Flash-off Layer thickness 40-80µm can be recoated with recommended Topcoat after 2 hours at 20°C. This Primer can be recoated within 48 hours – after that time, sanding is required. After force drying/IR-drying, sanding with P320 – P400 is required. TB500/510/511/512/520/530/532 (See Technical Data Sheet)	

Precautions: During application all health and safety measures referring to the use and handling of coating materials are to be observed, e. g. existing regulations issued by the trade associations in the Chemical Industry. For Health and Safety information please refer the Safety Datasheet (SDS). Information also available on our webpage: www.valsparindustrialmix.com/emea/en/

Note: The products listed are intended only for the professional user and for professional use. All recommendations given in writing on the use of our products to customers or users are not binding and do not give reasons for secondary obligations resulting from the bill of sale. Every care is taken to ensure that the technical information provided is accurate and up to date according to the present state of knowledge in science and our experience. These recommendations do not, however, exempt the customer from autonomously checking whether our products are suitable for the intend purpose. The durability of the coating system largely depends on the thorough preparation of the surface. Furthermore our uniform terms of delivery and payment are applicable.

With the publication of this Technical Data Sheet all previous versions regarding this product are no longer valid.