

## Product Information

### Product Description:

PB500 is a tintable 2K polyurethane primer DTM (direct to metal) with very good corrosion protection, adhesion properties, with air- and force dry capabilities. Add 20% Color Toner to 80% Binder PB500 to create any color. All Toners are chromate and lead free. This product is recommended for wet on wet application on larger surfaces.

### Preparation:

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

**Substrates:** Iron, steel, cast iron, galvanized steel, aluminum, glass fiber reinforced plastics (GRP).  
**Plastic:** FP600 Plastic Primer (adhesion test recommended)  
**Other:** Solvent resistant surfaces, cleaned/sanded/hardened original and cured Coatings.

**Iron/steel:** Abrasive shot blasting is recommended or dry sanding P80 – P180  
**Aluminum:** P180 – P240  
**Galvanized:** Sweep blasting recommended  
**Paint finishes:** P240 – P320 (Please, check and change abrasive paper regularly as required)

**Cleaning:** Surface must be dry and free from any contamination, e.g. oil, grease, release agents.  
 Use AD690 Solvent Degreaser for metal substrate and paint finishes.

### Material Description: PB500

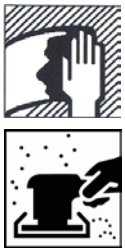









Application Method	Minimum DFT $\mu\text{m}$	Maximum DFT $\mu\text{m}$	Minimum WFT $\mu\text{m}$	Maximum WFT $\mu\text{m}$ *
Spraying equipment	30 $\mu\text{m}$	80 $\mu\text{m}$	40 $\mu\text{m}$	110 $\mu\text{m}$






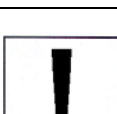
**Recoating:** Recoat from a range of Valspar Industrial Mix PU Topcoats: TB500/510/520/540/543/TW518TY518.  
 More detailed information go-to Technical Data Sheet TB500/510/520/540/543/TW518TY518.

### Physical properties:

Chemical base	Polyurethane
Density (kg/l)	1,368 (Binder)
Volume solids (%)	58.5%
Weight Solids (%)	74.0%
Flash point	31°C
Pot life (+20°C)	Approx. 2 – 3 hours
Shelf life	Min. 24 month under normal storage conditions and unopened tins
Coverage (m <sup>2</sup> )	Approx. 8.5m <sup>2</sup> 40 $\mu\text{m}$ (DFT)
Gloss	matt
Color	Binder Transparent
Temperature Stability	Dry Heat up to 140°C
VOC (g/l)	Max. 490g/l see CRS (VOC: 2004/42/IIIB(c)540g/l)
Processing temperature	+10°C till max. +40°C, max. Humidity 85%

## Application Data

	<b>Preparation/ Cleaning:</b>	<p><b>All surfaces must be properly shot blast or sanded and cleaned</b> Abrasive blast to EN ISO 12944, part 4 (SA 2.5) with a uniform blast profile of 20 – 50µm. Dry sanding Steel: P80 – P180 Aluminum: P180 – P240 Galvanized: Sweep blasting recommended Paint finishes: P240 – P320 Cleaning: AD690 Solvent Degreaser (metal surface &amp; paint finishes) Surface must be dry and free from any contamination, e.g. oil, grease</p>		
	<b>Handling:</b>	<b>Color preparation:</b> 1. Stir binder until homogeneous 2. Add Color Toners 3. Mix mechanically (paint shaker/ mechanical stirrer)	<b>Before use/spraying:</b> 1. Mix mechanically (paint shaker/ mechanical stirrer) 2. Add Activator and Reducer 3. Stir this mixture well with a mixing stick or a (pneumatic) stirrer	
	<b>Mixing ratio with Color Toner:</b> (By volume)	PB500 PU Primer <b>Binder</b> DTM tintable CT Range of VIM Color Toners	80 parts 20 parts	
For mixing machine users:		For mixing formula's see VIM CRS	(By weight)	
 	<b>Mixing ratio with Activator and Reducer:</b> (By volume)	PB500 PU <b>Primer</b> DTM AU500 PU Activator RS603 Universal Reducer Fast or RS605 Universal Reducer Medium or RS607 Universal Reducer Slow or RS609 Universal Reducer Ultra Slow	8 parts 1 part  add 10 – 25%	
<b>Mix stick:</b>		Use the Mixing stick <b>M4 8:1</b> (74-204 = 8:1/10:1) or <b>M6 Universal cm-stick</b> (74-206 standard) / <b>M7</b> (74-207 large)		
<b>Faster process of drying:</b>		AA600 Accelerator	+ 3 – 5%	
	<b>Viscosity:</b> 18 – 30 sec. (DIN4/20°C)			
	<b>Gravity or Suction Feed:</b> Nozzle set Spray gun "High pressure" Spray gun "Reduce pressure" HVLP (Air cap pressure) Airless/Airmix Pressure Pot	1.4 – 1.7 mm 3.0 – 4.5 bar (42 – 65 psi) 1.5 – 2.5 bar (21 – 36 psi) 0.7 bar (10 psi) maximum Not recommended 1.0 – 1.5mm		
	<b>Application:</b>  <b>Film Thickness:</b> (recommended 40 – 80µm)	<b>Option 1:</b> ½ coat followed by 1 full coat 30 – 50µm (DFT)	<b>Option 2:</b> 1 full closed coat followed by 1 full closed coat 60 – 100µm (DFT)	
	<b>Between coats at 20°C:</b>	5 minutes	5 – 10 minutes	
	<b>Before baking at 20°C:</b>	10 minutes	10 minutes	

	<b>Clean up:</b> (Check the local regulations!)	RS605/607/609 Universal Reducer or Gun cleaner (solvent)
	<b>Air-dry at 20°C:</b>  <b>Force-dry:</b>	<b>Dust Free:</b> 25 – 30 minutes <b>Dry:</b> 8 – 10 hours  30 minutes / 60°C object temperature
	<b>IR-dry:</b>	12 – 15 minutes (The panel must not reach a temperature above 90°C)
	<b>Use suitable respiratory protection (air fed respirator is strongly recommended).</b>	
	<b>Recoatable:</b>  After min. 1hr/20°C <40µm After min. 3hr/20°C 40-80µm	TB500/510/520/540/543/TW518/TY518 (See Technical Data Sheet)  After 24 hours: Sanding required (P280-P360 or grey scuff pad)
	<b>Precautions:</b> 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 Material Safety Datasheet (MSDS). Information also available on our webpage: <a href="http://www.valsparindustrialmix.com">www.valsparindustrialmix.com</a>	
	<b>Note:</b> 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.	