

## Product Information

### Product Description:

TB500 PU Topcoat Binder Performance High Gloss with 70% Binder - 30% Color is a two-component high solid polyurethane topcoat with excellent gloss and nice levelling. TB500 is especially developed for Industrial OEM. Fleet and aftermarket repairs, with very good air- and force-dry capabilities and provides excellent UV protection. All Toners are chromate and lead free. TB500 is a **low VOC** <420g/l product.

### Preparation:

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

#### Substrates:

Surfaces coated with Primers: FP400/401/440 Epoxy Primer, FP500/PB500/PB500-S PU Primer DTM and FP510/511 HS Surfacer. On plastic parts use FP600 Plastic Primer (adhesion test recommended).

Other: Solvent resistant surfaces, cleaned/sanded/hardened original and cured coatings.

Dry sanding: P320 – P400 eccentrically machine

Note: Please, check and change abrasive paper regularly as required

Wet sanding: P600 – P1000

Advice: We suggest using **dry sanding** by Orbital sander!

#### Cleaning:

Surface must be dry and free from any contamination, e.g. oil, grease, release agents, use AD690 Degreaser Solvent Based.

### Material Description: TB500





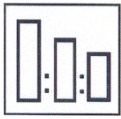

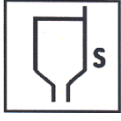


Application Method	Minimum DFT $\mu\text{m}$	Maximum DFT $\mu\text{m}$	Minimum WFT $\mu\text{m}$	Maximum WFT $\mu\text{m}$ *
Spraying equipment (not-including airless/airmix)	45 $\mu\text{m}$	70 $\mu\text{m}$	55 $\mu\text{m}$	90 $\mu\text{m}$

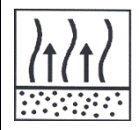






\* Higher thicknesses possible if given extended drying times

### Physical properties:

Chemical base	Polyurethane
Density (kg/l)	1,001 (Binder)
Volume solids (%)	53.2%
Weight Solids (%)	59.0%
Flash point	28.0°C
Pot life (+20°C)	Approx. 1 – 2 hours
Shelf life	Min. 24 month under normal storage conditions and unopened tins
Coverage (m <sup>2</sup> )	Approx. 8.5m <sup>2</sup> /L 40 $\mu\text{m}$ (DFT)
Gloss	High Gloss >90 GU/60°
Color	Binder Transparent
Temperature Stability	Dry Heat up to 140°C
VOC (g/l)	Max. 420g/l see CRS (VOC: 2004/42/IIB(d)420g/l)
Processing temperature	+10°C till max. +40°C, max. Humidity 85%

## Application Data

	<b>Preparation/ Cleaning:</b>	<b>All surfaces must be properly sanded and cleaned</b>	
		Dry sanding: P320 – P400 eccentrically machine Wet sanding: P600 – P1000	
		Cleaning: AD690 Degreaser Solvent Based Surface must be dry and free from any contamination, e.g., oil, grease	
	<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: (By volume)</b>	TB500 PU Topcoat <b>Binder</b> Performance CT Range of VIM Color Toners	70 parts 30 parts
	For mixing machine users:	For mixing formula's see VIM CRS	(By weight)
	<b>Mixing ratio with Activator and Reducer:</b> (By volume)	TB500 PU <b>Topcoat</b> Binder Performance 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 Universal Reducer Fast or RS605 Universal Reducer Medium or RS607 Universal Reducer Slow or RS609 Universal Reducer Ultra Slow	4 parts 1 part  Max. 5%
		<b>Faster process of drying:</b>	AA600 Accelerator (Advice AU500) Max. 3%
	<b>Mix stick:</b>	Use the Mixing stick <b>M2 4:1</b> (74-202 = 3:1/4:1) or <b>M6 Universal cm-stick</b> (74-206 standard) / <b>M7</b> (74-207 large)	
	<b>Viscosity:</b> 20 – 24 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	1.3 – 1.4 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 – 1.3mm	
	<b>Application:</b>  <b>Film Thickness:</b> (recommended 45 – 70µm)	<b>Option 1:</b> ½ coat followed by 1 full coat 40 – 55µm (DFT)	<b>Option 2:</b> 1 full closed coat followed by 1 full closed coat 50 – 70µm (DFT)

	<b>Between coats at 20°C:</b>  <b>Before baking at 20°C:</b>	5 minutes  10 minutes	5 – 10 minutes  10 minutes
	<b>Clean up:</b> (Check the local regulations!)	RS605/607/609 Universal Reducer or Gun cleaner (solvent)	
	Drying and curing is according to use of the wide range of Activator and Reducer.		
	<b>Air-dry at 20°C:</b>  <b>Force-dry at 60°C:</b>	<b>Dust Free:</b> 30 – 45 minutes <b>Dry to assembly:</b> 5 – 10 hours <b>Dry:</b> 10 – 16 hours	20 – 45 minutes (object temperature)
	<b>IR-dry:</b>	8 – 14 minutes (The panel must not exceed 90°C)	
	<b>Use suitable respiratory protection (air fed respirator strongly recommended).</b>		
	<b>Polish:</b>	Dust and minor imperfections can be polished out after the stated air-dry times have been reached, or after a full bake at 60°C object temperature, followed by a cool down of the object to ambient temperature. Before polishing, make sure the surface is well cured. Follow the instructions of the polish manufacture.	
	<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.		