

## Product Information

### Product Description:

TB540 PU Topcoat Binder DTM High Gloss with 70% Binder - 30% Color Toner, optional (60% Binder – 40% Color Toner on low opacity colours), is a two component, polyurethane topcoat DTM (direct to metal). With the exception of aluminium and galvanized substrates, both aluminium and galvanized exist in many different quality's therefore it is recommended to prime these substrates before the application of topcoat with a high gloss finish. This Topcoat contains anti corrosion chemicals offering excellent corrosion protection. TB540 is especially developed for Industrial OEM and aftermarket repair industry. Application enables fast operation – reducing costs, excellent air-dry und force dry capabilities. All Toners are chromate and lead free and provides excellent UV protection.

### 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, stainless steel (blasted) cast iron, glass fiber reinforced plastics (GRP).
- Primers:** FP400/401 Epoxy Primer, FP402 Epoxy Primer Zinc rich,  
 (as option) FP500/PB500 PU Primer DTM and FP600 Plastic Primer (adhesion test recommended). Solvent  
**Other:** resistant surfaces, cleaned/sanded/hardened original and cured Coatings.
- Iron/steel:** Abrasive shot blasting is recommended or dry sanding P80 – P180 Primed aluminium only.  
**Aluminum:** Because of the wide number of aluminum types we recommend to use primers as described above for the best adhesion and corrosion protection on aluminum before applying this topcoat. For proper preparation of the aluminum substrate follow the steps as described in TI Aluminum. Sanding aluminum recommendations: P80 – P180\*
- Galvanized:** Primed galvanized only. for sanding and perperation see VIM galvanized technical information.
- Paint finishes:** P280 – P360 (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: TB540

Application Method	Minimum DFT µm	Maximum DFT µm	Minimum WFT µm	Maximum WFT µm *
Spraying equipment (not-included airless/airmix)	40µm	65µm	55µm	85µm

\*In light industrial and CT sectors, many different types of aluminium's are used in manufacture and fabrication. Because of this, good sanding and cleaning is essential to create a sound coating process. Please contact your local technical adviser if unsure of the correct process and or materials.

**Recoating:** Can be coated with CC700 Clear Coat Anti Graffiti (see TDS CC700)








**Additive:** (optional) AD601/602 Texture Additive fine/coarse and AD600 High Build Additive (see TDS AD600/601/602).

### Physical properties:

Chemical base	Polyurethane
Density (kg/l)	1,030 (Binder)
Volume solids (%)	52,0%
Weight Solids (%)	54,0%
Flash point	27,5°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> 40µm (DFT)
Gloss	High Gloss >90 GU/60°
Color	Binder Transparent
Temperature Stability	Dry Heat up to 140°C
VOC (g/l)	Max. 500g/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>	<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: Properly prepared pre-primed aluminium                  Galvanized: Properly prepared pre-primed galvanized                  Paint finishes: P280 – P360                  Cleaner: 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>	<p><b>Color preparation:</b>                  1. Stir binder until homogeneous                  2. Add Colour Toners                  3. Mix mechanically (paint shaker/                  mechanical stirrer)</p>	<p><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</p>	
	<p><b>Mixing ratio with Color Toner:</b> (By volume)</p>	TB540 PU Topcoat <b>Binder</b> DTM High gloss CT Range of VIM Color Toners	70 parts 30 parts or	60 parts 40 parts
For mixing machine users:		For mixing formula's see VIM CRS		(By weight)
	<p><b>Mixing ratio with Activator and Reducer:</b> (By volume)</p>	TB540 PU <b>Topcoat</b> DTM High gloss AU540 PU Activator RS603 Universal Reducer Fast or RS605 Universal Reducer Medium or RS607 Universal Reducer Slow or RS609 Universal Reducer Ultra Slow		4 parts 1 part  add max. 25%
	<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>Faster process of drying:</b>		AA600 Accelerator	+ 3 – 5%	
	<p><b>Viscosity:</b>                  20 – 26 sec. (DIN4/20°C)</p>			
	<p><b>Gravity or Suction Feed:</b>                  Nozzle set                  Spray gun "High pressure"                  Spray gun "Reduce pressure"                  HVLP (Air cap pressure)                  Airless/Airmix                  Pressure Pot</p>	1.4 – 1.8 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		
	<p><b>Application:</b>   <b>Film Thickness:</b> (recommended 50 – 65µm)</p>	<p><b>Option 1:</b>                  ½ coat                  followed by 1 full coat                  40 – 50µm (DFT)</p>	<p><b>Option 2:</b>                  1 full closed coat                  followed by 1 full closed coat                  50 – 65µm (DFT)</p>	
	<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>Dust Free:</b> 25 – 30 minutes <b>Dry to assembly:</b> 3 – 5 hours <b>Dry:</b> 8 – 10 hours
	<b>Force-dry:</b>	30 – 40 minutes (60°C – 70°C object temperature)
	<b>IR-dry:</b>	12 – 15 minutes (The panel must not exceed 90°C)
	<b>Use suitable respiratory protection (air fed respirator strongly recommended).</b>	
	<b>Recoatable:</b>  After: min. 1hr/20°C	CC700 Clear Coat Anti Graffiti (See Technical Data Sheet)  After 24 hours: Sanding required (Grey scuff pad)
	<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.
	<p><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></p> <p><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 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.</p> <p>With the publication of this Technical Data Sheet all previous versions regarding this product are no longer valid.</p>	