

Technical Data Sheet

EMEAI Valspar bv Zuiveringweg 89 8243 PE Lelystad The Netherlands Tel. +31 (0) 320292200 www.valsparindustrialmix.com

TB543 PU Topcoat Binder DTM Low Gloss

TB543 / AU

Product Information

Product Description:

TB543 PU Topcoat Binder DTM Low 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 a low gloss finish - 20GU/60° gloss reading +/- 10GU this is dependent on color and spray technique. This Topcoat contains anti corrosion chemicals offering excellent corrosion protection. TB543 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.

Recommendation for air-dry, however force-dry will give a higher gloss result. Selection of hardener, reducer, color, viscosity, application, flash-off time and thickness will all have a influence of the end gloss result too.

Preparation:

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

Substrates: Iron, steel, stainless steel (blasted) cast iron, galvanized steel, aluminum,

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). 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: 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: TB543							
Application Method	Minimum DFT μm	Maximum DFT µm	Minimum WFT µm	Maximum WFT µm *			
Spraying equipment (not-included airless/airmix)	40μm	65µm	55µm	85µm			

^{*} Higher thicknesses possible if given extended drying times

Additive: (optional) AD601/602 Texture Additive fine/coarse and AD600 High Build Additive

(see TDS AD600/601/602).

Physical properties:

Date of issue: 2/2015 - Version: 1.0

Chemical base Polyurethane
Density (kg/l) 1,440 (Binder)
Volume solids (%) 38.0%

Volume solids (%) 38,0% 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 (m²) Approx. 8.5m² 40µm (DFT)
Gloss Low Gloss 20GU/60° +/- 10GU

Color Binder yellowish milky 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%



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	Preparation/ Cleaning:	All surfaces must be properly shot blast or sanded and cleaned 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: P280 – P360 Cleaner: AD690 Solvent Degreaser (metal surface & paint finishes) Surface must be dry and free from any contamination, e.g. oil, grease					
	Handling:	Color preparation: 1. Stir binder until homogeneous 2. Add Colour Toners 3. Mix mechanically (paint shaker/mechanical stirrer)		Before use/spraying: 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			
	Mixing ratio with Color Toner: (By volume) For mixing machine users:		TB540 PU Topcoat Binder DTM High gloss		70 parts	60 parts	
			CT Range of VIM Color Toners		30 parts or	40 parts	
			For mixing formula's see VI	(By weight)	(By weight)		
	Mixing ratio with Activator and Reducer: (By volume)		TB543 PU Topcoat DTM Low 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%		
	Mix stick:		Use the Mixing stick M2 4:1 (74-202 = 3:1/4:1) or M6 Universal cm-stick (74-206 standard) / M7 (74-207 large)				
	Faster process of drying:		AA600 Accelerator	+ 3 – 5%	+ 3 – 5%		
s	Viscosity: 20 – 26 sec. (E	DIN4/20°C)					
***	Gravity or Suction Feed: Nozzle set Spray gun "High pressure" Spray gun "Reduce pressure" HVLP (Air cap pressure) Airless/Airmix Pressure Pot		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				
	Application:		Option 1:		Option 2:		
	Film Thickness: (recommended 50 – 65µm)		followed by 1 full coat follow		l closed coat ved by 1 full closed coat 65µm (DFT)		
1 1 1	Between coats at 20°C:		5 minutes 5 – 10 minutes		. , ,		
<u>/1/1/</u>	Before baking	at 20°C:	10 minutes		10 minutes		



INDUSTRIAL MIX

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	Clean up: (Check the local regulations!)	RS605/607/609 Universal Reducer or Gun cleaner (solvent)				
	Air-dry at 20°C:	Dust Free: Dry to assembly: Dry:	25 – 30 minutes 3 – 5 hours 8 – 10 hours			
	Force-dry:		Not recommended	(30-40 min./60°C)		
	IR-dry:		Not recommended			
	Use suitable respiratory protection (air fed respirator strongly recommended).					
	Recoatable:	Not recommended	(recoating with clear c	oat)		
9	Polish:	Not recommended				



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 Material Safety Datasheet (MSDS). Information also available on our webpage: www.valsparindustrialmix.com

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 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.