

Technical Data Sheet

Valspar Automotive P.O. Box 1461 Minneapolis, MN 55440 1.800.845.2500

www.valsparindustrialmix.com

TB540 Polyurethane Enamel 3.5 VOC High Gloss

TB540 / US

Product Information

Product Description:

TB540 Polyurethane Enamel 3.5 VOC High Gloss - 70% Binder and 30% Color Toner. A two-component, Polyurethane Topcoat with a high gloss finish. Specially developed for Industrial OEM and aftermarket repair industry. Air-dry and force dry capabilities. Also provides excellent UV protection.

Substrates:

Properly prepared Steel and Aluminum substrates, also surfaces sprayed with Epoxy Primer: FP420/423 Epoxy Primer/Sealer (wet on wet or sanded)

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

Preparation:

Dry Sanding substrate: Steel: P80 – P180 / Aluminum: P180 – P240 Dry Sanding Coating: VIM Primer/existing finishes: P240 – P360

Steel surface Preparation: Abrasive blast to SSPC and NACE recommendation with a uniform blast profile of 0.7 to 2.0mil (20-50µm).

Galvanized: Sweep Blasting recommended.

Note: The layer thickness of the Primer should be three (3) times more than the grade of the shot blasted surface.

(More Detailed information go-to Preparation and Pre-treatment at www.valsparindustrialmix.com)

Cleaning:

Surface must be dry and free from any contamination, e.g. oil, grease, release agents. Use only approved cleaning products per your local regulations. (More Detailed information go-to cleaning processes at www.valsparindustrialmix.com)

Physical Data:

Date of issue: 1/2015 - Version: 3.0

	4	:1	4:1 +25%		4:1 +25%	
RTS REGULATORY DATA	(NO Reduction)		(170 / RS Reducer Line)		(Exempt Reducer Line)	
	LBS/GAL	g/L	LBS/GAL	g/L	LBS/GAL	g/L
Actual VOC	5,0 Max.	600 Max.	4.95 Max.	594 Max.	3.15 Max.	378 Max.
Regulatory VOC (less water and exempt solvents)	5,0 Max.	600 Max.	5.0 Max.	600 Max.	3.5 Max.	420 Max.
Density	8 - 12	960 - 1440	8 - 12	960 - 1440	8 - 12	960 - 1440
	WT.%	VOL.%	WT.%	VOL.%	WT.%	VOL.%
Total Volatile Content	20 - 45	35 - 55	35 - 55	35 - 65	30 - 50	45 - 65
Water Content	0	0	0	0	0	0
Exempt Compound Content	0 - 10	0 - 10	1 - 10	1 - 10	5 - 20	10 - 30
Physical properties:	•		•			•
Chemical base	Polyurethane		Coverage (sq ft - DFT)		Approx. 915sq ft / 1.0mil	
Density lbs/gal (kg/l)	8.72 lbs/gal (1.05 kg/L)		Gloss		> 90/20°	
Volume solids (%)	61%		Color		Binder Transparent	
Weight Solids (%)	66%		Temperature Stability		Dry Heat up to 284°F/140°C	
Flash point	52°F (11.11°C)		Processing temperature		50 – 104°F (+10°C - 40°C)	
Pot life / 77°F (+25°C)	Approx. 2.5 - 3 hours		Humidity		Until 85% R.H.	
Shelf life	Min. 24 month under normal storage conditions and unopened tins					



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Application Data

	Cleaning: Use only approved products per your local regulations	Primed or existing finishes – Valspar 155 Surface Cleaner or 170 AquaClean Low VOC WaterBase or AD680 Water Based Cleaner must be cleaned, dry and free from any contamination, e.g. oil, grease					
	Preparation:	Dry sanding coating: E Galvanized: S	alvanized: Sweep blasting recommended				
	Before using: The product must be shaken before adding the Color Toners and thoroughly stirred directly after the Activator and Reducer have been added.						
	Mixing ratio with Color Toner: (By Volume)	TB540 Polyurethane Enamel 3.5 VOC High Gloss CT Range of VIM Color Toners (For mixing formula's see Color Focus)		70 parts 30 parts			
	Mixing stick: Use the mixing stick M2 4:1 (74-202=3:1/4:1) or M6 (74-206 standard) / M7 (74-207 large) Universal cm-stick						
	US National Rule + Canada: If used as instructed, this product is designed to comply with the US and Canadian National Volatile Organic Compound (VOC) Emission Standards for Automobile Refinish Coatings. Confirm compliance with state and local air quality rules before use. Component: Use component as instructed per Valspar guidelines. Verify that intended end use of component is in compliance with state and local air quality rules before use.						
	Mixing Ratio with Activator and Reducer: (by Volume)	AU540 Polyurethane E RS6x0 Reducer Solver RE6x0 Exempt Reduce	TB540 Polyurethane Enamel High Gloss AU540 Polyurethane Enamel Activator RS6x0 Reducer Solvent (RS670/680/690) or RE6x0 Exempt Reducer (RE670/680/690) (Rx670 Fast / 680 Medium / 690 Slow)				
	USA VOC Compliant rules:		For VOC 3.5 compliant use Exempt Reducer RE6x0. For VOC national rule use Solvent Reducer RS6x0 (listed above).				
s	Viscosity: 20 – 22 sec. (DIN4/68°F/20°C) Use unreduced paint for Airless (wi	th/without air support), brush	and roller recommended only	on small areas!			
***	Gun set up: Gravity Feed Siphon Feed HVLP (Gravity Feed) Pressure Pot Airless / and with air support Atomizing Air Pressure	Nozzle / Tip Size: 1.5 – 1.8 mm 1.6 – 1.8 mm 1.3 – 1.5 mm 1.1 – 1.4 mm 013"017"	35-45 psi (2. 30 psi (2.0 b 35-40 psi (2. 900 – 1200 p	Pressure: 40 psi (2.5-2.8 bar) 45 psi (2.5-3.1 bar) psi (2.0 bar) Inlet Air 40 psi (2.5-2.8 bar) 0 – 1200 psi (60-80 bar) 65 psi (3.8-4.5 bar)			
	Application:	Option 1: ½ coat followed by 1 fu	Option 2: 2 medium/fu	II wet coats			
,	Recommended Film Thickness:	1.6 – 2.1mil DFT (40 –	1.6 – 2.1mil DFT (40 – 50μm) 2.1 – 2.7mil DFT (50 – 65μm)				
	Clean up: (check the local regulations!)	RS6x0 Reducer Solve RE6x0 Exempt Reduc					



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11/1/	Flash between coats at 77°F/25°C:	Option 1: NA		Option 2: 10 – 15 minutes or until previous coat is non stringing		
	Before baking at 77°F/25°C:	10 minutes		10 minutes		
	Air-dry at 77°F/25°C: (DFT dependent)	Tack Free: To Tape: To Recoat:	2 hour 6 hours 16 hours (overnight)			
	Force-dry at 140 – 158°F: (60°C – 70°C)	30 minutes 140°F/60°C object temperature		mperature		
	IR-Dry		12 – 15 minutes The panel must not re above 194°F/90°C.	each a temperature		
	Use suitable respiratory protection (the use of fresh air supply respirator recommended).					
9	Polish:	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.				
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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 at www.valsparindustrialmix.com

Note: The products listed are intended only for the professional user and for professional use. All recommendations in words and writing given 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 universal 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.

If used as instructed, this product is designed to comply with the US National Volatile Organic Compound (VOC) Emission Standard for Automobile Refinish Coatings. Confirm compliance with state and local air quality rules before use. The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option.