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

www.valsparindustrialmix.com

TB543 Polyurethane Enamel 2.8 VOC Low Gloss (70% fill) TB543 / US

Product Information

Product Description:
TB543 Polyurethane Enamel 2.8 VOC Low Gloss - 70% Binder and 30% Color Toner. A two-component, Polyurethane Topcoat with a low gloss finish. Specially developed for Industrial OEM and aftermarket repair industry. Air-dry and force dry capabilities. Also provides excellent UV protection. Recommended 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 an influence of the end gloss result too.

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: 280 – 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:

RTS REGULATORY DATA	4:1 +0-25% (Reducer Line)		4:1 +0-25% (Exempt Reducer Line)		4:1 +0-25% (Exempt Activator and Exempt Reducer Line)	
	LBS/GAL	g/L	LBS/GAL	g/L	LBS/GAL	g/L
Actual VOC	5.0 Max.	600 Max.	3.15 Max.	378 Max.	1.8 Max.	216 Max.
Regulatory VOC (less water and exempt solvents)	5.0 Max.	600 Max.	3.5 Max.	420 Max.	2.8 Max.	340 Max.
Density	8 - 12	960 - 1440	8 - 12	960 - 1200	10.8 - 12.8	1289 - 1529
	WT.%	VOL.%	WT.%	VOL.%	WT.%	VOL.%
Total Volatile Content	30 - 50	50 - 70	30 - 50	50 - 70	37 - 48	42 - 59
Water Content	0	0	0	0	0	0
Exempt Compound Content	0 - 10	0 - 10	10 - 30	10 - 30	15 - 32	15 - 35

Physical properties:			
Chemical base	Polyurethane	Coverage (sq ft - DFT)	Approx. 795sq ft / 1.0mil
Density lbs/gal (kg/l)	12.06 lbs/gal (1.45 kg/L)	Gloss	Semi gloss 20GU/60° +/-10GU
Volume solids (%)	50%	Color	Binder Beige Transparent
Weight Solids (%)	69%	Temperature Stability	Dry Heat up to 284°F/140°C
Flash point	40°F (4.4°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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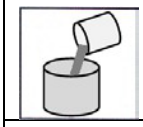
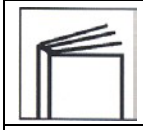
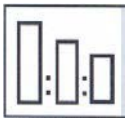
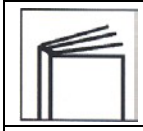
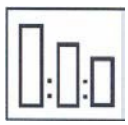
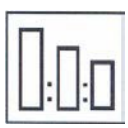
Application Data

	**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 substrate:** Steel P80 – P180 / Aluminum P180 – P240 **Dry sanding coating**: Existing finishes P280 – P360 **Galvanized:** Sweep blasting recommended **Abrasive blast**: with a uniform blast profile of 0.7 to 2mil (20-50µm)	
	**Before using:** The product must be shaken before adding the Color Toners and thoroughly stirred directly after the Activator and Reducer have been added. **NOTE**: Gloss levels can vary. A spray out should be performed prior to mixing large volumes of paint.		
	**Mixing ratio with Color Toner:** (By Volume)	TB543 Polyurethane Enamel 2.8 VOC Low Gloss CT Range of VIM Color Toners (For mixing formula's see Collision Core Color)	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		
	**Low VOC:** If used as instructed, this product is designed to comply with the Low 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.		
	**Low VOC (2.8 lbs/gal)** **Mixing Ratio with Activator and Reducer:** **Max VOC 2.8* (by Volume)	TB543 Polyurethane Enamel AU544 Polyurethane Activator Low VOC RE6x0 Exempt Reducer (RE670/680/690) (RE670 Fast / 680 Medium / 690 Slow)	4 parts 1 part +0-25%
	Faster process of drying	AA607 Accelerator (per sprayable gallon)	Up to 1 ounce
	**Canada:** If used as instructed, this product is designed to comply with the Canadian 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.		
	**Canadian (3.5 lbs/gal)** **Mixing Ratio with Activator and Reducer:** **Max VOC 3.5 with AU540* (by Volume)	TB543 Polyurethane Enamel AU540/AU544 Polyurethane Activator/Polyurethane Activator Low VOC RE6x0 Exempt Reducer (RE670/680/690) (RE670 Fast / 680 Medium / 690 Slow)	4 parts 1 part +0-25%
	Faster process of drying:	AA607 Accelerator (per sprayable gallon)	Up to 1 ounce
	**US National Rule:** If used as instructed, this product is designed to comply with the US National Rule 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.		
	**US National Rule (5.0 lbs./gal)** **Mixing Ratio with Activator" and Reducer:** **Max VOC 5.0* (by Volume)	TB543 Polyurethane Enamel AU540/AU544 Polyurethane Activator/Polyurethane Activator Low VOC RS6x0 Reducer Solvent (RS670/680/690) (RS670 Fast / 680 Medium / 690 Slow)	4 parts 1 part +0-25%
	Faster process of drying:	AA607 Accelerator (per sprayable gallon)	Up to 1 ounce

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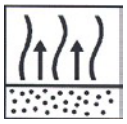
	**Viscosity:** 20 – 28 sec. (DIN4/68°F/20°C)		
	**Gun set up:** Gravity Feed Siphon Feed HVLP (Gravity Feed) Pressure Pot Airless / and with air support Atomizing Air Pressure	**Nozzle / Tip Size:** 1.5 – 1.8 mm 1.6 – 1.8 mm 1.3 – 1.5 mm 1.1 – 1.4 mm 013" - .017"	**Air Pressure:** 35-40 psi (2.5-2.8 bar) 35-45 psi (2.5-3.1 bar) 30 psi (2.0 bar) **Inlet Air** 35-40 psi (2.5-2.8 bar) 900 – 1200 psi (60-80 bar) 55-65 psi (3.8-4.5 bar)
	**Application:** **Recommended Film Thickness:**	**Option 1:** ½ coat – followed by 1 full wet coat 1.6 – 2.1mil DFT (40 – 50µm)	**Option 2:** 2 medium/full wet coats 2.1 – 2.7mil DFT (50 – 65µm)
	**Clean up:** (check the local regulations!)	RS6x0 Reducer Solvent or RE6x0 Exempt Reducer	
	**Flash between coats at 77°F/25°C:** **Before baking at 77°F/25°C:**	10 – 15 minutes or until previous coat is non stringing 10 minutes	
	**Air–dry at 77°F/25°C:** (DFT dependent)	**Tack Free:** 1 hour **To Tape:** 4 hours **To Recoat:** 16 hours (overnight)	
	Force–dry at 140 – 58°F: **(60°C – 70°C)**	30 minutes 140°F/60°C object temperature	
	**IR-Dry**	12 – 15 minutes The panel must not reach a temperature above 194°F/90°C.	
	**Use suitable respiratory protection (the use of fresh air supply respirator recommended).**		
	**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 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 Low 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 should serve only as a general guide. Valspar assumes no obligation or liability for use of 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.