

# Technical Data Sheet

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

www.valsparindustrialmix.com

TB550 Polyurethane Enamel 2.8 VOC High Gloss (Airless Application)

TB550-R / US

#### **Product Information**

#### **Product Description:**

TB550 Polyurethane Enamel 2.8 VOC High Gloss - 70% Binder and 30% Color Toner. A two-component, Polyurethane Enamel formulated to give outstanding gloss, depth, chemical resistance and durability. Specially developed for Industrial OEM and aftermarket repair industry. Air-dry and force dry capabilities. Also provides excellent UV protection. This product is recommended for use where 2.8 VOC is required.

Substrates: Properly prepared Steel and Aluminum substrates and 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 Coating: VIM Primer/existing finishes: P320 – 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 <u>www.valsparindustrialmix.com</u>)

**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)

**Additive:** (optional) AD500 Stabilizer, only for Airless-user to improve the metallic flake orientation.

#### **Physical Data:**

Date of issue: 4/2015 - Version: 3.0

RTS REGULATORY DATA		4:1 +0-25%		4:1		4:1 +25%		
		(National Rule)		(No Reduction)		(Exempt Reducer)		
		LBS/GAL	g/L	LBS/GAL	g/L	-	LBS/GAL	g/L
Actual VOC		5.0 Max.	600 Max.	2.8 Max.	340 Max.		2.55 Max.	306 Max.
Regulatory VOC (less water and exempt solvents)		5.0 Max.	600 Max.	2.8 Max.	340 Max.		2.8 Max.	340 Max.
Density		8 - 12	960 - 1440	8 - 12	960 - 1440		8 - 12	960 - 1440
		WT.%	VOL.%	WT.%	VOL.%		WT.%	VOL.%
Total Volatile Content		30 - 50	50 - 70	20 - 50	30 - 55		20 - 50	30 - 55
Water Content		0	0	0	0		0	0
Exempt Compound Content		0 - 10	0 - 10	0 - 10	0 - 10		10 - 30	10 - 25
Physical properties:								
Chemical base	Polyurethane		Coverage (sq ft - DFT)			Approx. 944sq ft / 1.0mil		
Density lbs/gal (kg/l)	8.36 lbs/gal (1.0 kg/L)		Gloss			High gloss 90GU/20°		
Volume solids (%)	58%		Color			Binder Transparent		
Weight Solids (%)	64%		Temperature Stability			Dry Heat up to 284°F/140°C		
Flash point	20°F (-7.0°C)		Processing temperature			50 – 104°F (+10°C - 40°C)		
Pot life / 77°F (+25°C)	Approx. 2 - 3 hours		Humidity			Until 80% R.H.		
Shelf life	Min. 24 month under normal storage conditions and unopened tins							



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### **Application Data**

Applica	ition 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: Galvanized: Abrasive blast:  VIM Primer/Existing finishes P320 – P360 Sweep blasting recommended 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.						
9	Mixing ratio with Color Toner: (Standard colors) (By Volume)	TB550 Polyurethane Enamel 2.8 VOC High Gloss CT Range of VIM Color Toners (For mixing formula's see Collision Core Color)			70 parts 30 parts		
	For Airless user: Add AD500 Stabilizer, to improve the metallic flake orientation for effect colors!						
	Mixing ratio with Stabilizer and Color Toner: (By Volume)	TB550 Polyurethane Ena AD500 Stabilizer CT Range of VIM Color	60 parts 10 parts 30 parts				
$\sim$	Mixing stick:						
	Use the mixing stick						
	Low VOC: If used as instructed, this product is designet to comply with Voatile Organic Compound (VOC) Standards in low-VOC jurisdictions, for Automobile Refinish Coatings. Confirm compliance with state and local air quality rules before use.  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.						
П	Mixing Ratio with Activator: (Standard Colors) (by Volume) or	TB550 PU Enamel + Color tonel AU540 Polyurethane Activator - AU544 Polyurethane Activator -	4 parts 1 part				
	Mixing Ratio with Activator: (Metallic colors) (by Volume)	TB550 PU Enamel + AU544 Polyurethane	AD500 Stabilizer +	4 parts 1 part			
	and with Reducer: (For USA 2.8 VOC)	ucer: PE670/690/690 Evernt Peducers for 2.9 V/OC			+0-25%		
	Faster process of drying:	AA600 Accelerator	+3-5%				
s	Viscosity: 20 – 26 sec. (DIN4/68°F/20°C)						
***	Gun set up: Gravity Feed Siphon Feed HVLP (Gravity Feed) Pressure Pot	Nozzle / Tip Size:       Air Pressure:         1.3 - 1.5 mm       35-40 psi (2.5-2.8 bar)         1.6 - 1.8 mm       35-45 psi (2.5-3.1 bar)         1.3 - 1.5 mm       30 psi (2.0 bar) Inlet Ai         1.1 - 1.4 mm       35-40 psi (2.5-2.8 bar)		oar) et Air			

0.009"" - 0.011"

Airless / and with air support Atomizing Air Pressure

Date of issue: 4/2015 - Version: 3.0

2500 – 3000 psi (until 200 bar)

55-65 psi (1.5-4.5 bar)



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	Application:	Option 1: ½ coat – followed by 1 full wet coat		Option 2: 2 medium/full wet coats		
- 'F	Recommended Film Thickness:	1.6 – 2.1mil DFT (25 – 50µm)		2.1 – 2.7mil DFT (50 – 80μm)		
	Clean up: (check the local regulations!)	RS6x0 Reducer Solvent or RE6x0 Exempt Reducer				
\ <sub>1</sub> \ <sub>1</sub> \	Flash between coats at 77°F/25°C:	Option 1: N/A		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)  Force-dry at 140 – 158°F: (60°C – 70°C)		Tack Free: To Tape: To Recoat:	2 hour 6 hours 16 hours (overnight)			
		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).					
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.				



**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 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.