

INDUSTRIAL MIX

Technical Data Sheet

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

www.valsparindustrialmix.com

TW518 Polyurethane High Opacity Binder High Gloss – White 8:1

TW518 / US

Product Information

Product Description:

TW518 Polyurethane High Opacity Binder High Gloss – White 8:1 with 95% white Binder - 5% Color Toner has to be added or without Color Toner as direct Topcoat. TW518 is a two component, polyurethane topcoat direct to steel offering excellent corrosion protection with a high gloss finish. This white Binder contains the highest possible amount of white pigments for excellent coverage and fast operation, reducing production times & product consumption. TW518 is especially developed for Industrial OEM and aftermarket repair industry with excellent air-dry and force dry capabilities. All Toners are chromate and lead free and provides excellent UV protection.

Substrates:

Properly prepared Steel 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: Not RecommendedDry Sanding Coating:VIM Primer/existing finishes: P280 – P360Steel 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 <u>www.valsparindustrialmix.com</u>)

RTS REGULATORY DATA		8:1 +0-35%		8:1 +0-35%		8:1 +	8:1 +0-35%	
		(Reducer Line)		(Exempt Reducer Line)			(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.	2.61 Max.	314 Max	. 2.33 Max.	280 Max.	
Regulatory VOC (less water and exempt solvents)		5.0 Max.	600 Max.	2.8 Max.	340 Max	. 2.8 Max.	340 Max.	
Density		11– 13	1350 - 1500	11 – 13	1350 – 1500	11 – 13	1400 – 1550	
		WT.%	VOL.%	WT.%	VOL.%	WT.%	VOL.%	
Total Volatile Content		21.2 – 31.7	36.0 – 48.8	21.2 – 35.72	36.0 – 48.8	21.69 – 36.01	35.4 – 48.31	
Water Content		0	0	0	0	0	0	
Exempt Compound Content		0 – 5	0 – 5	0 – 25	0 – 25	0 – 25	0 – 25	
Physical properties:						·		
Chemical base	Polyurethane		Coverage (sq ft - DFT)		Ар	Approx. 795sq ft / 1.0mil		
Density lbs/gal (kg/l)	12.88 lbs/gal (1.55	12.88 lbs/gal (1.55 kg/L)		Gloss		High gloss >90 GU/60° +/- 10GU		
Volume solids (%)	65%	65%		Color			White	
Weight Solids (%)	80%	80%		Temperature Stability			Dry Heat up to 284°F/140°C	
Flash point	82°F (28°C)	82°F (28°C)		Processing temperature			50 – 104°F (+10°C - 40°C)	
Pot life / 77°F (+25°C)	Approx. 1.5 – 2.5 h	Approx. 1.5 – 2.5 hours		Humidity			Until 85% R.H.	
Shelf life		Min. 24 month under normal storage conditions and unopened tins						

Physical Data:



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Application Data

	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				
	-	Dry sanding substrate: Dry sanding coating: Galvanized: Abrasive blast:	lot recommended 7 to 2mil (20-50µm)			
	Before using: The product must be shaken before Reducer have been added.	adding the Color Toners	and thoroughly stirred directly aft	er the Activator and		
R		TW518 Polyurethane Hig CT Range of VIM Color T (For mixing formula's see	95 parts 5 parts			
	Binder direct as Topcoat:	TW518 Polyurethane Hig Without Toner (mixing rat	h Opacity Binder	100 parts		
	Mixing stick: Use the mixing stick M4 8:1 (74-204=8:1/10:1) or M6 (74-206 standard) / M7 (74-207 large) Universal cm-stick					
F	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	TW518 Polyurethane High Opacity Binder AU544 Polyurethane Activator Low VOC RE6x0 Exempt Reducer (RE670/680/690) (RE670 Fast / 680 Medium / 690 Slow)		8 parts 1 part +0-35%		
	(by Volume) 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	TW518 Polyurethane H AU540/AU544 Polyure Activator Low VOC RE6x0 Exempt Reduc (RE670 Fast / 680 Medium /	ethane Activator/Polyurethane er (RE670/680/690)	8 parts 1 part +0-35%		
	(by Volume) Faster process of drying:	AA600 Accelerator		Max. 3%		
	<u>US National Rule</u> : 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)	TW518 Polyurethane H AU540/AU544 Polyure Activator Low VOC RS6x0 Reducer Solve (RS670 Fast / 680 Medium /	thane Activator/Polyurethane nt (RS670/680/690)	8 parts 1 part +0-35%		
	Faster process of drying:	AA600 Accelerator		Max. 3%		



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S	Viscosity: 20 – 26 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: 1.4 – 1.8 mm 1.6 – 1.8 mm 1.3 – 1.5 mm 1.0 – 1.5 mm Not Recommended			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) 55-65 psi (3.8-4.5 bar)		
	Application:	Option 1: ¹ / ₂ coat – followed by 1 full wet coat			Option 2: 2 full wet coats		
	Recommended Film Thickness: 1.6 – 2.4mi		il DFT (40 – 60µn	n)	2.4 – 3.2mil DFT (60 – 80µm)		
	Clean up: (check the local regulations!)		RS6x0 Reducer Solvent or RE6x0 Exempt Reducer				
/t/t/	Flash between coats at 77°F/25°C:		5 – 10 minutes or until previous coat is non stringing				
	Before baking at 77°F/25°C:		10 minutes				
	Air-dry at 77°F/25°C: (DFT dependent)		Tack Free:2 hoursTo Tape:8 hours				
			To Recoat:	16 hours (overnight)		
	Force–dry at 140 – 158°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 protectior	n (the use of	fresh air supply	/ respirator	recommended).		
S	<u>Polish:</u>		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.				
		ed by the trac	le associations in t	he Chemical	and handling of coating materials are to be Industry. For Health and Safety information alsparindustrialmix.com.		
	writing given on the use of our products resulting from the bill of sale. Every cal according to the present state of knowled customer from autonomously checking w	to customers re is taken to dge in science hether our pro	or users are not b ensure that the te and our experience ducts are suitable f	inding and do echnical inform ce. These reco or the intend p	nal use. All recommendations in words and not give reasons for secondary obligations nation provided is accurate and up to date ommendations do not, however, exempt the purpose. The durability of the coating system rms of delivery and payment are applicable.		
	With the publication of this Technical Data	a Sheet all pre	vious versions rega	rding this proc	duct are no longer valid.		

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 OF 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.