

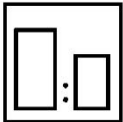


U500 Single Stage

FOR PROFESSIONAL USE ONLY

Description

U500 Single Stage is two-component, acrylic urethane designed for original equipment and repairs for commercial vehicles. U500 Single Stage is a cost-effective durable finish with good color capability that is simple to mix and easy to apply. U500 Single Stage is HAPs compliant with a ready to spray VOC < 5.0 lbs/gal.



3 U500 Single Stage RM
1 U500 Hardener



Use AkzoNobel Measuring Stick

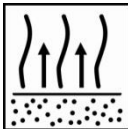
106



Spray gun setup:	Check gun manufacture specification		
HVLP – Pressure	1.0 – 1.2mm	Max 10psi (cap)	12 – 16 oz/min
HVLP – Gravity Feed	1.4 – 1.5mm	Max 10psi (cap)	



Apply two (2) to three (3) single flowing coats.



Between coats
10 - 15 min at 70°F (21°C)

Before curing
5 - 10 minutes at 70°F (21°C)



Dust Free
Dry to handle

70°F (21°C)	140°F (60°C)
35 min	N.A.
12 hrs	45 min



Use suitable respiratory protection
AkzoNobel recommends the use of a fresh air supply respirator

Read complete TDS for detailed product information





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Suitable Surfaces

Existing finishes, degreased and sanded with #P320 to #P400 grit paper dry or #P600 to #P800	
2K Surfacer	E350 Epoxy Primer
2K100 Surfacer	E380/E381 Epoxy Primer
460 Tintable Sealer	PAP722
460 Flex Tintable Sealer	

Product and Additives

Product U500 Single Stage RM

Hardener U500 Hardener

998 Accelerator
997 Enhancer

Accelerates dry times
Pot life extender. Slows flash off, allowing better melt-in a high temperatures
For flexible substrate application
Low gloss additive
Special solvent to dissolve fade out areas of spot repairs

Additives LV Flex
F100 Flattening Agent
U-TECH SRA Reducer

Basic Raw Material

U500 Single Stage RM
U500 Hardener

Acrylic urethane
Polyisocyanate resins

Product Characteristics

WPG (RM color)	8.0 – 9.2 lbs/gal	Gloss	High
Volume Solids (RTS)	40% +/- 2%	Color	Solid, metallic and pearl
Theoretical Coverage	642 ft ² /gal @ 1mil – 100%TE	Pot Life (no additives)	4 hr @ 70°F (21°C)
		Pot Life w/ 998 Accel	1 hr @ 70°F (21°C)
		Pot Life w/ 997 Enhancer	5 hrs @ 70°F (21°C)





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Mixing

High Gloss

- 3 U500 Single Stage RM
- 1 U500 Hardener

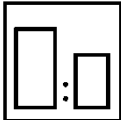
Use AkzoNobel Measuring Stick #106 for 3:1 ratio

Low Gloss

Mix 100 part by weight Ready Mix Color with F100 Flattening Agent according to the table below

- 5 U500 Single Stage RM Low Gloss with F100
- 1 U500 Hardener

Use AkzoNobel Measuring Stick #107 for 5:1 ratio



Gloss Range	Amount of RM Color by weight	Amount of F100 by weight
Antique (70 – 80)	100	10 – 30
Eggshell (50 – 60)	100	40 – 60
Semi gloss (40 – 50)	100	60 – 80
Matte (20 – 30)	100	110 – 150
Flat (10 - 20)	100	150 - 220

High amount of F100 Flattening Agent may cause a drop in coverage. Amount of F100 may vary from color to color

Flexed Parts

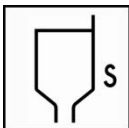
When spraying U500 over flexible substrates that have been primed with a U-Tech primer that has been flexed use the LV Flex Additive at the following ratio by volume

- 100 U500 Single Stage RM
- 15 LV Flex Additive

Then activate the flexed U500 Single Stage to the following ratio by volume

- 3 U500 Single Stage RM – Flexed
- 1 U500 Hardener

Viscosity



U500 Single Stage RM

25 - 35 sec

EZ ZAHN #2 at 70°F (21°C)

Viscosities are reported as Ready to Spray

Spray gun set-up / application pressure



RP – Pressure Feed	0.8 – 1.4mm	30 – 36psi	12 – 16 oz/min
RP – Gravity Feed	1.2 – 1.4mm	30 – 35psi	
HVLP – Pressure	1.0 – 1.2mm	Max 10psi (cap)	12 – 16 oz/min
HVLP – Gravity Feed	1.4 – 1.5mm	Max 10psi (cap)	



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Application

Solids - Apply two (2) to three (3) single flowing coats. Follow recommended flash time between coats.

Metallics - Apply two single flowing coats. Follow the recommended flash time between coats. Each coat of U500 Single Stage should be applied with sufficient flow, but should not be applied too heavily or excessive mottling will occur. Once hiding has been achieved an orientation coat may be applied if required. Allow a short flash of 5 - 10 minutes @ 70°F (21°C) then even out the metallic pattern with a final mist coat by lowering air pressure 3 - 5 psi and hold the spray gun at a 45° angle to the panel with increased distance of about 10 - 15 inches. Adjust the material flow from the spray gun by means of trigger control. Do not make this coat too wet. A light mist coat lightens the color. A heavy or wet mist coat will make the color darker. Proper application greatly affects the final color appearance.

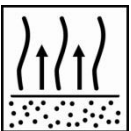


Note: U500 Single Stage will continue to flow and level during flash and bake.

Integrated Clearcoat (solid colors only): Apply two (2) to three (3) coats of U500 Single Stage for coverage. Allow single stage to flash 10 – 15 minutes. Activate MS Clearcoat (see MS Clearcoat TDS). Then integrate RTS MS Clearcoat with U500 Single Stage RM color 1:1 by volume. Apply final wet coat.

Clearcoat: For added durability one (1) wet coat of MS Clear may be applied over U500 Single Stage. Allow single stage to flash for at least one hour prior to clear coating. Recommend using 998 accelerator in U500 Single Stage when clear coating.

Flash off



10 – 15 minutes at 70°F (21°C) between coats
5 – 10 minutes at 70°F (21°C) final flash before bake

Dry times



	No Additives		1oz 998 Accelerator per gal		2oz 997 Enhancer per gal	
	70°F (21°C)	140°F (60°C)	70°F (21°C)	140°F (60°C)	70°F (21°C)	140°F (60°C)
Dust Free	35 min	N.A.	20 min	N.A.	45 min	N.A.
Dry to handle	12 hrs	45 min	80 min	35 min	12 hrs	55 min

Note: 998 will decrease pot life. Extreme temperatures may require higher amounts of 997

Dry Film Thickness





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1.8 – 2.2 mils
Some colors require higher DFT to achieve opacity

Recoatability

U500 Single Stage can be recoated with itself at any stage or clear coated after 1 hour flash at 70°F (21°C). Sanding is necessary after 24 hours.

Polishability



Dust and minor damage can be polished out after recommended dry times. If baking, allow a cool down period of the object to ambient temperature.

- Carefully de-nib out dust particles with #1500 then #2000 grit paper. Clean and dry the surface
- Mechanically polish area using quality rubbing compounds followed by polishing glaze
- For extensive color sanding and buffing of solid colors, it is necessary to apply one (1) or two (2) MS Clear

Cleaning of equipment

Clean equipment with extra strong cleaning solvents

VOC

U500 Single Stage RM < 5.0 lb/gal < 600 g/l

VOC is ready to spray at a mix ratio of 3:1

Product Storage and Shelf Life

Store products unopened and used products with closed lids. Store products between 70°F-95°F (21°C-35°C). Optimal storage temperature is 77°F (25°C). Avoid extreme temperature fluctuation when storing.

Intermix Tints	2 years
U500 Binder	2 years
U500 Hardener	1 year
998 Accelerator	1 year
997 Enhancer	1 year
LV Flex Additive	1 year

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Topcoats

U500 Single Stage

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IMPORTANT NOTE The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advices given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

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Head Office

AkzoNobel Car Refinishes Inc. 3587 Parkway Lane Norcross, GA 30092, USA. www.utech.us