

Programmed System Technique

North America

Programmed System Technique (PST)

Basecoat

09/20/2021

U-BASE Basecoat

U-BASE Basecoat is two-component polyurethane designed for original equipment and repairs for commercial vehicles. U-BASE Basecoat provides superior performance that is simple to mix and easy to apply. The ready to spray VOC is < 3.5 lbs/gal and is HAPs compliant.



Safety Considerations

- Use suitable personal protection.
- When exposed to paint or solvents AkzoNobel recommends the use of a fresh air supply respirator.



Mix

By Volume

- 3 Parts U-BASE Basecoat RM
- 1 Part U280/U350 Hardener
- 1 Part R300 Reducer (Fast or Slow)
- Other mixing ratios are available. Review the complete TDS for options.



Spray-Gun Set-Up

- 1.3 1.5mm HVLP Gravity
- 1.0 1.2mm HVLP Pressure Feed

Application Air Pressure:

- HVLP 10 psi (<0.7 bar) at cap maximum
- HVLP 10 psi (<0.7 bar) at cap maximum
 - o 12 16 oz. / minute



Application

- Apply on (1) wet coat followed by a cross coat (1/2) or until hiding is achieved
 - For metallic colors, an orientation coat may be desired.



Flash Between Coats at 70°F (21°C)

3 – 5 minutes.

Flash at 70°F (21°C) Before Clearcoat

- Solid Colors 30 minutes
- Effect Colors 45 minutes



Dry to Tape at 70°F (21°C) - Using SuperTop Plus

- Solid Colors 30 minutes
- Effect Colors 45 minutes
 - At 2 oz. per RTS gallon .Dependent on film weight and air flow.



Maximum Recoat

Maximum recoat window – 24 hours.

Read the complete TDS and the product Safety Data Sheet (SDS) for detailed product information.



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U-BASE Basecoat

Description

U-BASE Basecoat is two-component polyurethane designed for original equipment and repairs for commercial vehicles. U-BASE Basecoat provides superior performance that is simple to mix and easy to apply. The ready to spray VOC is < 3.5 lbs/gal and is HAPs compliant.

Suitable Surfaces



Existing finishes, degreased and sanded with #P320 to #P400 grit paper dry or #P600 to #P800

2KHB Surfacer

2K20 Surfacer

2K100 Surfacer

460 Tintable Sealer

460 Flex Tintable Sealer

E250 DTM Epoxy Primer

E380/E381 Epoxy Primer

Product and Additives

Product U-BASE Basecoat

Dry Effects Pigments

Dry Effects Rheology Modifier

Hardener U280 / U350 Hardener Reducers

R300 Reducer Fast (60°F (16°C) - 90°F (33°C))

R300 Reducer Slow (> 90°F (33°C))

Additives SuperTop Plus (accelerates dry times for taping applications)

U-Tech Metallic Wet Blend (assists metallic spot repair)

*other sizes available - see price list for complete size assortment

Mixed to specification

Mixed to specification

Item #583915

Item #484508

Item #527817

Item #527818

Item #397479

Item #531335

Basic Raw Material



U-BASE Basecoat RM U280 / U350 Hardener R300 Reducers (Fast / Slow)

Polyol resins

Polyisocyanate resins

Solvents

Product Characteristics

WPG (RM color) Volume Solids (RTS)

Theoretical Coverage

8.1 - 10.2 lbs/gal

642 ft²/gal @ 1mil - 100%TE

40% +/- 2%

Gloss

Color

Pot Life (no additives)

Pot Life w/ SuperTop Plus

High

Solid, metallic and pearl 1.5 hrs @ 70°F (21°C)

45-75 min @ 70°F (21°C)



U-BASE Basecoat

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Mixing Color Formulas and Products



Formulas

- Formulas are available to match the most popular OEM colors. These are available in MixitPro/Color Manager, or MIXIT (online).
- For easy mixing of color formulas or products, final mixing including hardening, reduction and the addition of additives can be done through MIXIT and the mixing scale.

AkzoNobel Dry Effects

To mix color formulas containing Dry Effects components, add each item by weight using the scale according to the formula shown in MIXIT. Once complete, tightly seal the container and blend the components using a paint shaker. Shake the mixture for 15 minutes or until color uniformity is achieved.

Mixing



Mix 3

U-BASE Basecoat RM

1

U280 /U350 Hardener

R300 Reducer (Fast or Slow)

Note: R300 Reducer Fast and Slow can be blended together for medium speed

For easy and accurate mixing, use U-Tech measuring stick #106 For Taping Applications add 2oz per RTS gallon of SuperTop Plus

Viscosity



U-BASE Basecoat RM

18 - 24 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 HVLP - Pressure Feed 1.2 - 1.4mm

30 - 35psi

12 - 16 oz/min

1.0 - 1.2mm

HVLP - Gravity Feed

1.2 - 1.4mm

Max 10psi (cap) Max 10psi (cap)

Application



Solids - Apply one (1) wet coat followed by a cross coat (1/2) or until hiding is achieved. Follow recommended flash time between coats.

Metallics - Apply one (1) wet coat followed by a cross coat (1/2) or until hiding is achieved. Follow recommended flash time between coats. An orientation coat can be applied after flashing the final coat for 1 minute.

Flash off



45 min (Effects)

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3 - 5 minutes at 70°F (21°C) between coats

30 min (Solid Colors) - 45 min (Effect Colors) minutes at 70°F (21°C) flash before clearcoat

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 No Additives
 2 oz/gal SuperTop Plus

 70°F (21°C)
 per RTS gal 70°F (21°C)

 Dry to clear coat
 30 min (Solids)
 15 min (Solids)

 45 min (Effects)
 30 min (Effects)

 Dry to tape
 30 min (Solids)

Note: SuperTop Plus will decrease pot life

Dry Film Thickness



1.5 - 2.0 mils

Some colors require higher DFT to achieve opacity

Recoatability



U-BASE Basecoat can be recoated with itself or clear coated with 4.0 Select Clear or HS21 Plus Clear after 30 min (Solid Colors) – 45 min (Effect Colors) minutes at 70°F (21°C). Sanding is necessary after 24 hours.

Cleaning of equipment



Clean equipment with extra strong cleaning solvents.

VOC



U-BASE Basecoat RM

< 3.5 lb/gal

< 420 g/l

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



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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

 U-BASE Binder
 2 years

 Dry Effects Pigments
 10 years

 Dry Effects Rheology Modifier
 2 years

 U280 / U350 Hardener
 1 year

 R300 Reducer Fast, Slow
 2 years

 SuperTop Plus
 1 year

FOR PROFESSIONAL USE WITH SUITABLE HSE EQUIPMENT

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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