

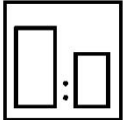


HS21 Clearcoat

FOR PROFESSIONAL USE ONLY

Description

HS21 Clearcoat is a low VOC, two-component high-solids polyurethane clearcoat. Provides a high gloss finish with one wet coat plus cross coat or two full wet coats. Flow and leveling is achieved with minimum effort. A compliant VOC clearcoat with excellent sprayability properties. The HS21 Clearcoat can be used as a final clearcoat or as an integrated clearcoat with the U280 Single Stage. The ready to spray VOC is 2.1 lbs/gal.



4 HS21 Clearcoat
1 HS21 Activator

Use AkzoNobel Measuring Stick



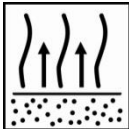
109



| Spray gun setup: | | Check gun manufacture specification | |
|---------------------|-------------|-------------------------------------|----------------|
| RP – Pressure Feed | 0.8 – 1.4mm | 30 – 36psi | 12 – 16 oz/min |
| RP – Gravity Feed | 1.3 – 1.4mm | 30 – 35psi | |
| HVLP – Pressure | 1.0 – 1.2mm | Max 10psi (caps) | 12 – 16 oz/min |
| HVLP – Gravity Feed | 1.4 – 1.5mm | Max 10psi (caps) | |



Apply one (1) wet coat followed by a cross coat (½) or apply two (2) full wet coats



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

Final flash before bake
10 – 15 minutes at 70°F (21°C)



Dust free
Dry to handle

70°F (21°C)
45 min
10 hrs

140°F (60°C)
N.A.
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

| | |
|-------------------|---------------|
| U280 Single Stage | 2.8 HSP |
| U350 Single Stage | Polybase Plus |

Existing finishes in the case of spot or blend repair, degrease and sand with #P800 to #P1000 DA Properly degrease substrate prior to sanding with Autoclean surface cleaner and R859 wax and grease remover.

Product and Additives

| | | |
|------------------|-----------------------|---|
| Product | HS21 Clearcoat | |
| Hardener | HS21 Activator | |
| Additives | 998 Accelerator | Accelerates dry times |
| | 997 Enhancer | Pot life extender. Slows flash off, allowing better melt-in a high temperatures |
| | LV Flex Additive | For flexible substrate application |
| | T890 Flattening Agent | Low gloss additive |
| | U-TECH SRA Reducer | Special solvent to dissolve fade out areas of spot repairs |

Basic Raw Material

| | |
|------------------|----------------------------------|
| HS21 Clearcoat | Hydroxyl acrylic resins |
| HS21 Activator | Polyisocyanate resin and solvent |
| LV Flex Additive | Special polyester resins |

Product Characteristics

| | | | |
|----------------------|--|------------------------------|-----------------------|
| WPG (a-component) | 8.20 +/- 0.2 lbs/gal | Gloss | High |
| Volume Solids (RTS) | 45 +/-2 % | Color | Clear |
| Theoretical Coverage | 720 ft ² /gal @ 1mil – 100%TE | Pot Life (no additives) | 1 ½ hrs @ 70°F (21°C) |
| | | Pot Life (with Supertop) | 1 hr @ 70°F (21°C) |
| | | Pot Life (with 997 Enhancer) | 2 ½ hrs @ 70°F (21°C) |





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Mixing

Standard mix ratio (by volume)

- 4 HS21 Clearcoat
- 1 HS21 Activator

Flexible Plastic Parts mix ratio (by volume)

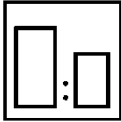
- 100 HS21 Clearcoat
- 15 LV Flex Additive

Then mix (by volume)

- 4 HS21 Clearcoat (Flexed)
- 1 HS21 Activator

Add a maximum of ½ oz of Supertop Accelerator per RTS gallon or 3 to 4 grams per RTS quart to speed up cure times

Add a maximum of 2oz of 997 Enhancer per RTS gallon or 12 – 14 grams per RTS quart to extend pot life and improve overspray melt-in



HS21 Clearcoat Flexed should be used in combination with flexed primers, sealers and topcoats

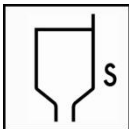
Note: Raw flexible plastic body parts require PAP 722 Clear adhesion promoter

T890 Flattening agent can be used to reduce the gloss units (GU) of the HS21 Clearcoat. Add T890 after activating the HS21 Clearcoat using the below table to achieve the desired gloss level. A spray out should be done first to determine desired gloss.

| Gloss Level | % of T890 Flattening |
|------------------------|-------------------------|
| Antique (70 – 80 gu) | 10% |
| Eggshell (50 - 60 gu) | 20% |
| Semi gloss (40 -50 gu) | 30% |
| Matte (20 – 30 gu) | 40% |
| Flat (10 – 20 gu) | 50% |

Use AkzoNobel Measuring Stick #109. Mix thoroughly.

Viscosity



HS21 Clearcoat

18 – 24 sec
11 – 15 sec

EZ ZAHN #2 at 70°F (21°C)
DIN #4 at 70°F (21°C)

Viscosities are reported as Ready to Spray



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Spray gun set-up / application pressure



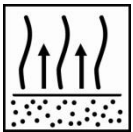
| | | | |
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Application



Apply one (1) wet coat followed by a cross coat (½) or apply two (2) full wet coats

Flash off



10 - 15 minutes at 70°F (21°C) between coats

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

Dry times



| | No Additives | | ½ oz Supertop 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 | 45 min | N.A. | 5 min | N.A. | 1 hr | N.A. |
| Dry to handle | 10 hrs | 45 min | 4 hrs | 25 min | 10 hrs | 45 min |

Note: 998 will decrease pot life. Extreme temperatures may require higher amounts of 997. Using LV Flex will extend curing times and effect the sandability of HS21 Clearcoat

Dry Film Thickness

2.0 – 2.5 mils

Apply 1.2 - 1.4 mils per coat





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Polishing



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

- Carefully de-nib out dust particles with #P1500 then #P2000 grit paper. Clean and dry the surface to be polished
- Mechanically polish area using quality rubbing compounds followed by polishing glaze

Recoatability

HS21 Clearcoat is recoatable with itself after full drying cycle. Sanding becomes necessary after 24 hours.

Striping or lettering on HS21 Clearcoat must be applied within 24 hours for good adhesion. Sanding becomes necessary after 24 hours.

Decals can be applied after 48 hours 70°F (21°C)

Cleaning of equipment

Clean equipment with extra strong cleaning solvents

VOC

| | | |
|----------------|------------|---------|
| HS21 Clearcoat | 2.1 lb/gal | 250 g/l |
|----------------|------------|---------|

VOC is ready to spray at a mix ratio of 4:1

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.

| | |
|-----------------------|----------|
| HS21 Clearcoat | 2 years |
| HS21 Activator | 1 year |
| Supertop Accelerator | 6 months |
| 997 Enhancer | 1 year |
| LV Flex Additive | 1 year |
| T890 Flattening Agent | 2 years |



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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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