

North America

Programmed System Technique (PST)

Clearcoat

01/27/2022

## 4.0 Select Clearcoat

4.0 Select Clearcoat is a two-component polyurethane clearcoat. Provides a high gloss finish in two full wet coats. This product is designed for ease of buffing, even after aggressive color sanding or several days of cure. The ready to spray VOC is 4.0 lb/gal.



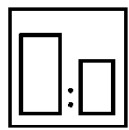
### Safety Considerations

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



### Surface Preparation

- U-Base Basecoat
  - Wait until the indicated flash time before clearcoat application.
- Existing Clearcoat
  - Thoroughly sanded with P1000 dry or a gray scuff pad.



BY VOLUME  
STICK #109

### Mix

4  
1

### By Volume

- 4.0 Select Clearcoat
- 4.0 Select Activator - Fast, Medium or Slow



### Spray-Gun Set-Up:

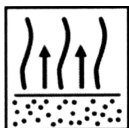
Refer to gun manufacturer specifications

- |                        |               |                   |                  |
|------------------------|---------------|-------------------|------------------|
| • RP – Pressure Feed   | • 0.8 – 1.4mm | • 30 – 36psi      | • 12 – 16 oz/min |
| • RP – Gravity Feed    | • 1.3 – 1.4mm | • 30 – 35psi      |                  |
| • HVLP – Pressure Feed | • 1.0 – 1.2mm | • Max 10psi (cap) | • 12 – 16 oz/min |
| • HVLP – Gravity Feed  | • 1.4 – 1.5mm | • Max 10psi (cap) |                  |



### Application

- 2 – 3 x 1 Coats (2 to 3 wet flowing coats)



### Flash Between Coats at 70°F (21°C)

- 5 minutes

### Flash at 70°F (21°C) Before Force Drying

- 5 minutes



### Air Drying at 70°F (21°C)

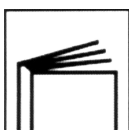
- Dry to handle in 15 hours

*Dependent on film weight and air flow.*

### Force Drying at 140°F (60°C)

- Dry to handle in 45 minutes

*Allow to cool down to ambient temperature.*



### Recoatable With:

- 4.0 Select Clearcoat may be recoated with itself after a full drying cycle. Sanding becomes necessary after 24 hours.

# 4.0 Select Clearcoat

## Description

4.0 Select Clearcoat is a two-component polyurethane clearcoat. Provides a high gloss finish in two full wet coats. This product is designed for ease of buffing, even after aggressive color sanding or several days of cure. The ready to spray VOC is 4.0 lb/gal.

## Suitable Substrates



- U-TECH U-Base Basecoat – Wait until the indicated flash time before clearcoat application.
  - Existing Finishes – In the case of spot or blend repair, degrease and sand with #P800 to #P1000 dry.
- 
- Properly degrease substrate prior to sanding with either AutoPrep Ultra Prep or R859 wax and grease remover.

## Products and Additives

|                  |                               |                 |                                    |
|------------------|-------------------------------|-----------------|------------------------------------|
| <b>Product</b>   | • 4.0 Select Clearcoat        | – Item # 399115 |                                    |
| <b>Hardeners</b> | • 4.0 Select Fast Activator   | – Item # 399097 | – Up to 85°F (30°C)                |
|                  | • 4.0 Select Medium Activator | – Item # 399098 | – 70°F (21°C) - 85°F (30°C)        |
|                  | • 4.0 Select Slow Activator   | – Item # 399099 | – 80°F (27°C) - 95°F (35°C)        |
| <b>Additives</b> | • 997 Enhancer                | – Item # 398679 | – Extends flash times and pot-life |
|                  | • 998 Accelerator             | – Item # 483670 | – Accelerates dry times            |
|                  | • T-890 Flattening Agent      | – Item # 399084 | – Used to achieve lower gloss      |
|                  | • LV Flex Additive            | – Item # 398767 | – For flexible substrates          |
|                  | • B91 Reducer SRA             | – Item # 510324 | – Special solvent for spot repairs |

- SDS and TDS for products available online at – <http://my.anaac.net/>

## Basic Raw Materials

|                |  |                                    |
|----------------|--|------------------------------------|
| <b>Product</b> | • 4.0 Select Clearcoat                       | – Hydroxyl acrylic resins          |
|                | • 4.0 Select Activator Fast, Medium and Slow | – Polyisocyanate resin and solvent |
|                | • LV Flex Additive                           | – Special polyester resins         |

## Substrate Preparation



### Pre-Cleaning

- If needed, pre-wash the repair with warm soap and water. Rinse completely with clean water.
- Clean with R859 Surface Cleaner, AutoPrep Ultra-Prep (VOC compliant) or Anti-Static surface cleaners.

# 4.0 Select Clearcoat



### Sanding Preparation

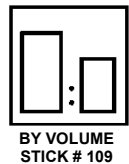
- Existing Finishes
- P800 to P1000 Dry



### Surface Cleaning – Prior to Paint Application

- Clean with R859 Surface Cleaner, AutoPrep Ultra-Prep (VOC compliant), Anti-Static or OTO Quick surface cleaners.

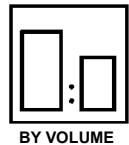
## Mixing



**Mix**  
4  
1

### Standard Mix

- 4.0 Select Clearcoat
- 4.0 Select Activator – Fast, Medium or Slow



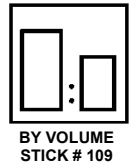
### Mix-Step 1

100  
15

### Flexed Mix

- 4.0 Select Clearcoat
- LV Flex Additive

✓ **Stir this mixture well, THEN:**



### Mix-Step 2

4  
1

- 4.0 Select Clearcoat / LV Flex Additive Mixture (from Step 1)
- 4.0 Select Activator – Fast, Medium or Slow

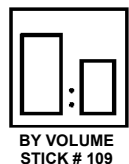
- ✓ 4.0 Select Clear Flexed should be used in combination with flexed primers, sealers and topcoats



**Mix**  
4  
1  
+

### Accelerated Mix

- 4.0 Select Clearcoat
- 4.0 Select Activator – Fast, Medium or Slow
- Add a maximum of ½ oz of 998 Accelerator per RTS gallon or 3 – 4 grams per RTS quart



**Mix**  
4  
1

### Flattened Clearcoat Mix – Step 1

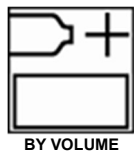
- 4.0 Select Clearcoat
- 4.0 Select Activator – Fast, Medium or Slow

✓ **Stir this mixture well**

**Then, Add** – Step 2

- 10% - 50%** (Refer to Table) • T890 Flattening Agent (by volume) to the ready to spray clearcoat mixture from Step 1, using the following table as a guide:

# 4.0 Select Clearcoat



| Gloss Level              | % of T890 |
|--------------------------|-----------|
| • 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%     |

✓ A sprayout should be made to evaluate the gloss level needed.

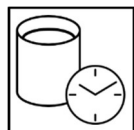
## Viscosity – Ready to Spray



**14–20  
Seconds**

Measured with a DIN #4 viscosity cup at 70°F (21°C)

## Pot-Life When Mixed



### 4.0 Select Clearcoat at 70°F (21°C)

- Fast Activator
- Medium Activator
- Slow Activator

### No Additives

- 2 hours
- 3 hours
- 3 hours

### 998 Accelerator

- 1 hour
- 1.5 hours
- 2 hours

✓ **Extended Pot-Life:** The pot-life of 4.0 Select Clearcoat may be extended to a maximum of 4 hours (@ 70°F (21°C)) by preparing a flexed mixture per TDS using 4.0 Select Clear Activator Slow and adding 2 ounces of U-TECH 997 Enhancer per ready to spray gallon.

## Spray Gun Set-Up



Consult spray gun manufacturer instructions for gun pressure specifications.

| Spray Gun          | Fluid Tip    | Application Pressure                         |
|--------------------|--------------|--|
| RP Pressure Feed   | 0.8 – 1.4 mm | 12 – 16 oz/min at 30 – 36 psi                |
| RP Gravity Feed    | 1.3 – 1.4 mm | 30 – 35 psi                                  |
| HVLP Pressure Feed | 1.0 – 1.2 mm | 12 – 16 oz/min at <10 psi (0.68 bar) at cap. |
| HVLP Gravity Feed  | 1.4 – 1.5 mm | <10 psi (0.68 bar) at cap.                   |

# 4.0 Select Clearcoat

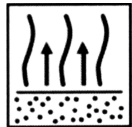
## Application



### Application

- Apply two (2) to three (3) wet flowing coats

## Flash Drying



### Flash Between Coats at 70°F (21°C)

- 5 minutes

### Flash at 70°F (21°C) Before Force Drying

- 5 minutes

- Flash time will be dependent on ambient temperature, applied paint wetness/thickness and available air-flow.

## Drying / Curing Time



4.0 Select  
Activator Fast

Dust Free  
Dry to handle

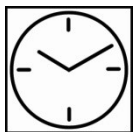
| No Additives   |                 | ½ oz 998<br>Accelerator per gal |                 |
|----------------|-----------------|---------------------------------|-----------------|
| 70°F<br>(21°C) | 140°F<br>(60°C) | 70°F<br>(21°C)                  | 140°F<br>(60°C) |
| 1 hr           | N.A.            | 8 min                           | N.A.            |
| 8 hrs          | 25 min          | 4 hrs                           | 15 min          |



4.0 Select  
Activator Med

Dust Free  
Dry to handle

| No Additives   |                 | ½ oz 998<br>Accelerator per gal |                 |
|----------------|-----------------|---------------------------------|-----------------|
| 70°F<br>(21°C) | 140°F<br>(60°C) | 70°F<br>(21°C)                  | 140°F<br>(60°C) |
| 1 ½ hrs        | N.A.            | 12 min                          | N.A.            |
| 12 hrs         | 30 min          | 6 hrs                           | 20 min          |



4.0 Select  
Activator Slow

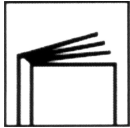
Dust Free  
Dry to handle

| No Additives   |                 | ½ oz 998<br>Accelerator per gal |                 |
|----------------|-----------------|---------------------------------|-----------------|
| 70°F<br>(21°C) | 140°F<br>(60°C) | 70°F<br>(21°C)                  | 140°F<br>(60°C) |
| 2 hrs          | N.A.            | 20 min                          | N.A.            |
| 16 hrs         | 35 min          | 8 hrs                           | 25 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 4.0 Select Clearcoat

# 4.0 Select Clearcoat

## Recoating



- 4.0 Select Clearcoat is recoatable with itself after full drying cycle. Sanding becomes necessary after 24 hours.

## Decals and Lettering



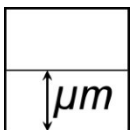
- Decals and adhesive stripes can be applied after 48 hours at 70°F (21°C).
- Hand painted striping or lettering must be applied within 24 hours for good adhesion. After 24 hours, scuff with a grey scuffing pad before application.

## Cleaning of Equipment



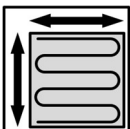
- Clean equipment and dispose of waste following local and federal regulations. In compliant localities, use a VOC compliant high-quality solvent borne gun cleaner. For national rule regions, a use high quality lacquer thinner.
- For efficient cleaning and less evaporated cleaning solvents, an enclosed automatic gun cleaning machine is suggested.

## Film Thickness – Using Suitable Application



- 1 Coat will achieve a thickness of 1.2 – 1.4 mils (30.5μm – 35.6μm) dry.
- The minimum total thickness required is 2.0 mils (50.8μm) for adequate protection and appearance.

## Theoretical Coverage



- With the recommended application the theoretical material usage is ±720 feet<sup>2</sup>/gallon (17.7 m<sup>2</sup>/liter) at a 1 mil thickness (24.5 μm).
- Actual coverage is dependent on many factors which may include the shape of the object, surface smoothness, application technique, and other application variables.

## VOC / Regulatory Information



- | <b>Product</b>   | <b>VOC Pounds per Gallon</b> | <b>VOC Grams per Liter</b> |
|--|------------------------------|----------------------------|
| <ul style="list-style-type: none"> <li>• 4.0 Select Clearcoat (Ready to Spray)</li> </ul>  | – 4.0                        | – 476                      |
| <ul style="list-style-type: none"> <li>• Do not handle until the Safety Data Sheets have been read and understood. Regulations require that all employees be trained on Safety Data Sheets for all chemicals with which they come in contact. The manufacturer recommends the use of an air-supplied respirator when exposed to vapors or spray mist.</li> </ul> |                              |                            |

## 4.0 Select Clearcoat

### Product Storage



- Stock unopened or used products in approved closed containers with proper labeling. Store in moderate temperatures. Optimum storage temperature is approximately 70°F (21°C). Avoid too much temperature fluctuation. The maximum temperature range for storage is 40°F – 95°F (5°C – 35°C).
- 4.0 Select Clearcoat – 2 Years
- 4.0 Select Activator – Fast, Medium, or Slow – 1 Year
- 997 Enhancer – 1 Year
- 998 Accelerator – 1 Year
- LV Flex Additive – 1 Year
- T890 Flattening Agent – 2 Years

### AkzoNobel Inc., North America

**Address: 1845 Maxwell Street – Troy, MI USA**

**Telephone: 800.618.1010**

#### 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 Safety 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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