

Speed Clear

Programmed System Technique (PST)
Clearcoat
08/16/2024

DESCRIPTION

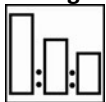
Speed Clear is an exceptional, high-performance clearcoat technology for vehicle refinishing and repairs. Speed Clear provides easy application and exceptional gloss and durability. Its fast dry times make it an ideal choice for both air dry and lower temperature force curing.

Safety Considerations



- Use suitable personal protection
- AkzoNobel recommends the use of a fresh air supply respirator.
- Refer to the product Safety Data Sheet (SDS) for more complete safety information.

Mixing

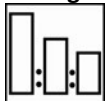


STICK #23

Mixing By Volume – only to be used with Cool Temp, Standard, and Hot Temp Reducers

- 5 Parts Speed Clear
- 1 Parts Speed Clear Hardener
- 1 Parts Speed Clear Reducer (Cool, Standard, Hot)

Mixing



STICK #23

Mixing By Volume – only to be used with Extreme Temp Reducer

- 5 Parts Speed Clear
- 1 Parts Speed Clear Hardener
- 2 Parts Speed Clear Extreme Temp Reducer

***Note:** For convenience, **Stick #23** has both ratios listed – ensure the correct side is used for the ratio desired.

Equipment



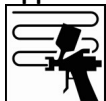
HVLP or Compliant Spray-Gun Set-Up:

1.3-1.5 mm

Application Air Pressure:

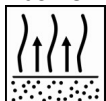
Consult spray gun manufacturer specifications.
HVLP – 10 psi (<0.7 bar) at the air cap maximum.

Application



- Apply 1.5 (1½) coats with minimal flash time between coats.
 - The first coat is to be applied as a thin, closed coat (not sprayed for appearance).
 - Follow this coat with a full-flowing coat.

Flash-off



Flash Between Coats at 70°F (21°C)

- 0-3 minutes

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

- No flash recommended

Drying time



Air Drying at 70°F (21°C)

- Dry to Handle
- 50 – 60 minutes

Force Drying at 120°F (49°C)

- Dry to Handle
- 20 – 25 minutes

- *Dependent on film weight and air flow.*

Read complete TDS for detailed product information

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DESCRIPTION

Speed Clear is an exceptional, high-performance clearcoat technology for vehicle refinishing and repairs. Speed Clear provides easy application and exceptional gloss and durability. Its fast dry times make it an ideal choice for both air dry and lower temperature force curing.

PRODUCT AND ADDITIVES

Product	Speed Clear	Item #588736 (GL)
Hardener	Speed Clear Hardener	Item #588780 (QT) Item #588735 (GL)
Reducer	Speed Clear Cool Temp Reducer	Item #588781 (QT)
	Speed Clear Standard Reducer	Item #588809 (QT) Item #588733 (GL)
	Speed Clear Hot Temp Reducer	Item #588782 (QT) Item #588732 (GL)
	Speed Clear Extreme Temp Reducer	Item #588783 (QT) Item #588731 (GL)

METHOD OF USE

- | | |
|----------------------------|---|
| Suitable substrates | <ul style="list-style-type: none">• Lesonal WB Basecoat• Lesonal SB Basecoat• Properly prepared existing finishes |
|----------------------------|---|

- | | |
|----------------------------|--|
| Basic Raw Materials | <ul style="list-style-type: none">• Speed Clear – Polyacrylic polyol resins• Speed Clear Hardener – Polyisocyanate resins• Speed Clear Reducers – Special solvent blends |
|----------------------------|--|

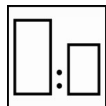
- | | |
|------------------------------|--|
| Substrate Preparation | Surface Cleaning – Prior to Paint Application <ul style="list-style-type: none">• Clean with Surface Cleaner, Autoprep UltraPrep, or Plastic Surface Cleaner. |
|------------------------------|--|



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Mixing – General



STICK #23



- Mix** By Volume – only to be used with Cool Temp, Standard, and Hot Temp Reducers
- 5** • Speed Clear
 - 1** • Speed Clear Hardener
 - 1** • Speed Clear Reducer (Cool, Standard, and Hot)

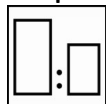
Speed Clear Reducer Choice

- Cool Temp Reducer
- Standard Reducer
- Hot Temp Reducer

Temperature Range

- 60°-70°F (15°-21°C)
- 70°-80°F (21°-27°C)
- 80°-90°F (27°-32°C)

Mixing –Extreme Temperatures



STICK #23



- Mix** By Volume – only to be used with Extreme Temp Reducer
- 5** • Speed Clear
 - 1** • Speed Clear Hardener
 - 2** • Speed Clear Extreme Temp Reducer

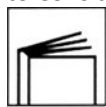
Speed Clear Reducer Choice

- Extreme Temp Reducer

Temperature Range

- ≥90°F (≥32°C)

Mixing – Points to Consider

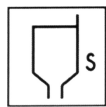


- It is advised to remain within the listed temperature range when making the reducer selection.



- Flex additive is not required for application on plastic parts.

Viscosity When Mixed



DIN #4

13-15 seconds

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

Potlife when Mixed



Product Mix

- Speed Clear Cool Temp Reducer
- Speed Clear Standard Reducer
- Speed Clear Hot Temp Reducer
- Speed Clear Extreme Temp Reducer

Temperature

- at 60°-70°F (15°-21°C)
- at 60°-80°F (15°-27°C)
- at 60°-90°F (15°-32°C)
- at 60°-100°F (15°-38°C)

Time

- 1.5 – 2 hours
- 1.5 – 2 hours
- 1.5 – 2 hours
- 1.5 – 2 hours

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Spray Gun Set-Up



Spray Gun

HVLP Gravity Feed

Fluid Tip

1.3-1.5 mm

Application Pressure

<10 psi at air cap

< 0.7 bar at air cap

Compliant Gravity Feed

1.3-1.5 mm

Consult equipment manufacturer recommendations.

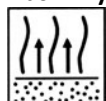
Note: Larger fluid tip sizes typically provide easier application in higher temperatures or on larger panels.

Application



- Apply 1.5 (1½) coats with minimal flash time between coats.
 - The first coat is to be applied as a thin, closed coat (not sprayed for appearance).
- Follow this coat with a full-flowing coat.

Flash Drying



Flash Between Coats at 70°F (21°C)

- 0-3 minutes

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

- No flash recommended

Film Thickness



Using Suitable Application

Using the recommended application (1.5 coats) will achieve a thickness of 1.6 – 2.4 mils (40.6 – 61.4µm), dry.

DRYING / CURING TIME

Baked Systems



Speed Clear Bake

Object Temperature

- 100° to 120°F (≈38° to 50°C)

Dust Free

0-5 minutes

Dry to Handle

20-25 minutes

- ✓ Drying times are stated at recommended application method, film thickness and object temperature.
- ✓ **Do not** exceed 120°F (≈50°C) object temperature when baking.
- ✓ Allow the object to cool-down to ambient temperature before handling/polishing.

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Infrared (IR)



- Drying / Curing with short wave light IR equipment and a surface distance of 20 – 27 inches (50 – 70cm). temperature must not reach a temperature above 140°F (60°C).

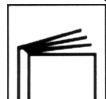
Speed Clear IR Cure

Object Temperature	Dust Free	Dry to Handle
• 100°F (≈38°C)	-	10-15 minutes
• 120°F (≈50°C)	-	10-15 minutes
• 140°F (60°C)	-	10 minutes

- ✓ Drying times are stated at recommended application method, film thickness and object temperature.
- ✓ **Do not** exceed 140°F (60°C) object temperature when IR curing.
- ✓ Allow the object to cool-down to ambient temperature before handling/polishing.

POST-APPLICATION

Recoating



- After a complete drying cycle, Speed Clear may be recoated with itself. After 24 hours, sanding becomes necessary.

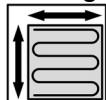
ADDITIONAL INFORMATION

Cleaning of Equipment



Clean equipment following local and federal regulations. In compliant localities, use Sikkens LV Cleaning Solvent or high-quality solvent borne gun cleaner. For national rule regions, use Sikkens Cleaning Solvent or high-quality lacquer thinner.

Theoretical Coverage



- With the recommended application the theoretical material usage is ±540 feet²/gallon (13.2 m²/liter) at a 1 mil thickness (25.4µm) and 100% transfer efficiency.
- Actual coverage is dependent on many factors which may include the shape of the object, surface smoothness, application technique, and other application variables which could affect actual coverage.

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VOC / Regulatory Information



Product

- Speed Clear (Ready to Spray)

VOC Pounds per Gallon

– 3.98

VOC Grams per Liter

– 478

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.

Product Storage



- Store unopened, or products in use with approved closed containers and proper labeling. Store in moderate temperatures between 40°F - 95°F (5°C – 35°C). Avoid too much temperature fluctuation. Optimum storage temperature is approximately 70°F (21°C).
- Refer to the Lesonal Product Shelf-Life Overview TDS or the current price list for the most up-to-date shelf-life information.

AkzoNobel Inc., North America

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FOR PROFESSIONAL USE WITH SUITABLE HS&E 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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