

Autoclear[®] Mat LV

FOR PROFESSIONAL USE ONLY

Description

A two component VOC compliant clearcoat with a matt finish. Higher gloss levels can be reached by mixing with Autoclear Superior 250 or Autoclear HS + LV. The main application is to achieve a lower gloss level over plastic parts.



- a. 100:50:30
 –Autoclear Mat LV
 –Autoclear Superior 250 Hardener
 –Autoclear Superior 250 Medium Reducer



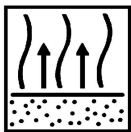
- b. 3:1:1
 –Autoclear Mat LV
 –Sikkens Standard Hardener LV
 –Sikkens Production Activator LV



Autoclear Superior 250: Use the Sikkens Measuring Stick #1 (Black)
 Autoclear HS+ LV: Use the Sikkens Measuring Stick #9 (Grey)



2-3x1
 HVLP Siphon (1.8-2.2 mm)
 HVLP Gravity (1.3-1.5 mm)
 Max 10 psi (max 0.8 bar)



5-10 minutes at 70°F (20°C)



7 hours at 70°F (20°C)
 20 minutes at 140°F (60°C)



Use suitable respiratory protection

Contains acrylic resins, xylene and other ingredients. When mixed, Autoclear Mat LV also contains isocyanates.

Read complete TDS for detailed product information

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Product and additives

Product: Autoclear Mat LV

Hardeners:
 -Autoclear Superior 250 Hardener: a general-purpose hardener for all repair sizes.
 -Sikkens Standard Hardener LV: a general-purpose hardened for all

Activators:

Autoclear Superior 250	Autoclear HS + LV	Use
Slow Reducer	Standard Activator LV	60°F–105°F (16°C–40°C.)
Medium Reducer	Production Activator LV	65°F–95°F (18°C–35°C)
Fast Reducer	Rapid Activator LV	55°F–85°F (15°C–28°C)

Additives:
 -LV Elast-O-Actif: additive to increase flexibility of Autoclear Mat LV, for use on flexible parts.
 -LV 250 Accelerator: a catalyst additive, which provides faster hardening of Autoclear Mat LV.
 -Autoclear Superior 250 or Autoclear HS + LV: If higher levels of gloss are needed, please see heading "Adjustment of Gloss Level" in this technical data sheet.

Basic raw materials

-Autoclear Mat LV: hydroxyl acrylic resins.
 -Autoclear Superior 250 Hardener: polyisocyanate resins.
 -Autoclear HS + LV Hardener: polyisocyanate resins.

Alternate Mixing

(For Autoclear Superior 250 Users)

When blending Autoclear Mat LV with Autoclear Superior 250 clear, mix as follows:

3 parts by volume of Autoclear Mat LV and Autoclear Superior 250.

2 parts by volume of Autoclear Superior 250 Hardener.

1 parts by volume of Autoclear Superior 250 Medium Reducer.

For easy and accurate mixing, use the Sikkens Measuring Stick #250 (Green).

(For Autoclear HS + LV Users)

When blending Autoclear Mat LV with Autoclear HS + LV clear, mix as follows:

3 parts by volume of Autoclear Mat LV and Autoclear HS + LV.

1 parts by volume of Sikkens Standard Hardener LV.

1 parts by volume of Sikkens Production Activator LV..

For easy and accurate mixing, use the Sikkens Measuring Stick #9 (Grey).



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Suitable surfaces

- Autowave[®] Solid, Metallic and Pearl colors: after a flash-off time of 20 minutes at 70°F (20°C).
- Existing finish: in the case of spot repair.
See TDS "Spot Repairs With Autowave".

Adjustment of gloss level

The following gloss levels can be achieved by mixing Autoclear Mat LV with Autoclear Superior 250 or Autoclear HS+LV.

Gloss Level	Parts by Weight or Volume Autoclear Mat LV	Parts by Weight or Volume Autoclear Superior 250/ HS+LV
Matt (20–30 GU)	100	0
Eggshell (40–60 GU)	80	20
Semi Gloss (70-85 GU)	30	70

(GU = Gloss Units)

If the mixture has not been hardened. Stir the mixture thoroughly; add hardener and reducer to this mixture as shown below under the sub heading; Mixing Ratios.

Mixing ratio

Autoclear Mat LV / Autoclear Superior 250

Mixture A: For rigid parts:

- 3 parts by volume Autoclear Mat LV / Superior 250 mixture
- 2 parts by volume Autoclear Superior 250 Hardener
- 1 parts by volume Autoclear Superior 250 Medium Reducer

For easy and accurate mixing, use the Sikkens Measuring Stick #250 (Green).

Mixture B: For flexible plastic parts:

- 100 parts by volume Autoclear Mat LV / Superior 250 mixture
- 20 parts by volume LV Elast-O-Actif

For easy and accurate mixing, use the Sikkens Measuring Stick #14 (Blue). Stir thoroughly; further preparation of the product is as follows:

- 3 parts by volume mixed material
- 2 parts by volume Autoclear Superior 250 Hardener
- 1 parts by volume Autoclear Superior 250 Medium Reducer

For easy and accurate mixing, use the Sikkens Measuring Stick #250 (Green)

Autoclear Mat LV / Autoclear HS + LV

Mixture E: For rigid parts:

- 3 parts by volume Autoclear Mat LV/Autoclear HS + LV mixture
- 1 part by volume Sikkens Standard Hardener LV
- 1 part by volume Sikkens Production Activator LV

For easy and accurate mixing, use the Sikkens Measuring Stick #9 (Grey).

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Mixture F: For flexible plastic parts:

- 100 parts by volume Autoclear Mat LV/Autoclear HS + LV mixture
- 33 parts by volume LV Elast-O-Actif

For easy and accurate mixing, use the Sikkens Measuring Stick #9 (Grey). Stir thoroughly: further preparation of the product is as follows:

- 3 parts by volume mixed material
- 1 part by volume Sikkens Standard Hardener LV
- 1 part by volume Sikkens Production Activator LV

For easy and accurate mixing, use the Sikkens Measuring Stick #9 (Grey)

Soft plastics

As the amount of LV Elast-O-Actif necessary to maintain flexibility of the topcoat over soft polyurethane foam parts is high, it is impossible for Autoclear Mat LV to retain its matt appearance.

For more information on spraying plastic car parts, see "Test Methods for Plastics Identification" TDS.

Pot life

When mixed with Superior 250 Hardener and Medium Reducer: 45 minutes at 70°F (20°C).
When mixed with Sikkens Standard Hardener LV and Production Activator: 2 hours at 70°F (20°C)

Spraying viscosity

16–18 sec. ZAHN cup #2 (14–16 sec. DIN cup #4) at 70°F (20°C)

Spray gun & pressure

	Fluid Tip	Spraying Pressure
Siphon Feed	0.055"–0.067" (1.4–1.7 mm)	40–50 psi (3–4 bar)
Gravity Feed	0.051"–0.055" (1.3–1.4 mm)	40–50 psi (3–4 bar)
HVLP Siphon	0.071"–0.087" (1.8–2.2 mm)	max. 10 psi (max. 0.8 bar)
HVLP Gravity	0.051"–0.059" (1.3–1.5 mm)	max. 10 psi (max. 0.8 bar)

Application method

Apply two to three single thin coats, allowing for a flash time of 5–10 minutes between coats. Heavy wet coats will increase the gloss effect.

Flash times

The flash times are dependent on air velocity and temperature. The correct choice of reducer should be made by determining the size of job and the spraying temperature. Please refer to subheading "Reducers or Activators" earlier in this technical data sheet.

Drying time

Autoclear Mat LV may be air dried or forced dried in a baking booth. The chart below shows the variations of dry times.



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Autoclear Superior 250 Hardener

Temperature	Drying	Slow Reducer	Medium Reducer	Spot & Panel Reducer
70°F (20°C)	Dust free	60 minutes	45 minutes	30 minutes
	Dry	8 hours	7 hours	5 hours
140°F (60°C)	Dust free	25 minutes	20 minutes	15 minutes
	Dry	60 minutes	50 minutes	35 minutes

Sikkens Standard Hardener LV

Temperature	Drying	Standard Activator LV	Production Activator LV	Rapid Activator LV
70°F (20°C)	Dust free	60 minutes	45 minutes	30 minutes
	Dry	8 hours	7 hours	5 hours
140°F (60°C)	Dust free	20 minutes	15 minutes	10 minutes
	Dry	50 minutes	35 minutes	25 minutes

Film thickness

Approximately 1.0 – 1.2 mils per single coat.

Cover rate

Approximately 70 sq. ft./liter of unmixed paint at a film thickness of 2.4 mils. It is a requirement that Autoclear Mat LV be applied at a film thickness of approximately 2.4 mils.

Polishing

As Autoclear Mat LV is designed to produce a low gloss (matt) appearance, polishing never recommended.

Cleaning of equipment

Clean equipment with Sikkens Cleaning Solvent 790 or lacquer thinner.

Stock keeping

- Color:** White, translucent
- Container size:** 1 quart
- Shelf life:** Autoclear Mat LV: Two years if stored unopened at room temperature.

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Safety aspects**Ready to Spray VOC**

-Autoclear Mat LV 100:50:30 with Autoclear Superior 250 Hardener / Autoclear Superior 250 Medium Reducer: 1.68 lb/gal.... (202 g/liter)

-Autoclear Mat LV 3:1:1 with Sikkens Standard Hardener LV / Sikkens Production Activator LV: 1.98 lb/gal....(237 g/liter)

Notice: Do not handle until the Material Safety Data Sheets have been read and understood. Regulations require that all employees be trained on Material 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.

Akzo Nobel Car Refinishes Inc. North America**Address: 5555 Spalding Drive, Norcross. GA 30092 USA****Tel: 770-662-8464****FOR PROFESSIONAL USE ONLY**

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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