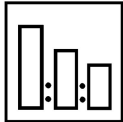


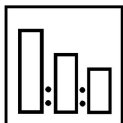
Description

Autoclear Mat is a two-part acrylic urethane clearcoat with a matt finish. Higher gloss levels can be reached by mixing with any Sikkens urethane clear, i.e. Autoclear III or Autoclear HS +. The main application is to achieve a lower gloss level over plastic parts. For VOC recording, Autoclear Mat will be listed as a specialty coating under "Elastomeric Refinishing" or "Antiglare Coatings".

For Autoclear III users



- a. 100:50:30
- Autoclear Mat
 - Sikkens Standard Hardener
 - Sikkens Production Activator



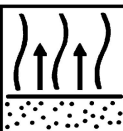
- b. 100:33:50
- Autoclear Mat
 - Sikkens XP Hardener
 - Sikkens Production Activator



Use the Sikkens Measuring Stick
#1 (Black), for 100:50:30 ratio
#25 (Blue), for 100:33:50 ratio



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 also contains isocyanates.

Read complete TDS for detailed product information



Description

Autoclear Mat is a two-part acrylic urethane clearcoat with a matt finish. Higher gloss levels can be reached by mixing with any Sikkens urethane clear, i.e. Autoclear III or Autoclear HS +. The main application is to achieve a lower gloss level over plastic parts. For VOC recording, Autoclear Mat will be listed as a specialty coating under "Elastomeric Refinishing" or "Antiglare Coatings".

Product and additives

Product:	Autoclear Mat
Hardeners:	<ul style="list-style-type: none"> -Sikkens Standard Hardener: a general-purpose hardener for all repair sizes. -Sikkens XP Hardener: a general-purpose hardened for all repair sizes. -Autocryl Hardener: a general-purpose hardener for all repair sizes. -Autocryl Hardener Rapid: a fast curing hardener used for spot and panel repairs, and for cool weather.
Activators:	<ul style="list-style-type: none"> -Sikkens Standard Activator: a general-purpose activated standard reducer for larger areas and overall refinishing. Temperatures from 60°F-105°F (16°C–40°C.) -Sikkens Production Activator: an accelerated activated reducer for Medium repairs. Temperatures from 65°F–95°F (18°C–35°C) -Sikkens Rapid Activator: an accelerated activated reducer for spot and panel repairs at 55°F–85°F (15°C–28°C)
Additives:	<ul style="list-style-type: none"> -Autocryl Elast-O-Actif: additive to increase flexibility of Autoclear Mat, for use on flexible parts. -Autocryl Extratop: a catalyst additive, which provides faster hardening of Autoclear Mat. -Autoclear III or Autoclear HS +: If higher levels of gloss are needed, please see heading "Adjustment of Gloss Level" in this technical data sheet.

Basic raw materials

- Autoclear Mat: hydroxyl resins
- Sikkens Standard Hardener: polyisocyanate resins
- Sikkens XP Hardener: polyisocyanate resins
- Autocryl Hardeners: polyisocyanate resins

Alternate mixing

(For Autoclear HS + users)

Using Autocryl Hardener or Autocryl Hardener rapid with Sikkens Production Activator, Autoclear Mat should be mixed as follows:

- 3 parts by volume of Autoclear Mat, with
- 1 parts by volume of Autocryl Hardener
- 1 parts by volume of Sikkens Production Activator.

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



Autoclear[®] Mat

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Suitable substrates

- Autobase Plus[®] Solid, Metallic and Pearl colors: after a flash-off time of 15–20 minutes at 70°F (20°C).
- Autobase Plus Single Stage converter: Solid colors of Autobase Plus, converted to a single stage, may be clear coated after a minimum of 15 minutes.
- Autocryl Solid colors: after a flash-off time of 15 minutes. Autocryl Metallic can be clear coated after 30 minutes at 140°F (60°C) or 16 hours at 70°F (20°C).
- Existing finish: in the case of spot repair.
See TDS “Spot Repairs With Autobase Plus” and TDS “Spot Repairs with Autocryl”.

Adjustment of gloss level

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

Gloss Level	Parts by Weight or Volume Autoclear Mat	Parts by Weight or Volume Autoclear HS + / III
Matt (20–30 GU)	100	0
Eggshell (40–60 GU)	100	100
Gloss	0	100

(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.

Note: When using Autoclear III, both Autoclear III and Autoclear Mat must use the Sikkens Standard Hardener with Sikkens Production Activator at the mixing ratio of 100:50:30.

Note: For XP Hardener: When using Autoclear III, both Autoclear III and Autoclear Mat must use the Sikkens XP Hardener with Sikkens Production Activator at the mixing ratio of 100:33:50, # 25 Measuring Stick.

Note: When mixing ready to spray Autoclear HS+ with ready to spray Autoclear Mat, the above ratios (**for gloss level**) should also be followed.

Mixing ratio

Autoclear Mat / Autoclear III

Mixture A: For rigid parts: **(Sikkens Standard Hardener)**

- 100 parts by volume Autoclear Mat/Autoclear III mixture
- 50 parts by volume Sikkens Standard Hardener
- 30 parts by volume Sikkens Production Activator

For easy and accurate mixing, use the Sikkens Measuring Stick #1 (Black).



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Mixture B: For flexible plastic parts:

- 100 parts by volume Autoclear Mat/Autoclear III mixture
- 20 parts by volume Autocryl 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:

- 100 parts by volume mixed material
- 50 parts by volume Sikkens Standard Hardener
- 30 parts by volume Sikkens Production Activator

For easy and accurate mixing, use the Sikkens Measuring Stick #1 (Black)

Mixture C: For rigid parts:

- 100 parts by volume Autoclear Mat/Autoclear III mixture
- 33 parts by volume Sikkens XP Hardener
- 50 parts by volume Sikkens Production Activator

For easy and accurate mixing, use the Sikkens Measuring Stick #25 (Blue).

Autoclear Mat / Autoclear III**Mixture D:** For flexible plastic parts: **(Sikkens XP Hardener)**

- 100 parts by volume Autoclear Mat/Autoclear III mixture
- 20 parts by volume Autocryl 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:

- 100 parts by volume mixed material
- 33 parts by volume Sikkens XP Hardener
- 50 parts by volume Sikkens Production Activator

For easy and accurate mixing, use the Sikkens Measuring Stick #25 (Blue).

Autoclear Mat / Autoclear HS +**Mixture E:** For rigid parts:

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

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

Mixture F: For flexible plastic parts:

- 100 parts by volume Autoclear Mat/Autoclear HS + mixture
- 33 parts by volume Autocryl 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 Autocryl Hardener Rapid
- 1 part by volume Sikkens Production Activator

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

Autoclear[®] Mat

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Soft plastics

As the amount of Autocryl Elast-O-Actif necessary to maintain flexibility of the topcoat over soft polyurethane foam parts is high, it is impossible for Autoclear Mat 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 Autocryl Hardener Rapid: 45 minutes at 70°F (20°C).

When mixed with Sikkens Standard Hardener 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 may be air dried or forced dried in a baking booth. The chart below shows the variations of dry times.

Temperature	Drying	Standard Hardener		XP Hardener	
		Production Activator	Rapid Activator	Production Activator	Rapid Activator
70°F (20°C)	Dust free	40 minutes	30 minutes	30 minutes	25 minutes
	Dry	7 hours	4 hours	5 hours	3 hours
140°F (60°C)	Dust free	15 minutes	5 minutes	10 minutes	7 minutes
	Dry	25 minutes	25 minutes	20 minutes	15 minutes

Autoclear[®] Mat

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Temperature	Drying	Autocryl Hardener		Hardener Rapid	
		Production Activator	Rapid Activator	Production Activator	Rapid Activator
70°F (20°C)	Dust free	35 minutes	30 minutes	35 minutes	25 minutes
	Dry	8 hours	5 hours	7 hours	3 hours
140°F (60°C)	Dust free	15 minutes	10 minutes	15 minutes	N/A
	Dry	25 minutes	25 minutes	20 minutes	N/A

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 be applied at a film thickness of approximately 2.4 mils.

Polishing

As Autoclear Mat 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:	Clear
Container size:	1 liter
Shelf life:	Autoclear Mat: Two years if stored unopened at room temperature.

Safety aspects

Ready to Spray VOC

- Autoclear Mat 100:50:30 with Sikkens Standard Hardener / Production Activator:
4.72 lb/gal.... (566 g/liter)
- Autoclear Mat 100:33:50 with Sikkens XP Hardener / Production Activator:
4.73 lb/gal.... (567 g/liter)
- Autoclear Mat 3:1:1 with Autocryl Hardener / Production Activator:
4.49 lb/gal....(538 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.



North America

Technical Data Sheet S1.05.20

Clearcoat
05.19.2010

Autoclear[®] Mat

FOR PROFESSIONAL USE ONLY

Akzo Nobel Car Refinishes Inc. North America

Address: 5555 Spalding Drive, Norcross. GA 30092 USA

Tel: 770-662-8464

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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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Head Office

Akzo Nobel Car Refinishes B.V., PO Box 3 2170 BA Sassenheim, The Netherlands. www.sikkenscr.com

