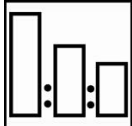


# Autoclear Energy Pro 250

FOR PROFESSIONAL USE ONLY

## Description

The Autoclear Energy Pro 250 is an acrylic urethane clearcoat for use over Autowave waterborne base coat. Intended for ambient cure conditions, this clear offers excellent resistance to surface contamination with excellent gloss, making it an ideal choice for air dry environments. It also meets the regulatory requirements for clearcoats at 250 g/liter VOC.



- 3 Autoclear Energy Pro 250
- 1 Autoclear Energy Pro 250 Hardener
- 1 Autoclear Energy Pro 250 Activator Spot and Panel, Medium or Slow



Use Sikkens measuring stick

**9** (Grey)



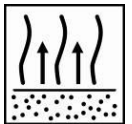
Gravity spray gun set-up:  
1.3 -1.6 mm

Application pressure:  
HVLP Max 10 psi at air cap

➤ Check gun manufacturer specification



2 x 1 coat



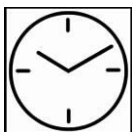
Between coats:  
5 – 10 minutes at 70° F (20° C)

Before curing (forced drying):  
5 – 10 minutes at 70° F (20° C)

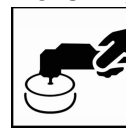


Air Drying:  
Dust free;  
15 minutes at 70°F (20°C)

Dry to handle;  
1 to 1½ hours at 70°F (20°C)  
*Dependant on film build*



Force drying:  
Dry to handle;  
30 minutes at 120° F (49° C)



Polishing: (Color-sand and compound);  
2 to 3 hours at 70° F (20° C)  
30 minutes at 120° F (49° C)



Use suitable respiratory protection  
AkzoNobel Car Refinishes recommends the use of a fresh air supply respirator

Read complete TDS for detailed product information

# Autoclear Energy Pro 250

FOR PROFESSIONAL USE ONLY

## Description

The Autoclear Energy Pro 250 is an acrylic urethane clearcoat for use over Sikkens Autowave waterborne base coat. Intended for ambient cure conditions, this clear offers excellent resistance to surface contamination with excellent gloss, making it an ideal choice for air dry environments. It also meets the regulatory requirements for clearcoats at 250 g/liter VOC.

## Suitable substrates

- Sikkens Autowave, Autobase Plus
- Allow the base coat color a minimum flash off time of 15 minutes at 77°F (25°C)
- Existing finish that is thoroughly prepared, in the case of spot repairs and blending.

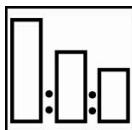
## Product and additives

- Products**      **Autoclear Energy Pro 250.**
- Hardeners**    **Autoclear Energy Pro 250 Hardener.**
- Activator / Reducers**    **Autoclear Energy Pro 250 Spot and Panel Repair Activator.** an activator to be used for application on small to medium repairs, temperatures of 65°F (18°C) to 85°F (29°C)
- Autoclear Energy Pro 250 Medium Activator.** an activator for small to medium size repairs, temperatures of 75°F (24°C) to 90°F (32°C)
- Autoclear Energy Pro 250 Slow Activator.:** an activator to be used for application on large repairs, temperatures of 85°F (29°C) and above
- Additives**      LV **Elast-O-Actif:** an additive to increase the flexibility level of the clear system, for use on flexible parts.

## Basic raw materials

- |   |                       |
|---|-----------------------|
| <b>Autoclear Energy Pro 250:</b>            | Acrylic Polyol resins |
| <b>Autoclear Energy Pro 250 Hardener:</b>   | Polyisocyanate resins |
| <b>Autoclear Energy Pro 250 Activators:</b> | Activated solvents    |

## Mixing



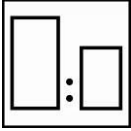
- |   |  |
|---|--|
| 3 | Parts by volume of Autoclear Energy Pro 250.                                       |
| 1 | Part by volume Autoclear Energy Pro 250 Hardener.                                  |
| 1 | Part by volume Autoclear Energy Pro 250 Activator, Spot and Panel, Medium or Slow. |

Use the Sikkens measuring stick #9 (grey) or Lesonal measuring stick #7 (purple)

# Autoclear Energy Pro 250

FOR PROFESSIONAL USE ONLY

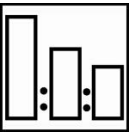
## Flexible parts



To increase flexibility of Autoclear Energy Pro 250 for use on flexible parts.  
Before adding Hardener and Activator, prepare the Autoclear Energy Pro 250 as follows:

- 3 Parts by volume of Autoclear Energy Pro 250**  
**1 Part by volume of LV Elast-O-Activif**

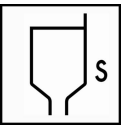
Use the Sikkens measuring stick #9 (grey)



### Further mixed as follows

- 3** Mixture of Autoclear Energy Pro 250 and LV Elast-O-Activif  
**1** Part by volume Autoclear Energy Pro 250 Hardener.  
**1** Part by volume Autoclear Energy Pro 250 Activator, Spot and Panel, Medium or Slow.

## Viscosity



14 – 16 seconds DIN cup #4 at 70°F (20°C)

## Spray gun set-up / application pressure



Spray gun:	Fluid tip-set-up:	Application pressure:
Siphon feed	1.4-1.6 mm	40 to 50 psi at the spray gun air inlet
HP Gravity	1.3-1.5 mm	40 to 50 psi at the spray gun air inlet
RP Gravity	1.3-1.5 mm	35 psi at the spray gun air inlet
HVLP Gravity	1.3-1.5 mm	29 psi at the spray gun air inlet
		➤ HVLP max 10 psi at the air cap.
		➤ Check gun manufacturer specification

## Pot-life

With:	At 70°F (20°C)	At 95°F (35°C)
Autoclear Energy Pro 250 Spot and Panel Repair Activator	45 minutes	15 – 20 minutes
Autoclear Energy Pro 250 Medium Activator	1 hours	25 – 35 minutes
Autoclear Energy Pro 250 Slow Activator	2 hours	35 – 45 minutes

# Autoclear Energy Pro 250

FOR PROFESSIONAL USE ONLY

## Application



Apply 2 single flowing coats.

Allow a flash off time of 5 to 10 minutes between the coats, this will depend on ambient temperature, applied layer thickness and airflow.

## Film thickness when using the recommended application

2 coats                      2.4 -- 3.0 mils (60 - 75µm)

## Drying time



	at 70°F (20°C)	at 95°F (35°C)	At 120°F (49°C)
Dust free	15 minutes	10 minutes	5 minutes
Dry to handle	1 to 1½ hours	30 minutes	25 minutes
Dry to polish	2 to 3 hours	1½ to 2½ hours	30 minutes

Activator	at 70°F (20°C)	at 95°F (35°C)	N/A
Spot & Panel	1 ½ hours	N/A	
Medium	2 hours	N.A	
Slow	2 ½ hours	N/A	

Drying times relate to recommended application (film thickness) and object temperature



Distance between short wave IR unit and object. 20- 27inches (50-70 cm)

Allow 3 to 5 minutes flash off before Infra red curing

Cure 5 minutes low power setting followed by 10 minutes high power setting.

> The panel must not reach a temperature above 100°C while curing.

## Recoatable and blending

Recoatable with itself after full drying cycle. Sanding becomes necessary if there are defects or after 24 hours..

For blending (spot repairs and panel blends), Please see TDS Spot Repairs with Autowave or the Lesonal WB data sheet.

## Theoretical coverage

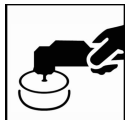
per coat of unmixed paint; 743 sq.ft/liter (18.2 sq. m/liter)

> *The practical coverage depends on many factors i.e. shape of the object, roughness of the surface, application techniques, pressure and application circumstances.*

# Autoclear Energy Pro 250

FOR PROFESSIONAL USE ONLY

## Polishability



Dust and minor damage can be polished out after the stated air-dry times have been reached, or after a full bake at 120°F (49°C) object temperature, followed by approximately 1 hour cool down of the object to ambient temperature.

Carefully sand out dust particles and restore the surface according to the polishing recommendations. Sand out dust particles with #1500 then #2000 grit paper wet or finish with the 3M Perfect-It™ Paint Finishing System.

1. Trizact foam disc P3000 followed with Perfect-It™ Rubbing Compound (PN 06085/06086) using the Superbuff™ III Wool Pad (PN 05703).
2. Remove compounding swirls by using Perfect-It™ Machine Polish (PN 06064 / 06065) using Perfect-It™ Plus Foam Polish Pad (PN 05738).  
Complete the system, if necessary with;
3. Perfect-It™ Ultrafine Machine Polish (PN 06068 / 06069) using the Ultrafine Foam Polishing Pad (PN 05733)

## Cleaning of equipment

Sikkens LV Cleaning Solvent or solvent borne gun cleaner

## VOC

(3:1:1 Ratio; ready to spray) Autoclear Energy Pro 250:	1.87 lb/gal (224 g/Liter)
(3:1 Autoclear Energy Pro 250: / LV Elast-O-Activ; then 3:1:1 Ratio:	2.1 lb/gal (250 g/Liter)

## Product storage

Store products unopened, and used products with closed lids preferably between 40°F-95°F (5°C-35°C) Avoid too much temperature fluctuation, optimal storage temperature approximately 70°F (20°C) ;wa/

Autoclear Energy Pro 250:	1 year	Autoclear Energy Pro 250	1 year
Autoclear Energy Pro 250	6 months	Activators:	
Hardener:			

**AkzoNobel 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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### Head Office

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