

# FOR PROFESSIONAL USE ONLY

## Description

Sikkens Autoclear Expert HS - HSR is two component clearcoat system provides excellent flow, gloss and smooth finish. It is easy to apply and suitable for all types of repairs, in most application conditions. Autoclear Expert HS - HSR shows excellent flow, gloss and optimum scratch resistance.

## P Series Hardeners / Plus Reducers



100 Autoclear Expert HS - HSR100 P Hardeners – P25 / P350-10 Plus Reducers



Use any applicable Sikkens measuring stick



Spray gun set-up: 1.3-1.4mm Application pressure: 1.7-2.0 bar at the air inlet HVLP max 0.6-0.7 bar at the air cap



2 x 1 coat First apply a medium closed coat, next apply a full coat after indicated flash off time



Between coats 5–10 minutes at 25°C Reducer selection according temperature Before curing 10-15 minutes at 25°C Flash-off time depending on oven type



Product selection P25 / Plus Reducer Medium P35 / Plus Reducer Slow

25°C 135 minutes 180 minutes 60°C 35 minutes 43 minutes



Use suitable respiratory protection Akzo Nobel Car Refinishes recommends the use of a fresh air supply respirator.

Read complete TDS for detailed product information





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#### **Product and additives**

Autoclear	Expert HS
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Hardener P25 Hardener; spot, panel and larger repairs at 20°C- 30°C P35 Hardener; spot, panel and larger repairs at 25°C-40°C

PlusPlus Reducer Fast; spot and panel repairs at 15°C-20°CReducersPlus Reducer Medium; spot and panel repairs and large areas at 15°C-40°CPlus Reducer Slow; larger areas and complete paint jobs at 15°C-40°CPlus Reducer Extra Slow; hot temperatures at 25°C - 40°C

**Xpress Dry** Xpress Dry Reducer; spot and panel repairs, temperature range: 15°C-25°C. **Reducer** 

#### Additives NA

#### **Basic raw materials**

Basic Clear: Acrylic and polyester resins P Hardener: Poly-isocyanate resins Plus Reducers – A blend of organic solvents Xpress Dry Reducer: A blend of organic solvents, additives and catalysts

#### Suitable substrates

Autobase Plus; after a minimum flash off time of 15 minutes at 25°C Autowave 2.0: until completely matt and dry



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### Mixing

Standard systems

100 Autoclear Expert HS - HSR100 P Hardeners0-10 Plus Reducers

## Accelerated system

- 100 Autoclear Expert HS HSR
- 100 P25 Hardener
- 10 Xpress Dry Reducer

Use any applicable Sikkens measuring stick

## Viscosity



14-16 seconds – DIN Cup 4 at 25°C.

## Spray gun set-up / application pressure



Spray gunFluid tip – set-upGravity feed1.3-1.4 mm

#### Application pressure

1.7-2.0 bar at the spray gun air inlet HVLP max 0.6-0.7 bar at the air cap

### **Application process & blending**



Apply a medium closed coat, allowing for a 5-10 minutes flash-off time at 25°C. Next, apply a full coat, allowing for a 10-15 minutes flash-off time at 25°C before baking. Flash-off between coats; in case of application to larger areas, flash off between coats is minimal. Recoat-able with itself after full drying cycle, sanding becomes necessary after 24 hours For blending (spot repair and panel blends), see TDS S8.01.01. When sanding and heavy polishing is required, a third coat may be applied after the stated flash-off times at 25°C.

#### Pot-life

P25 Hardener	3 hours	at 25°C
P35 Hardener	3 hours	at 25°C
P25 Hardener with Xpress Dry Reducer	1 hour	at 25°C

### Film thickness

By using the recommended application: 50-60µm



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## **Drying times**

Allow for a minimum of 10 minutes flash off time at 20°C - 30°C before moving the car into a pre-heated drying oven (booth) at 60°C. All drying times relate to standard application and object temperature. Consider the time required for the spray booth to reach an acceptable air temperature to enable the heat transfer of 60°C to the object.

		P25 / Xpress Dry Reducer	P25 / Plus Reducer Med	P35 /Plus Reducer Slow
15°C	Dust dry	40 minutes	60 minutes	170 minutes
	Dry to handle*	110 minutes	180 minutes	285 minutes
	1			
25°C	Dust dry	30 minutes	55 minutes	80 minutes
	Dry to handle*	70 minutes	135 minutes	180 minutes
35°C	Dust dry	23 minutes	40 minutes	75 minutes
	Dry to handle*	60 minutes	95 minutes	135 minutes
60°C	Dust dry	10 minutes	25 minutes	30 minutes
	Dry to handle*	20 minutes	35 minutes	43 minutes

Complete through hardening of the clearcoat will be realized after approximately 2 weeks at 20°C \*Take precaution in cases of washing or cleaning the clearcoat surface within this time period.

\*Dry to handle; Following the drying cycle at 60°C object temperature, allow the Autoclear Expert HS - HSR to cool down fully to ambient temperature. Dry to handle after approximately 10 minutes.



Allow 5 minutes flash off prior to infra-red curing The panel must not reach a temperature above 100°C while curing. For additional infra-red drying information; see TDS S9.01.01

### Polishability



Dust and minor imperfections can be polished out after the stated air-dry times have been reached, or after a full bake at 60°C object temperature, followed by a cool down of the object to ambient temperature. Carefully sand out dust particles and restore the surface according polishing recommendations. Ready to polish approximately 30 minutes after cool-down to ambient temperature. Polish within 24 hours to ensure ease of polishing





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## **Theoretical coverage**

By using the recommended application, the theoretical material usage is  $\pm$  7 m<sup>2</sup>/liter RTS mixture. The theoretical material usage at 1 µm dry film thickness is: 363 - 389 m<sup>2</sup>/liter

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

#### **Cleaning of equipment**

Sikkens Solvents or solvent borne Gun cleaners

#### VOC

The VOC content of this product in ready to use form is 551 - 567 g/liter RTS mixture.

#### Product storage

Product shelf-life is determined when products are stored unopened at 20°C. Avoid extreme temperature fluctuation. Product shelf life data see TDS S9.01.02

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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 current prior to using the product.

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