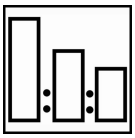
Autoclear® UV

FOR PROFESSIONAL USE ONLY

Description

Two-pack VOC compliant UV curable clearcoat system designed for an optimum appearance and with an high gloss level over Autowave. Autoclear UV provides the ultimate in production capability, capitalising on throughput while reducing energy and material usage.

Note: Autoclear UV is only released for use with UV-A (handlamp or UV-LED)



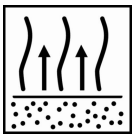
100 grams	Autoclear UV
150 grams	Autoclear UV Hardener
10 grams	Autoclear UV Activator
7 grams	Autoclear UV Reducer

Ratio by weight

Spray gun set-up:
1.0-1.2 mm

Application pressure:
1.7-2.2 bar at the air inlet
HVLP max 0.6-0.7 bar at the air cap

2 x 1 coat
Apply two flowing closed coats, respecting the indicated flash off time.



Between coats	Before curing
2-3 minutes at 20°C	2-3 minutes at 20°C

Minimum 6 minutes
After the surface is evenly exposed by one or two pases with a UV lamp

For UV safety and UV equipment handling see TDS S8.01.02

Use suitable respiratory protection

Akzo Nobel Car Refinishes recommends the use a fresh air supply respirator.

Read complete TDS for detailed product information

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Description

Two-pack VOC compliant UV curable clearcoat system designed for an optimum appearance and with an extreme high gloss level over Autowave. Autoclear UV provides the ultimate in production capability, capitalising on throughput while reducing energy and material usage.

Product and additives

Product Autoclear UV

Hardener Autoclear UV Hardener

Activator Autoclear UV Activator

Reducer Autoclear UV Reducer; for optimum wetting and improved flow characterisitics, especially on horizontal surfaces.

No plastiziser (Elast-O-Actif) required

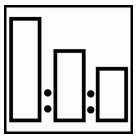
Basic raw materials

Autoclear UV: Thiol functional resins
Autoclear UV Hardener: Poly-isocyanate resins
Autoclear UV Activator: Special additives

Suitable substrates

Autowave; after a minimum flash-off time of 15 minutes at 25°C.

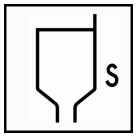
Mixing by weight



Standard system:

100	grams	Autoclear UV
150	grams	Autoclear UV Hardener
10	grams	Autoclear UV Activator
7	grams	Autoclear UV Reducer

Viscosity



15 seconds – DIN Cup 4 at 20°C

Spray gun set-up / application pressure

Spray gun
Gravity

Fluid tip – set-up
1.0-1.2 mm

Application pressure
1.7-2.2 bar at the spray gun air inlet
HVLP max 0.6-0.7 bar at the air cap

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Application process & blending

400 Watt handlamp
Apply two flowing closed coats, allowing for a 2-3 minutes flash-off time at 20°C.
Next, allow for a 2-3 minutes flash-off time at 20°C before UV light exposure.

UV LED gun
Apply two flowing closed coats, allowing for a 2-3 minutes flash-off time at 20°C, directly followed by UV led exposure (2-3 passes).

- In case of application to larger areas, flash-off between coats is minimal.
- If the spray gun is to be left for a longer period of time, wipe the fluid tip with solvent

For blending (spot repair and panel blends), see TDS S8.01.01a.

Application on OEM clearcoat
Basefix WB with 20% Activator WB can be used as a pre-coat for Autoclear UV. Apply one full fowing closed coat over the entire OEM surface that will ultimately be coated with Autoclear UV. Flash-of and apply the Autowave color coat to the repair area and fade into the dried pre-coat. Ensure flash-off times of subsequent colors coats are observed.

Basefix WB is optimized for application as a pre-coat prior to Autowave application for easier fade-out and colour blending for application with Autoclear UV. Basefix WB also secures an even flow and even curing characteristic with Autoclear UV.

Pot-life

8 hours at 20°C (in a closed container away from direct UV exposure).

Film thickness

By using the recommended application: 50-60 µm

Cure specification

By using a 400 watt UV lamp — Approximately 6 minutes after UV exposure
Use the UV unit according recommendation

Move the 400W UV lamp / UV LED gun (directly after spraying) evenly over the painted area ensuring good overlaps and constant speed at a distance of 10-15 cm. ensuring areas like wheel arches are completely exposed to the light source.

Curing speed is influenced by several factors such as:

- *Applied Autowave colour (light reflection)*
- *Clearcoat layer thickness*
- *Lamp intensity and UV spectra (400 Watt lamp)*
- *Bulb life (400 Watt lamp*
- *Distance between lamp and the substrate (400 Watt lamp*
- *Contamination of the overspray protection foil (UV LED gun)*

For UV safety and UV equipment handling see TDS S8.01.02
Ensure all areas coated with Autoclear UV are exposed to the light source, areas not exposed to the UV-light source will not dry within the indicated time.

**Autoclear UV is Recoatable with itself at approximately 1 hour after curing. The surface must be sanded with minimum P1000 - P1200 dry sanding paper (i.e. 3M 260L) prior to clearcoat application.*

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Personal protection equipment

When curing Autoclear UV, it is necessary to use suitable UV protection equipment which covers all skin areas on hand, arm and face. Wear long sleeves, gloves and cover the face with suitable full face shield.

Polishability

Dust and minor imperfections can be polished out after approximately 30 minutes after curing. Carefully sand out dust particles and restore the surface according polishing recommendations.

Autoclear UV is Recoatable with itself at approximately 1 hour after curing. The surface must be sanded with minimum P1000 - P1200 dry sanding paper (i.e. 3M 260L) prior to clearcoat application.

Film thickness by using recommended application

50-60 µm

Theoretical Coverage

Ready for use mixture (standard system) at 1 µm layerthickness:	± 608 m²/liter
Ready for use mixture (10% diluted) at 1 µm layerthickness:	± 581 m²/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 guncleaners

VOC

2004/42/IIb(d)(420)350
The EU limit value for this product (product category: IIB.d) in ready to use form is max. 420 g/liter VOC.
The VOC content of this product in ready to use form is max. 350 g/liter.

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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