

Autoclear PC

Autoclear PC is a high-solids acrylic urethane clearcoat for use over Sikkens basecoats. Autoclear PC offers high gloss and is designed for various conditions. It can be used with a Manual Proportioning Unit (MPU) at a 2:1 mixing ratio. It is designed to be sprayed over small or large areas in a variety of environments.



Safety Considerations

- Use suitable personal protection.
- AkzoNobel recommends the use of a fresh air supply respirator.
- Refer to the product Safety Data Sheet (SDS) for more complete safety information.



Suitable Substrates

- Autowave – After the TDS prescribed flash dry time.
- Autobase Plus – After the TDS prescribed flash dry time.
- Existing Clearcoat – Abraded with P1000 dry or a gray scuff pad, then cleaned.



MIX

2

1

By Volume

Parts Autoclear PC Production OR Autoclear PC Standard
Parts Autoclear PC Hardener



Spray-Gun Set-Up

- 1.3 – 1.5 mm HVLP Gravity
- 1.3 – 1.5mm Compliant Gravity

Application Air Pressure

- HVLP – 10 psi at the air cap maximum.
- Consult manufacturer specifications.



Application

- 2 x 1 Coat (2 single wet coats)



Flash Between Coats at 70°F (21°C)

- 0 – 7 minutes

Flash at 70°F (21°C) Before Force Drying

- 0 – 5 minutes



Drying at 70°F (21°C)

- 4 – 10+ hours, depending on mix.
 - ✓ Reference tables within the TDS.
 - *Dependent on film weight, airflow, and choice of clearcoat mixture.*

Drying at 140°F (60°C)

- 10 – 40 minutes, depending on mix.
 - ✓ Reference tables within the TDS.



Recoatable With

- Autoclear PC can be recoated with itself after a full drying cycle. Sanding becomes necessary after 12 hours.

Read the complete TDS and the product Safety Data Sheet (SDS) for detailed product information.

Description

Autoclear PC is a high-solids acrylic urethane clearcoat for use over Sikkens Basecoats. Autoclear PC offers high gloss and is designed for various conditions. It can be used with a Manual Proportioning Unit (MPU) at a 2:1 mixing ratio. It is designed to be sprayed over small or large areas in a variety of environments.

Suitable Substrates



- Existing finishes that have been properly sanded and cleaned
- Sikkens Autowave - after the TDS prescribed flash dry time.
- Sikkens Autobase Plus - after the TDS prescribed flash dry time.
- Sikkens Autoclear PC

Products and Additives

Product	<ul style="list-style-type: none"> • Autoclear PC Production – Item # 391298 • Autoclear PC – Item # 391297
Hardeners	<ul style="list-style-type: none"> • Autoclear PC Hardener – Item # 391299
Additives	<ul style="list-style-type: none"> • Sikkens Elast-O-Actif – Item # 386100 • Sikkens Autocryl ExtraTop – Item # 386210 • Sikkens High Temperature Additive – Item # 589142

○ SDS and TDS for products available online at – <http://my.anaac.net/>

Basic Raw Materials



- Sikkens Autoclear PC and PC Production – Hydroxyl acrylic resins
- Sikkens Autoclear Performance LV Hardener – Polyisocyanate resins
- Additives – Refer to specific additive product TDS.

Substrate Preparation



Pre-Cleaning

- If needed prewash the repair with warm soap and water. Rinse completely with clean water.
- Clean with M600 Surface Cleaner, Autoprep UltraPrep (VOC compliant) and/or Antistatic surface cleaners.



Sanding Preparation

- Abrade existing clearcoat with #P1000 dry and a soft interface pad or use a gray scuffing pad with a quality scuffing paste and water.



Surface Cleaning – Prior to Paint Application

- Clean with M600 Surface Cleaner, Autoprep UltraPrep (VOC compliant) and/or Antistatic surface cleaners.

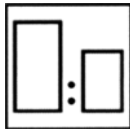
Mixing Formulas and Products



Formulas

- For easy mixing of products, final mixing - including hardening, reduction, and the addition of additives, can be done through the Color Manager or MIXIT.

Mixing



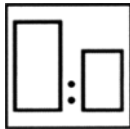
BY VOLUME
STICK #1

Mix

2
1

Standard Mix

- Autoclear PC or PC Production
- Autoclear PC Hardener



BY VOLUME
STICK #1

Mix

2
1

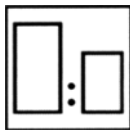
1% – 10%
(BY VOLUME)

High Temp / High Humidity Mix

- Autoclear PC
- Autoclear PC Hardener
- High Temperature Additive

NOTE:

High Temperature Additive should only be used with Autoclear PC (not PC Production) and is not recommended for use at temperatures below 85°F (≈29°C).



BY VOLUME
STICK #1

Mix

2
1

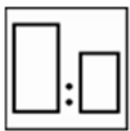
+15 ml
(MAXIMUM)

Accelerated Mix

- Autoclear PC or PC Production
- Autoclear PC Hardener
- Autocryl ExtraTop per ready to spray quart

Mixing by Stick – Flexible Substrates

If the part to be painted can be deformed by hand, increase the flexibility of Autoclear PC as follows:



BY VOLUME
STICK #9

Mix

100
10

(BY VOLUME)

- Autoclear PC or PC Production
- Elast-O-Actif

STIR, THEN MIX



BY VOLUME
STICK #1

2
1

- Autoclear PC + Elast-O-Actif
- Autoclear PC Hardener

Mixing by MPU – Flexible Substrates

If the part to be painted can be deformed by hand, increase the flexibility of Autoclear PC as follows:



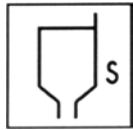
- 2**
- Autoclear PC or PC Production
- 1**
- Autoclear PC Hardener

Dispense clear and hardener from the MPU then add flex additive:



- +**
- 55 grams**
- Elast-O-Actif per dispensed quart of PC Clear + Hardener

Viscosity – Ready to Spray at 70°F (21°C).



DIN #4

- Autoclear PC

At 70°F (21°C)

– 13–14 Seconds

Pot-Life When Mixed



Product Mix

- Autoclear PC
- Autoclear PC + 10% High Temperature Additive
- Autoclear PC Production / Slow Combinations
- Autoclear PC Production

At 70°F (21°C)

- 4 hours
- 4 hours
- 2 hours
- 1 hour

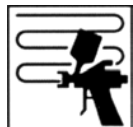
Spray Gun Set-Up

Consult spray gun manufactures instructions for specific spray gun pressure specifications.



Spray Gun	Fluid Tip	Application Pressure
HVLP Gravity Feed	1.3-1.5 mm	Max 10 psi (<0.7 bar) at the air cap
Compliant Gravity Feed	1.3-1.5 mm	Consult manufacturer recommendations

Application



- Apply 2 single wet coats.
 - If heavy polishing is required a third coat may be applied after observing proper flash time.

Flash Drying



Flash Between Coats at 70°F (21°C)

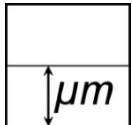
- 0-7 minutes.

Flash at 70°F (21°C) Before Force Drying

- 0-5 minutes.

- Flash time will be dependent on selected clearcoat speed/mixture, ambient temperature, applied paint wetness/thickness, and available airflow.

Film Thickness – Using Suitable Application



- 1 coat will achieve a thickness of 1.2-1.5 mils (30 – 38μm).
- The minimum clearcoat film thickness to provide suitable protection and appearance over base-coat is 2.4 mils (60 μm).

Drying / Curing Time

Drying times are stated at recommended application method, film thickness, and object temperature. Drying temperatures provided are for metal or object temperature.

Drying Table at 70°F (21°C) Object Temperature:



Mix	70°F (21°C)		Accelerated Mix 70°F (21°C)
	Dust Free	Dry to Handle	Dry to Handle
Standard	1 hour	10 hours	7 hours
Standard +10% High Temp Additive	90 min	10+ hours	Not Recommended
Production	30 min	4 hours	Not Recommended
75 parts Standard / 25 parts Production	50 min	8 hours	4.5 hours
50 parts Standard / 50 parts Production	35 min	7 hours	4 hours
25 parts Standard / 75 parts Production	35 min	5.5 hours	Not Recommended

Drying Table at 140°F (60°C) Object Temperature:

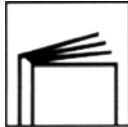


Mix	140°F (60°C)		Accelerated Mix 140°F (60°C)
	Dust Free	Dry to Handle	Dry to Handle
Standard	20 min	30 min	25 min
Standard +10% High Temp Additive	25 min	40 min	Not Recommended
Production	7 min	10 min	Not Recommended
75 parts Standard / 25 parts Production	20 min	25 min	20 min
50 parts Standard / 50 parts Production	15 min	20 min	15 min
25 parts Standard / 75 parts Production	15 min	20 min	Not Recommended

Curing - Infrared

Drying / Curing with short wave light IR equipment and a surface distance of 20 – 27 inches (50 – 70cm). The object temperature must not reach a temperature above 212°F (100°C).

- Allow 5-minute flash off before infrared curing.
- Cure 6 minutes on low power followed directly by a 6-minute full power cure.

Recoating

- Autoclear PC can be recoated with itself at any stage. Sanding will become necessary after 12 hours.

Polishing

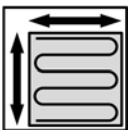
- Dust and minor damage can be polished out after the stated air-dry times have been reached or after a full bake at 140°F (60°C) metal temperature followed by a cool down to ambient temperature.
- When heavy sanding is required, it may be necessary to apply one extra coat of Autoclear PC.

Decals / Lettering

- Small decals and adhesive stripes can be applied 48 hours (70°F (21°C)) after full cure.
- Hand painted striping or lettering must be applied within 48 hours for good adhesion. After 48 hours, scuff with a grey pad and clean before application.

Cleaning of Equipment

- Clean equipment following local and federal regulations. For national rule regions, use Sikkens Cleaning Solvent or high quality lacquer thinner.

Theoretical Coverage

Actual coverage is dependent on many factors. These may include the shape of the object, surface smoothness, application technique and other application variables.

- 644 ft² / gallon or 16 m²/liter of ready to use clearcoat at 1 mil dry film thickness and 100% transfer efficiency.

VOC / Regulatory Information

- Ready to spray clearcoat (all mixtures) VOC ≤4.1 lb/gal (492 g/L)

Product Storage

Stock unopened or used products in approved closed containers with proper labeling. Store in moderate temperatures between 40°F - 95°F (5°C – 35°C). Avoid too much temperature fluctuation. Optimum storage temperature is approximately 70°F (21°C).

- Refer to the Product Shelf Life Overview TDS or the current price list for the most up-to-date shelf-life information.

AkzoNobel Inc., North America**Address: 1845 Maxwell Street – Troy, MI USA****Telephone: 800.618.1010****FOR PROFESSIONAL USE WITH SUITABLE HSE 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 Safety 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.

Coatings brand names mentioned in this data sheet are trademarks of or are licensed to AkzoNobel.

Head Office

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