
AUTOCLEAR HS +

DESCRIPTION: Autoclear HS + is a high-solids acrylic urethane clearcoat for use over Autobase Plus®. A National Rule compliant acrylic urethane clearcoat, Autoclear HS + offers high gloss and is designed for baking conditions. With the choice of activators, can be used for small areas and large areas under different temperature environments.

PRODUCT & ADDITIVES:

PRODUCTS: Autoclear HS +



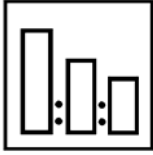

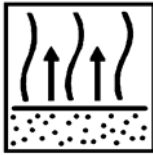
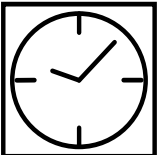
HARDENERS: —Autocryl® Hardener: a general purpose hardener for all repair sizes above 85°F (28°C), generally chosen for high temperatures.
—Autocryl® Hardener Rapid: a fast curing hardener for all repair sizes under 95°F (32°C), generally chosen for production work at lower temperatures.

REDUCERS: —Sikkens Extra Slow Activator: an extra slow activated reducer for larger areas and overall refinishing in very warm weather. Temperatures of 90°F (32°C) and above.
—Standard Activator: a general-purpose activated standard reducer for larger areas and overall refinishing. Temperatures of 60°F-105°F (16°-38°C).
—Production Activator: an activated production reducer for medium and spot and panel repairs Temperatures of 60°F-90°F (16°-32°C).
—Rapid Activator: an accelerated activated reducer for spot and panel repairs at 55°F-85°F (15°C-28°C)

ADDITIVES —Autocryl Elast-O-Actif: additive to increase flexibility for use on flexible parts. The addition of 33% is added for flexible and 100% for soft foam parts. This is added before hardening and reducing.
—Autocryl Extratop: a catalyst additive, providing faster hardening of Autoclear HS +.
—Autoclear Mat: a special clearcoat with a mat finish. The gloss of Autoclear HS + can be reduced with blending of Autoclear Mat.

BASIC RAW MATERIALS: —Autoclear HS +: hydroxyl acrylic resins
—Autocryl Hardener: polyisocyanate resins
—Autocryl Hardener Rapid: polyisocyanate resins
—Extra Slow and Standard Activator: special activated solvent blends
—Production Activator and Rapid Activator: activated reducers containing special solvent blends and catalyst.

sikkens**AUTOCLEAR HS +****APPLICATION:**

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|----|---|---|----|--|--|
| 1. |  | Contains acrylic resins and other ingredients. When mixed, also contains isocyanates. | 3. |  | Use the Sikkens measuring Stick # 9 (Gray) |
| 2. |  | 3:1:1
Autoclear HS +
Autocryl Hardener
Sikkens Standard Activator | 4. |  | 2 x 1
HVLP Siphon
0.071"-0.087 (1.8-2.2mm)
HVLP Gravity
0.055"-0.059 (1.4-1.5mm)
Max 10 psi (max 0.8 bar) |
| 5. |  | 6-10 minutes at 70°F (20°C) | 6. |  | Autocryl Hardener
Sikkens Standard Activator
12 hours at 70°F (20°C)
35 minutes at 140°F (60°C) |

SUITABLE SURFACES:

- Sikkens Autobase Plus® Solid, Metallic and Pearl Colors: after a flash-off time of 15–20 minutes at 70°F (20°C).
- Existing finishes that have been sanded and degreased. In the case of spot repairs and blending, see TDS "Spot Repairs with Autobase Plus".
- Autocryl Solid Colors: after a flash of 15 minutes

MIXING RATIO:

- Mix: 3 parts by volume of Autoclear HS +
1 part by volume of Autocryl Hardener or Autocryl Hardener Rapid.
1 part by volume of Extra Slow, Standard, Production or Rapid Activator.

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

SPRAYING VISCOSITY:

13-15 seconds. DIN cup #4, 70°F (20°C)

POTLIFE:

- 3 hours at 70°F (20°C) using Extra Slow Activator
2 hours at 70°F (20°C) using Standard or Production Activator
1 hour at 70°F (20°C) using Rapid Activator

sikkens**AUTOCLEAR HS +****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"-0.059" (1.3-1.5 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	0.055"-0.059" (1.4-1.5 mm)	max. 10 psi (max. 0.8 bar)

**APPLICATION
METHOD:**

Apply 2 single wet coats. If heavy sanding and polishing is required, a third coat may be applied after the stated flash off time.

FLASH TIME:

6-10 minutes at 70°F (20°C) with Standard Activator
4- 6 minutes at 70°F (20°C) with Production Activator
No flash at 70°F (20°C) with Rapid Activator

**DRYING
TIMES:**

Below is a table showing the drying times of Autoclear HS + with **Autocryl Hardener**. The air-dry times stated may vary with insufficient airflow.

Metal Temp.	Drying	Extra Slow Activator	Standard Activator	Production Activator	Rapid Activator
70°F (20°C)	Dust Free	N/A	1 hr	35 min	30 min
	Dry	N/A	12 hr	8 hr	5 hr
140°F (60°C)	Dust Free	25 min	20 min	15 min	10 min
	Dry	40 min	35 min	25 min	20 min

Below is a table showing the drying times of Autoclear HS + with **Autocryl Hardener Rapid**. The air-dry times stated may vary with insufficient airflow.

Metal Temp.	Drying	AC Hardener Rapid Standard Activator	AC Hardener Rapid Production Activator	AC Hardener Rapid Rapid Activator
70°F (20°C)	Dust Free	1 hr	35 min	30 min
	Dry	11 hr	8 hr	5 hr
140°F (60°C)	Dust Free	20 min	15 min	10 min
	Dry	30 min	20 min	15 min

sikkens**AUTOCLEAR HS +****DRYING
TIMES:
(INCLUDING
EXTRATOP)**

Below is a table showing the drying times of Autoclear HS + with **Autocryl Hardener** and the addition of Autocryl Extratop. The air-dry times stated may vary with insufficient airflow.

Metal Temp.	Drying	Extra Slow Activator	Standard Activator	Production Activator	Rapid Activator
70°F (20°C)	Dust Free	N/A	1 hr	35 min	30 min
	Dry	N/A	11 hr	8 hr	5 hr
140°F (60°C)	Dust Free	25 min	20 min	15 min	10 min
	Dry	35 min	30 min	20 min	15 min

Below is a table showing the drying times of Autoclear HS + with **Autocryl Hardener Rapid** and the addition of Autocryl Extratop. The air-dry times stated may vary with insufficient airflow.

Metal Temp.	Drying	AC Hardener Rapid Standard Activator	AC Hardener Rapid Production Activator	AC Hardener Rapid Rapid Activator
70°F (20°C)	Dust Free	1 hr	35 min	N/A
	Dry	10 hr	7 hr	N/A
140°F (60°C)	Dust Free	20 min	15 min	N/A
	Dry	25 min	20 min	N/A

RECOATABILITY: Autoclear HS + can be re-coated with itself at any stage. Sanding will become necessary after 12 hours.

FILM

THICKNESS: 1.2–2.0 mils per single coat

**COVERAGE
RATE:**

Approximately 103 sq. ft./liter of unmixed paint at a film thickness of 2.5 mils

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 of panel to ambient temperature. Carefully sand out dust particles with #10 micron (#1500) grit paper wet, and then polish the area manually or mechanically.

NOTE:

When heavy color sanding and rubbing are required, it may be necessary to apply one extra coat of Autoclear HS +.

sikkens**AUTOCLEAR HS +**

- DECALS:** Decals can be applied after 48 hours at 70°F (20°C)
- LETTERING:** Hand striping or lettering must be applied within 48 hours for good adhesion. After 48 hours, scuff with a gray scuffing pad.
- CLEANING OF EQUIPMENT:** Clean equipment with Sikkens Cleaning Solvent 790 or lacquer thinner.
- STOCK KEEPING:**
- COLOR:** Clear
- CONTAINER SIZE:**
- Autoclear HS +: 1 gallon (3.785 lt)
 - Autocryl Hardener & Autocryl Rapid Hardener: 1 gallon (3.785 lt) or 1 quart (0.8 lt)
 - Extra Slow, Standard, Production and Rapid Activator: 1 gallon (3.785 lt)
- SHELF LIFE:**
- Autoclear HS +: Two years if stored unopened at room temperature.
 - Autocryl Hardener: One year if stored unopened at room temperature.
One year if stored unopened at room temperature.
 - Extra Slow, Standard, Production and Rapid Activator: Six months if stored unopened at room temperature
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SAFETY ASPECTS:**READY TO
SPRAY VOC:**

(3:1:1)

When mixed ready to spray,
Autoclear HS + yields a VOC content of: 4.2 lb/gal 505 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 the Material Safety Data Sheets for all chemicals with which they come in contact. The manufacturer recommends the use of protective equipment when mixing and spraying this material. Protect skin with gloves and spray suits, wear safety glasses or goggles when mixing, and wear full hood fresh air fed respirator while spraying.