



North America

Programmed System Technique (PST)

Basecoat

10/13/2021

Autowave Basecoat

Autowave is the basecoat color in the Sikkens waterborne two-stage paint system. It provides color accuracy and easy application. Autowave blends easily to provide an "invisible repair." When used with a Sikkens clearcoat system, a glossy and durable surface is achieved.



Safety Considerations

- Use suitable personal protection.
- When exposed to paint or solvents AkzoNobel recommends the use of a fresh air supply respirator.



Surface Preparation

- Complete Panel
- Color Blend Area
- Sand with P500 to P600 dry or P600 to P800 wet.
- P1000 on an interface pad and D/A sander or de-gloss using a gray scuff pad.



Mixing - Preparation

- Gently shake toner before each color pour.
- Stir completed formula color before reducing.



Mix By Volume 100 Parts Autow

100 Parts Autowave Color10 - 50 Parts Activator WB

STICK #1



Spray-Gun Set-Up

- 1.3 1.5mm HVLP Gravity
- 1.3 1.5mm Compliant

Application Air Pressure

- HVLP 10 psi (0.7 bar) at cap maximum.
- Consult manufacturer specifications.



Application Solid Colors

• 2 to 3 x 1 coats.

Application Effect Colors

- 2 to 3 x 1 coats.
- Apply orientation coat if needed.



Flash Between Coats at 70°F (21°C)

Until matte.

Flash at 70°F (21°C) Before Clearcoat

• 15 minutes.



Re-Coatable With

 Sikkens clearcoats. Sikkens has a selection of clearcoats for application over Autowave. The selection is based on many considerations including environment, size of the repair, and time.

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



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FOR PROFESSIONAL USE WITH SUITABLE HSE EQUIPMENT

Description

Autowave is the basecoat color in the Sikkens waterborne two-stage paint system. It provides color accuracy and easy application. Autowave blends easily to provide an "invisible repair." When used with a Sikkens clearcoat system a glossy and durable surface is achieved.

Suitable Substrates



- OEM finishes
- Stable existing finishes
- Sikkens primer surfacers and sealers.
- Do not apply over thermoplastic acrylic lacquers.
- Do not apply directly over acid containing washprimers or pre-treatments.

Products and Additives

ProductAutowave

Per color formula

Hardeners

WB Hardener

- Item #553737 (USA Only)
- Item #484386 (Canada Only)
- WB Hardener is suitable for use in Autowave. The addition of 5% is sufficient to improve system robustness including stone chip resistance, adhesion and system hardness. WB Hardener is also recommended when multi-layer systems are applied and the recommended layer thickness is exceeded.

Activators

Activator WB

Item #391196

Additives

- Autowave Additive LP
 - Used to extend the pot life of Autowave metallic colors.

Item #391192

- Autowave Underhood Additive
- Item #398179
- SDS and TDS for products available online at http://my.anaac.net/

Basic Raw Materials



- Autowave
- WB Hardener
- Autowave Underhood Additive
- Activator WB
- Autowave Additive LP

- Water based acrylic dispersion
- Poly-Isocyanate resins
- Poly-Isocyanate resins
- Water / Glycol mixture
- Special chemical blend



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Substrate Preparation



Pre-Cleaning

- If needed pre-wash the repair with warm soap and water. Rinse completely with clean water.
- Clean with M600 Surface Cleaner, AutoPrep Ultra-Prep (VOC compliant) or Anti-Static surface cleaners.



Sanding Preparation	Repair Area	Sand with P1000 on an interface pad and D/A sander.	
Existing Finishes Dry	Initial - #P360-P400Final - #P500-P600		
Existing Finishes Wet	Initial - #P360-P400Final - #P600-P800	1 g g, 2 p	



Surface Cleaning – Prior to Paint Application

 Clean with M600 Surface Cleaner, AutoPrep Ultra-Prep (VOC compliant), or Antistatic surface cleaners.

Product Agitation



Color Preparation

- Shake paint on a paint shaker or vigorously by hand for 45 seconds before first use.
- For metallic, pearl or effect toners, also stir the mixing color before first use.
- Gently shake the Autowave toner before each pour.



• Once all the toners in a formula have been combined, stir the paint prior to reduction and then stir again after the Activator WB has been added.

Mixing Color Formulas and Products



Formulas

- Formulas are available to match the most popular OEM colors. These are available in MIXIT (online) or Color Manager.
 - Ensure when a specified primer color is suggested to use that shade of undercoat primer.
 - For easy mixing of color formulas or products, final mixing including hardening, reduction and the addition of additives can be done through the Color Manager program.

Custom Mixed Colors

- Solid colors can be made with solid MM toners and do not require additional MM666 binder.
- For straight metallic colors (no solid toners), mix 1 part MM888 toner with 4 parts MM666 binder.

Note: When mixing metallic colors, please follow the recommended mixing directions. This will ensure that the material will function as intended and not produce any unanticipated results.



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Mixing



Mix Standard Mix
100 Parts Autowave Color
10 – 50 Parts Activator WB

- Add Activator WB to all Autowave colors prior to application using the following guidelines.
 - Metallic Colors add 30-50 parts Activator WB. Do not exceed 50 parts of Activator WB.
 - Pearl Colors add 20-40 parts Activator WB
 - Solid Colors add 10-30 parts Activator WB



Mix	Extending Metallic Color Potlife	
100	Grams Unreduced Autowave Color Formula	
5	Grams Autowave Additive LP	

- · Stir together and then reduce as normal.
- Do not use Autowave Additive LP in solid colors or in mixtures containing Hardener WB or Autowave Underhood Additive.



Mix	Underhood Additive Mix	
100	Parts Autowave Color	
10	Parts Autowave Underhood Additive (stir to combine)	
20-30	Parts Activator WB (stir to combine)	

If improved system robustness including stone chip resistance, adhesion and system hardness is desired, Autowave basecoat may be mixed with WB Hardener before reduction.



Mix	Hardened Basecoat Mix	
100	Parts Autowave Color	
5	Parts WB Hardener	

Stir together and then reduce as normal.

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



Autowave – 20-30 Seconds

Potlife When Mixed at 70°F (21°C)



Normal Product Mixes

Autowave solid and pearl mixed colorAutowave colors containing MM888 or MM338 toner

Autowave colors containing MM888 or MM338 toner with Autowave LP – Autowave MM888 or MM338 colors containing toner MM777 –

Product Mixes with WB Hardener or Autowave Underhood Additive

Autowave solid and pearl mixed color

Autowave pearl and solid colors containing 50% or more AW245

Autowave colors containing MM888 or MM338 toner

1 week
 3 months

3 months1 day

3 months



- 30 minutes



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Equipment Set-Up



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

Spray Gun	Fluid Tip	Application Pressure
HVLP Gravity Fed	1.3 – 1.5 mm	<10 psi (0.7 bar) at cap
Compliant Gravity Fed	1.3 – 1.5 mm	psi per spray gun manufacturer
Paint Strainers	Use waterborne suitable 125-micron paint strainers.	

Application



Application - Solid Colors

- Apply 2 medium coats or until opacity is achieved.
 - Autowave MM245 applied as pure color can be applied in 2 single layers with flash-off between coats as well as by 2 light wet coats wet-on-wet.
- Use increased air-flow to flash off between coats until matte in appearance.
 - When force drying using a Windjet or equivalent equipment, keep a minimum distance of 3 feet.



Metallic Color Application

- Apply 1 full coat, 100 % closed. When needed apply intermediate coats, 80% as wet as the first coat until coverage is achieved. Flash dry between coats until the basecoat dries completely to a matte finish.
- Apply optional orientation coat
 - o Increase the distance to approximately 12 to 14 inches and apply a damp coat with no wet areas. The finish should look like "satin" when completed.



Spot Repair Application

- Autowave MM666 Binder may also be used as a clear foundation coat before commencing the metallic spot repairs. Reduce 10-20% with Activator WB and apply one thin single coat of this blending foundation and dry to allow for an easier metallic orientation.
- When making spot repairs apply thin color coats until opacity is achieved extending the area slightly with each coat. Dry until matt between each coat before fading out.
- Metallic colors may require air pressure adjustments for the best color match.
- Finally apply 1-2 orientation coats fading out well beyond the coverage coats.
- In the case of high hiding colors and fading out, the color transparency can be increased by adding reduced MM666 to the ready to spray (RTS) mixed color prior to blending, at a ratio of 100 parts RTS color with 50 parts RTS MM666.



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FOR PROFESSIONAL USE WITH SUITABLE HSE EQUIPMENT

Flash Drying



Flash Between Coats at 70°F (21°C)

Until matte.

Flash at 70°F (21°C) Before Clearcoat

• 15 minutes.

- Flash time will be dependent on ambient temperature, humidity, applied paint wetness/thickness and available air-flow.
 - Flash can be reduced to a minimum by using air accelerator systems at approximately 3 feet
 (.91m) from the repair, thus increasing the airflow across the repair.
 - Introducing heat is also an option. When heat is used for drying, allow object to cool down to application temperature before proceeding with color or clearcoat application.
- o Maximum flash time is 24 hours at which time the base coat must be abraded and color re-applied.

Autowave Underhood Additive Mix - Flash Drying and Cure



Flash Between Coats at 70°F (21°C)

Final Flash at 70°F (21°C) Before Force Dry

20-30 minutes.

o After final flash, can be force dried at 140°F (60°C) object temperature.

Film Thickness - Using Suitable Application

Until matte.



- 1 Coat will achieve a thickness of 0.4 0.9mils (10.2 22.9µm) dry.
- The maximum total thickness is 1.2 mils (30.5μm). If this maximum will be exceeded, the Autowave Hardener WB mix should be used.

Theoretical Coverage



- With the recommended application the theoretical material usage is ±256 feet²/gallon (6.3²/liter) at a 1 mil thickness (25.4µm) and 100% transfer efficiency.
- Actual coverage is dependent on many factors. These may include; the shape of the object, surface smoothness, application technique and variables among others.

Recoating



After the stated dry time Autowave may be recoated with the following materials:

- Autoclear Performance LV
- Autoclear Superior 250 2-Pack
- Autoclear Energy-Select LV
- Autoclear HS+ 2 Pack
- Autoclear HS+ LV 2-Pack

- Autoclear Mix & Matt
- Autoclear Mix & Matt 250
- Autoclear PC
- Autoclear Xpress



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What to Do



Fisheyes / Craters

- Fisheyes maybe caused by silicones or other contamination. In that event apply mist coats of basecoat over the contaminated area and proceed with the repair allowing longer flash times. If severe, it may be necessary to allow a dry time of 20-30 minutes, sand, and continue to spray basecoat.
- Adding Anti-Silicon to basecoat is not recommended.

Second Repair

- If during the application of basecoat color, some damage occurs such as dust impregnation or perspiration spots, allow the basecoat to flash off for 20 minutes at 70°F (20°C).
- Lightly sand the damaged area with #P600 grit paper dry. Care must be taken to clean up all sanding residue.
- Re-apply color to the affected area as needed.

Two-Tone Masking

- Autowave colors can be taped (i.e. two-toning) after 20 minutes flash-off at 75°F (24°C).
- Increasing temperature especially in combination with air movement improves the ability to apply masking. If heat is used let the object cool down to ambient temperature before masking.

Cleaning of Equipment



- Clean equipment and dispose of waste following local and federal regulations.
- Clean and rinse the spray gun thoroughly after use with water from a squirt or spray bottle.
- Finish cleaning with Autowave Gun Cleaner.
 - Do not use any conventional thinner unless removing dried waterborne paint deposits.
 - o Do not soak the spray gun for long periods either with Autowave Gun Cleaner or WB Activator.
- Purge the spray gun with Autowave WB Activator and blow dry as a final step.

VOC / Regulatory Information



Product

VOC Pounds per Gallon

VOC Grams per Liter

Autowave (Ready to Spray)

- <3.50

- <420

Do not handle until the Safety Data Sheets have been read and understood. Regulations require
that all employees be trained on Safety Data Sheets for all chemicals with which they come in
contact. The manufacturer recommends the use of an air-supplied respirator when exposed to
vapors or spray mist.

Product Storage



- Store unopened, or products in use with approved closed containers and 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).
- Reference the current price sheet for shelf-life information.



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FOR PROFESSIONAL USE WITH SUITABLE HSE EQUIPMENT

AkzoNobel Inc., North America

Address: 1845 Maxwell Street - Troy, MI USA

Telephone: 800.618.1010

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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.

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Head Office

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