North America

Programmed System Technique (PST)
Basecoats
10/17/2025

Autowave 2.0 Basecoat

Autowave MM 2.0 waterborne basecoat provides excellent coverage, metallic control and sprayability when used to duplicate OEM solid, metallic, and pearl effect colors. Autowave MM 2.0 must be used in conjunction with a specified Sikkens clearcoat to provide protection from the environment. Autowave MM 2.0 is the superior choice to achieve an optimal color match.

Safety Considerations

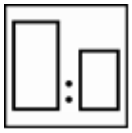
- Use suitable personal protection.
- When exposed to paint or solvents AkzoNobel recommends the use of a fresh air supply respirator.

Surface Preparation

- Complete Panel
  - Sand with P500 to P600 dry or P600 to P800 wet
- Color Blend Area
  - 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



STICK # 1

Mix	By Volume
100	Parts Autowave Color
10 – 30	Parts Activator WB

✓ Refer to the TDS for detailed mixing guidance

Spray-Gun Set-Up

- 1.3 – 1.4mm HVLP Gravity
- 1.3 – 1.4mm Compliant

Application Air Pressure

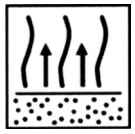
- HVLP – 10 psi (<0.7 bar) at cap maximum
- Consult manufacturer specifications

Application Solid Colors

- 2 to 3 x 1 coats

Application Effect Colors

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

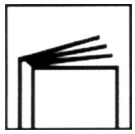


Flash Between Coats at 70°F (21°C)

- Until matte

Flash at 70°F (21°C) Before Clearcoat

- 15 minutes



Recoat With

- Sikkens clearcoats listed in the *Recoating* section of the Autowave 2.0 TDS

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

Autowave 2.0 Basecoat

FOR PROFESSIONAL USE WITH SUITABLE HS&E EQUIPMENT

Description

Autowave MM 2.0 waterborne basecoat provides excellent coverage, metallic control and sprayability when used to duplicate OEM solid, metallic, and pearl effect colors. Autowave MM 2.0 must be used in conjunction with a specified Sikkens clearcoat to provide protection from the environment. Autowave MM 2.0 is the superior choice to achieve an optimal color match.

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

NOTE: Autowave 2.0 is not suitable for application directly to e-coat.

Products and Additives

Product	• Autowave MM 2.0	– Per color formula
Hardeners	• WB Hardener	– Item #553737
	– WB Hardener is suitable for use in Autowave 2.0. 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 # 609978 (gallon)
	• Activator WB Dispenser Bottle	– Item # 2015653
Additives	• Autowave Additive LP ○ Used to extend the pot life of Autowave 2.0 (MM338 metallic colors)	– Item #391192 (liter)
	○ SDS and TDS for products available online at – http://my.anaac.net/	

Basic Raw Materials

• Autowave	– Water based acrylic dispersion
• WB Hardener	– Polyisocyanate resins
• Activator WB	– Water / glycol mixture
• Autowave Additive LP	– Special chemical blend

Substrate Preparation

Precleaning

- If needed, prewash the repair with warm soap and water. Rinse completely with clean water
- Clean the substrate with the appropriate AkzoNobel / Sikkens waterborne and solventborne surface cleaners

Sanding Preparation	Repair Area	Blend Area
Existing Finishes Dry	• Initial - #P360-P400 • Final - #P500-P600	• Sand with P1000 on an interface pad and D/A sander.
Existing Finishes Wet	• Initial - #P360-P400 • Final - #P600-P800	• Abrade using a gray scuff pad and a quality scuffing paste with water.

NOTE: Autowave 2.0 is not suitable for application directly to e-coat.

Surface Cleaning – Prior to Paint Application

- Clean with the appropriate AkzoNobel / Sikkens waterborne and solventborne 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
  - 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 MIXIT

Custom Mixed Colors

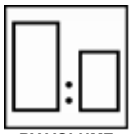
- Solid colors can be made with solid MM toners and do not require additional binder
- For straight metallic colors (no solid toners), mix 60 parts MM800 toner with 40 parts of MM600

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.

Autowave 2.0 Basecoat

FOR PROFESSIONAL USE WITH SUITABLE HS&E EQUIPMENT

Mixing


BY VOLUME

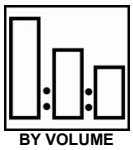
Mix	**Standard Mix**
100	Parts Autowave 2.0 Color Formula
10 – 20	Parts Activator WB

- Add 20-30 parts Activator WB for Autowave 2.0 colors that are sensitive to cloudiness/mottling and/or difficult to blend


BY WEIGHT

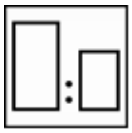
Mix	**Extending MM338 Metallic Colors Potlife**
100	Grams unreduced Autowave 2.0 Color Formula containing MM338 metallic toners
5	Grams Autowave Additive LP

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


BY VOLUME

Mix	**Underhood Mix**
100	Parts Autowave 2.0 Color Formula
10	Parts WB Hardener (stir to combine)
10	Parts Activator WB (stir to combine)

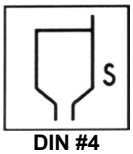
If improved system robustness including stone chip resistance, adhesion and system hardness is desired, Autowave basecoat may be mixed with WB Hardener before reduction.


BY VOLUME
STICK # 9

Mix	**Hardened Basecoat Mix**
100	Parts Autowave 2.0 Color Formula
5	Parts WB Hardener

- Stir together and then reduce as normal

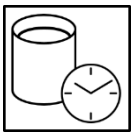
Viscosity – Ready to Spray at 70°F (21°C)



DIN #4

- Autowave 2.0 – 20-30 Seconds

Potlife When Mixed at 70°F (21°C)



Normal Product Mixes

- Autowave 2.0 solid and pearl mixed colors – 3 months
- Autowave 2.0 colors containing MM338 metallic toners – 1 week
- Autowave 2.0 colors containing MM338 metallic toners with Additive LP – 3 months
- Autowave 2.0 MM338 metallic colors containing toner MM700 – 1 day

Product Mixes with WB Hardener

- Autowave 2.0 solid and pearl mixed colors – 1-½ hours
- Autowave 2.0 pearl and solid colors containing 50% or more AW245 – 1 hour
- Autowave 2.0 colors containing MM338 toners – 30 minutes

Equipment Set-Up

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

Spray Gun	Fluid Tip	Application Pressure
HVLP Gravity Feed	1.3 – 1.4 mm	<10 psi (0.7 bar) at cap
Compliant Gravity Feed	1.3 – 1.4 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 airflow 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

- First, apply a closed wet coat. Next, 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 –
  - 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 / MM600 (mixed 60:40) may also be used as a clear foundation coat before commencing metallic spot repairs. Reduce 10-20% with Activator WB and apply one thin closed coat of this blending foundation 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

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 airflow
  - Flash can be reduced to a minimum by using air accelerator systems at approximately 3 feet (≈1m) from the repair and 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
- Maximum flash time is 24 hours at which time the basecoat must be abraded and color reapplied

Autowave Underhood Mix - Flash Drying and Cure

Flash Between Coats at 70°F (21°C)
- Until matte

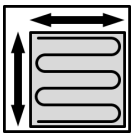
Final Flash at 70°F (21°C) Before Force Dry
- 20-30 minutes

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

Film Thickness – Using Suitable Application

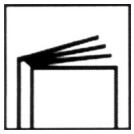
- 1 Coat will achieve a thickness of 0.4 – 0.9mils (10.2 – 22.9µm) dry
- The maximum total thickness is 1.2 mils (30.5µm). If this maximum will be exceeded, the hardened basecoat mix should be used

Theoretical Coverage



- With the recommended application the theoretical material usage is ±256 feet^2/gallon (6.3 m^2/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 other variables

Recoating



After the stated dry time Autowave 2.0 may be recoated with the following materials:

- Autoclear Performance LV
- Autoclear Superior 250 2-Pack
- Autoclear Energy-Select LV
- Autoclear HS+ 2 Pack
- Autoclear 2121 LV
- Autoclear Mix & Matt
- Autoclear PC
- Autoclear Xpress

What to Do

Fisheyes / Craters

- Fisheyes may be caused by silicone 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
- Reapply 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
  - 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 2.0 (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)
- Refer to the Product Shelf-Life Overview TDS or the current price list for the most up-to-date shelf-life information

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FOR PROFESSIONAL USE WITH SUITABLE HS&E EQUIPMENT

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