

Autowave[®] MM 2.0

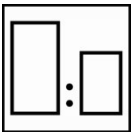
FOR PROFESSIONAL USE ONLY

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 in order to provide protection from the environment. Autowave MM 2.0 is the superior choice to achieve an optimum color match.



Gently shake the Autowave MM 2.0 can prior to use



100 Autowave 2.0
10-50 Activator WB



Use Sikkens measuring stick

14 Blue



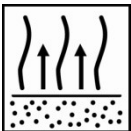
Spray gun set-up:
Below 28°C: 1.2 – 1.3 mm
Above 28°C: 1.3 – 1.4 mm

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



Application metallic colors:
2 x 1 coat followed by a mistcoat

Application solid colors:
2 x 1 coat



Between coats:
Until completely matt and dry

Prior to clearcoat application:
Until completely matt and dry



Clearcoat application
See clearcoat T.D.S



Use suitable respiratory protection
Akzo Nobel Car Refinishes recommends the use of a fresh air supply respirator.

Read complete TDS for detailed product information

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Suitable substrates

All Existing OEM finishes.
All current Sikkens preparatory products with the exception of Washprimers

Note:

All Autowave SEC colors must be applied on Colorbuild Plus Black or Autowave MM400.

Products and additives

Product: Autowave MM 2.0 (Mixing Machine) colors
Autowave RM SEC colors

Activators: Activator WB, the waterborne basecoat activator to use for all repair sizes at standard application conditions at approximately 25°C and higher with a relative humidity range between 20% to 80%.

Additives: Autowave Separator
Autowave Guncleaner
Autowave 2.0 Hardener (see TDS S5.01.02)

No plasticizer required for application on plastic car parts.

Basic raw materials

Water based acrylic dispersion

Surface preparation



Final sanding step P500
Initial sanding steps may be executed with a coarser sanding grit; P360 - P400
Respect a maximum 100 grit sanding step difference or less throughout the sanding steps.
For detailed surface preparation see TDS S8.06.02 Substrates & Preparation



Final sanding step P1000
Initial sanding steps may be executed with a coarser sanding grit P600 - P800
Respect a maximum 200 grit sanding step difference or less throughout the sanding steps.
For detailed surface preparation see TDS S8.06.02 Substrates & Preparation



Surface cleaning; remove any surface contamination prior to the application of the basecoat using an appropriate surface cleaner.

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Mixing



Gently shake Autowave MM 2.0 several times before use for optimum pour viscosity of the MM toners prior to color mixing. Autowave MM 800 Metallic toners must be stirred thoroughly before using for the first time; thereafter they should be gently shaken as recommended for all other MM toners.



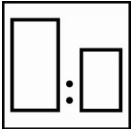
The Autowave MM 2.0 colors must be stirred thoroughly directly after mixing the formula.

Climate condition; standard

10 – 20 parts of Activator WB for all Autowave 2.0 colors.

20 – 30 parts of Activator WB 2.0 colors sensitive to cloudiness/ molting or difficult to blend.

Climate condition; extreme



Relative Humidity		Temperature	
		< 35°C	> 35°C
> 70%	Metallic / Pearl	10 - 20	10 - 20
	Solid	5 - 10	5 - 10
< 20%	Metallic / Pearl	10 - 30	10 - 30
	Solid	10 - 20	10 - 20
< 10%	Metallic / Pearl	10 - 30	40 - 50
	Solid	10 - 20	10 - 20

For accurate mixing always use measuring stick No.14 (blue) or mix on Mixit Pro.

Color mixing without formula:

If an Autowave MM 2.0 metallic color is made without the use of a formula, mix 60 parts MM800 toner with 40 parts of MM 600.

Diluting a mixed color (optional)

In situation where you want to dilute the mixed color (RTS) to decrease opacity supporting your color blending add M666 (RTS) to your color mixture.

Mixing

Filtering:

For optimum straining use waterborne suitable paint strainers, size: 125µm.

Application:

In the event of a black pre-coat requirement i.e. special effect colors, use deep black MM400 RTS

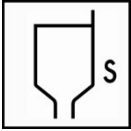
Solvents:

Avoid contact between waterborne products and any solvents.

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Viscosity



20-30 seconds DIN cup no. 4 at 20°C

Spray gun set-up / application pressure

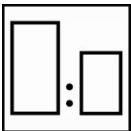


Spray gun
Gravity feed

Fluid tip – set-up
Below 28°C: 1.2 – 1.3 mm
Above 28°C: 1.3 – 1.4 mm

Application pressure
1.7-2.2 bar at the spray gun air inlet

Pot-life



All mixed Autowave MM 2.0 colors:

3 months at 20°C.

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Application process

Solid colors

Apply 2 single coats or until opacity is achieved. *Flash-off between coats by increasing airflow and or heat until the basecoat dries completely to a matt finish. If necessary allow the surface to cool.
Autowave MM 245 applied as pure color can be applied in 2 single layers with flash-off between coats as also by 2 light wet coats wet-on-wet. At force drying using windjets, keep a minimum distance of 1 meter.

*Dry for a minimum of 15 minutes (max. 24 hours) at 25°C prior to clearcoat application.

Metallic/Pearl/SEC colors

Apply a closed wet coat. Next apply a light wet coat. * Flash-off between coats by increasing airflow and or heat until the basecoat dries completely to a matt finish. If necessary allow the surface to cool.

When needed, apply a drop coat (metallic orientation coat) by reducing the pressure to 1-1 ½ bar at the gun inlet and apply the drop coat with full trigger, increase the distance to 30 cm.

*Dry for a minimum of 15 minutes (max. 24 hours) at 25°C prior to clearcoat application.

Spot repairs

When making spot repairs use lower application pressure and apply thin coats until opacity is achieved. Dry until matt between each coat before fading out well beyond the edges. In case of metallic colors apply a drop coat (metallic orientation coat) when needed by increasing the spray gun distance.

In the case of strong hiding colors, the color transparency can be increased by adding MM 666 RTS to the RTS mixed color.

Note:

Fade out of Autowave MM 2.0 can be done on:-
Existing finish, prepared according to TDS S8.01.01.
A wet coat of MM666.
A dried coat of MM666.

Spot repairs

When making spot repairs use lower application pressure and apply thin coats until opacity is achieved. Dry until matt between each coat before fading out well beyond the edges. In case of metallic colors apply a drop coat (metallic orientation coat) when needed by increasing the spray gun distance.

In the case of strong hiding colors, the color transparency can be increased by adding MM 666 RTS to the RTS mixed color.

Engine Bay

For engine bay application add 10% of Autowave 2.0 Hardener to the Autowave MM 2.0 color.
The use of clearcoat is not needed.

Under the hood

For under the hood application add 10% of Autowave 2.0 Hardener to the Autowave MM 2.0 color.
If desired add 10% of Activator WB to this color/ hardener mixture for optimum sprayability.
The use of clearcoat is not needed.

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Autowave drying and air acceleration

Humidity and airflow will influence the AutowaveMM 2.0 flash off and drying times. These times can be reduced to a minimum by using air accelerator systems with a minimum distance of 1 meter from the object, thus increasing the airflow over the object.

When heat is used for drying, allow object to cool down to application temperature before proceeding with color or clearcoat application.

Film thickness

By recommended application; Autowave MM 2.0 solid, metallic and pearl colors: 12-25 µm.
The total dry layer thickness of Autowave MM 2.0 should never exceed 30µm.

Masking

Autowave MM 2.0 Solid, Metallic and Pearl colors can be taped after it is completely matt and dry. Temperature increase in combination with air movement increase the ability for masking. Let the object cool down to ambient temperature before masking.

Denibbing

Allow Autowave MM 2.0 to flash off sufficiently, until it is completely matt and dry. Then lightly sand the damaged area with P500 free-cut sanding paper. Thoroughly remove sanding residue before continuing Autowave MM 2.0 application.

Recoatable with

Autoclear LV Superior (Fast-Medium-Slow), Autoclear Plus HS, Autoclear Rapid

All Sikkens (VOC compliant) clearcoats with the exception of:
Autoclear, Autoclear III, Autoclear LV Supreme, MS Clearcoats

Recoat time

Maximum 24 hours at 25°C

Should this maximum time be exceeded, abrade the surface and apply another coat.

Theoretical coverage

By using the recommended application the theoretical material usage is ± 8-14 m²/liter RTS mixture.

The practical material usage depends on many factors i.e. shape of the object, roughness of the surface, application techniques, pressure and application circumstances.

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Cleaning of equipment

Clean and rinse the spray gun thoroughly after use with Autowave Guncleaner.
Purge the spray gun with Activator WB prior to Autowave MM 2.0 use.
Do not use any conventional thinner unless removing dried Autowave deposits.
Do not soak the spray gun for long periods either with Autowave Guncleaner or Activator WB.

VOC

The VOC content of this product in ready to use form is max. 413 g/liter.

Product storage



Product shelf-life is determined when products are stored unopened at 20°C.
Avoid too much temperature fluctuation.
For optimal performance, store opened products at application temperature
Maximum transport and storage temperatures between 3°C-35°C.
Frost causes gelling / lumps in Autowave toners after which they no longer can be used.
Product shelf life data see TDS S9.01.02

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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 Material 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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