

CROMAX® PRO

WATERBORNE BASECOAT



PRODUCT DESCRIPTION

Cromax Pro Basecoat gives bodyshops a competitive colour advantage by enabling them to match even the very latest colours and effects. One of the most technologically-advanced waterborne basecoats available, it delivers outstanding quality not only in terms of colour but through improved productivity and profitability.

Match latest colour trends
Use most advanced technology
Optimise productivity
Achieve excellent results

FEATURES

- 01** Exceptionally accurate colour matching plus excellent coverage.
- 02** Part of a comprehensive system of tints, binders and controllers plus state-of-the-art spectros and colour retrieval software.
- 03** Quick and economical to use.
- 04** Has large application window.
- 05** Usable under different climate conditions and with different application techniques.
- 06** Helps to increase throughput and productivity.
- 07** Can be used with all Cromax undercoats and clearcoats.

TECHNICAL DATA SHEET

CROMAX® PRO

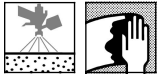


WATERBORNE BASECOAT

Product preparation - application for 2-stage colours



It is strongly recommended to use appropriate personal protection equipment during application to avoid respiratory, skin and eye irritation.



Old or original paintwork well sanded and cleaned.
 Primer-surfacer or Surfacer, sanded and cleaned
 Primer-Surfacer or Surfacer, unsanded in a wet-on-wet process
 Surfaces must be prepared and cleaned correctly before application
 Repair areas should be sanded with P500-P600 (by machine) or P800-P1000 (by hand) and cleaned



| < 30°C | | | |
|-------------------|------------------|-----------------|----------------------|
| Relative Humidity | Binder | Controller | TN800W |
| < 15% | Standard binders | WB2045 | - |
| 16% - 25% | Standard binders | WB2043 | - |
| 26% - 35% | Standard binders | WB2043 | - |
| 36% - 50% | Standard binders | WB2040 | - |
| > 50% | Standard binders | WB2040 | - |
| > 30°C | | | |
| < 15% | Slow binders | WB2045 | 10% |
| 16% - 25% | Standard binders | WB2045 | 10% |
| 26% - 35% | Standard binders | WB2043 | (10%) |
| 36% - 50% | Standard binders | WB2040/3 | - |
| > 50% | Standard binders | WB2040 (20-30%) | - |
| | | Basecoat | Controller |
| Standard | Effect colours | Cromax Pro | WB2040/WB2043/WB2045 |
| Standard | Solid colours | 100 | 20 |
| Standard | Solid colours | 100 | 10 |

Mixing ratio's are on volume.



For optimum application properties, apply the basecoat immediately after addition of Cromax Pro Basecoat Controller WB2040/WB2043/WB2045. Use within same working day. Colours should be stored without the addition of the Controller.



| | Spray nozzle | Spray pressure | |
|-----------|--------------|----------------|----------------------|
| Compliant | 1.2 - 1.3 | 1.8 - 2 bar | inlet pressure |
| HVLP | 1.2 - 1.3 | 0.7 bar | atomisation pressure |

see manufacturer's instructions



1 + 0.5
 Apply a closed coat by wetting the surface sufficiently to achieve 70-80% opacity in the wet film.
 This is followed by an effect coat with increased distance to the object with close overlaps into the still wet first layer.
 This final ½ (>50%) effect coat achieves the correct effect orientation, completes the hiding and provides the correct colour position.

flash-off until matt



Clearcoat

VOC compliant 2004/42/IIIB(d)(420) 420: The EU limit value for this product (product category: IIB(d)) in ready to use form is maximum 420 g/l of VOC. The VOC content of this product in ready to use form is maximum 420 g/l.

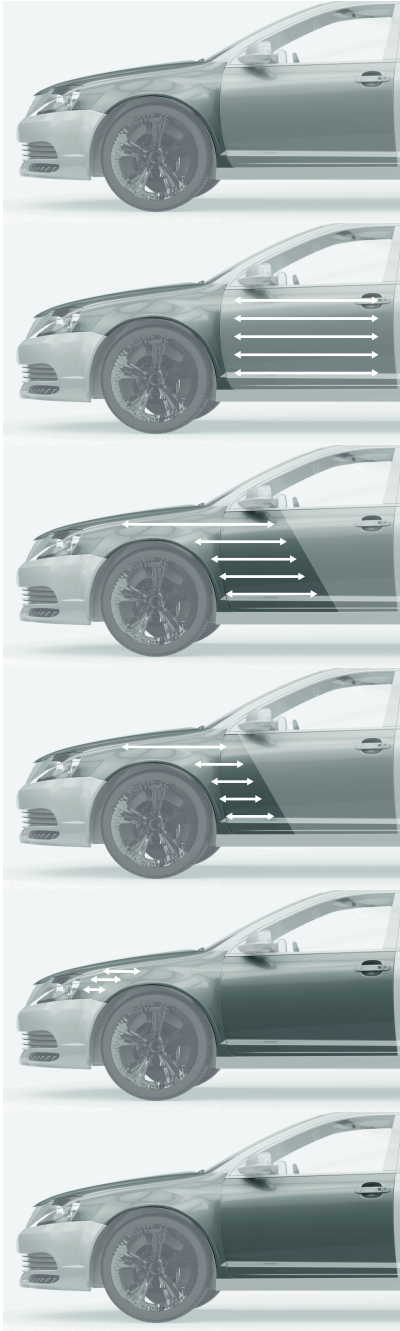
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WATERBORNE BASECOAT

Cromax Pro Blend in Standard application



Adjacent panel:
sand panel with suitable abrasive e.g. Trizact - P1000
New part / repair: sand surfacer (minimum P500)

Apply the Blender WB2091/3 avoiding the extreme edges of the panel.
Remark: in hot & dry conditions the blender can be applied to the whole panel.

Note: hot and dry conditions choose type of blender:
WB2091
WB2091 + 5% slow controller (WB2043 or WB2045) or
WB2093

Apply the 1st coat of basecoat to the widest area

Spray the 2nd coat of basecoat inside the 1st coat and extend further onto fender.

Do not extend beyond the 1st coat.

Remark / option:

The basecoat can be diluted by

20% blender added to the colour

20% binder to the total amount of binder in the formula

Apply the basecoat standard method (= 1.5 coat wet-on-wet)

Apply clearcoat to finish the repair.

5% activation (WB2075) of all layers is a must when using CC6750.

Cromax Pro Basecoat Blender / Basecoat Blender LH is not recommended for dark colours.

WB2093 Cromax Pro Basecoat Blender LH is suitable for low relative air humidity (<30°C) and/or temperatures above 30°C.

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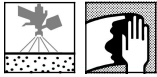


WATERBORNE BASECOAT

Product preparation - application for Tri-stage colours



It is strongly recommended to use appropriate personal protection equipment during application to avoid respiratory, skin and eye irritation.



Old or original paintwork well sanded and cleaned.
Primer-surfacer or Surfacer, sanded and cleaned
Surfaces must be prepared and cleaned correctly before application
Repair areas should be sanded with P500-P600 (by machine) or P800-P1000 (by hand) and cleaned



| < 30°C | | | | |
|-------------------------|------------------|-----------------|-----------|----------------------|
| Relative Humidity | Binder | Controller | TN800W | |
| < 15% | Standard binders | WB2045 | - | |
| 16% - 25% | Standard binders | WB2043 | - | |
| 26% - 35% | Standard binders | WB2043 | - | |
| 36% - 50% | Standard binders | WB2040 | - | |
| > 50% | Standard binders | WB2040 | - | |
| > 30°C | | | | |
| < 15% | Slow binders | WB2045 | 10% | |
| 16% - 25% | Standard binders | WB2045 | 10% | |
| 26% - 35% | Standard binders | WB2043 | (10%) | |
| 36% - 50% | Standard binders | WB2040/3 | - | |
| > 50% | Standard binders | WB2040 (20-30%) | - | |
| | | Basecoat | Activator | Controller |
| | | Cromax Pro | WB2075 | WB2040/WB2043/WB2045 |
| Ground coat (Activated) | Effect colours | 95 | 5 | 20 |
| Standard Effect coat | Effect colours | 100 | - | 20 |
| Ground coat (Activated) | Solid colours | 95 | 5 | 10 |
| Standard Effect coat | Solid colours | 100 | - | 10 |

Mixing ratio's are on volume.

Stir after each step.

To compensate for the use of WB2075 in Cromax Pro basecoat, it is recommended to use a slower setting than normally would be advised.

A slower controller can be used and up to 10% TN800W can be added.



For optimum application properties, apply the basecoat immediately after addition of Cromax Pro Basecoat Activator WB2075 and Cromax Pro Basecoat Controller WB2040/WB2043/WB2045.

Solid ground colours - 5%: 1 hr 30 min - 2 hr

Effect ground colours - 5%: 45 min - 1 hr

Blender - 5%: 1 hr - 1 hr 30 min



| | Spray nozzle | Spray pressure | |
|-----------|--------------|----------------|----------------------|
| Compliant | 1.2 - 1.3 | 1.8 - 2 bar | inlet pressure |
| HVLP | 1.2 - 1.3 | 0.7 bar | atomisation pressure |

see manufacturer's instructions



1.5 - 2 Ground coats (2K Activated)

flash-off until matt

1 + 0.5 Effect/midcoat

flash-off until matt



| | Ground coat - Bake | Ground coat - Blowing | Ground coat - Ambient |
|------------|--------------------|-----------------------|-----------------------|
| 20 °C | - | - | 15 min - 25 min |
| 35 - 40 °C | - | 8 min - 12 min | - |
| 60 - 65 °C | 10 min - 15 min | - | - |



Clearcoat

VOC compliant

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WATERBORNE BASECOAT

Cromax Pro Blend in Tri-stage application



Adjacent panel:
sand panel with suitable abrasive e.g. Trizact - P1000
New part / repair: sand surlacer (minimum P500)

Apply a closed coat of activated Blender / Blender slow (blender +5% WB2075) to the adjacent blending areas, avoiding the extreme edges of the panel. Remark: in hot and dry conditions the activated blender can be applied to the whole panel.

Apply the 'activated' Ground coat to the edge of the wet Blender / Blender slow, and over the repaired surface. Refer to mixing details page for activation ratios.

Apply a closed coat of "Blender / Blender slow" to adjacent blending area.

Apply the 1st coat of the effect coat to the widest area.
Spray the 2nd coat inside the 1st coat and extend further onto the fender.
A 3rd coat might be needed. Keep working outside-in.

Apply clearcoat to finish the repair.
5% activation (WB2075) of all layers is a must when using CC6750.

WB2093 Cromax Pro Basecoat Blender LH is suitable for low relative air humidity (<30°C) and/or temperatures above 30°C.

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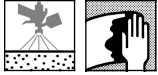


WATERBORNE BASECOAT

Product preparation - application for Specialty colours (containing WB1735)



It is strongly recommended to use appropriate personal protection equipment during application to avoid respiratory, skin and eye irritation.



Suitable substrates, undercoats and its preparation can be found in previous pages in this TDS.

- Apply a single layer of 2K Clearcoat on all repaired panels / surfaces
- After drying and cooling, sand the whole panel very carefully with:
 - machine sanding: P1000 – P1200 grade
 - hand sanding for edges and corners: P3000 grade
- For blend-in process, please refer to blend-in page for 2 stage colours



| | | Basecoat | Controller |
|----------|----------------|------------|---------------|
| | | Cromax Pro | WB2043/WB2045 |
| Standard | Effect colours | 100 | 50 |



For optimum application properties, apply the basecoat immediately after addition of Cromax Pro Basecoat Controller WB2043/WB2045 . Use within same working day. Colours should be stored without the addition of the Controller.



| | Spray nozzle | Spray pressure | |
|-----------|--------------|----------------|----------------------|
| Compliant | 1.2 - 1.3 | 1.8 - 2 bar | inlet pressure |
| HVLP | 1.2 - 1.3 | 0.7 bar | atomisation pressure |

see manufacturer's instructions



1 + 0.5
Apply a closed coat by wetting the surface sufficiently to achieve 70-80% opacity in the wet film.
This is followed by an effect coat with increased distance to the object with close overlaps into the still wet first layer.
This final ½ (>50%) effect coat achieves the correct effect orientation, completes the hiding and provides the correct colour position.

flash-off until matt



Clearcoat
Check if a specific clearcoat is required to meet car manufacturer approvals.

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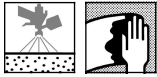


WATERBORNE BASECOAT

Product preparation - application with Cromax Pro Basecoat Activator WB2075



It is strongly recommended to use appropriate personal protection equipment during application to avoid respiratory, skin and eye irritation.



Old or original paintwork well sanded and cleaned.
Primer-surfacer or Surfacer, sanded and cleaned
Primer-Surfacer or Surfacer, unsanded in a wet-on-wet process
Surfaces must be prepared and cleaned correctly before application
Repair areas should be sanded with P500-P600 (by machine) or P800-P1000 (by hand) and cleaned



| < 30°C | | | |
|-------------------|------------------|-----------------|--------|
| Relative Humidity | Binder | Controller | TN800W |
| < 15% | Standard binders | WB2045 | - |
| 16% - 25% | Standard binders | WB2043 | - |
| 26% - 35% | Standard binders | WB2043 | - |
| 36% - 50% | Standard binders | WB2040 | - |
| > 30°C | | | |
| < 15% | Slow binders | WB2045 | 10% |
| 16% - 25% | Standard binders | WB2045 | 10% |
| 26% - 35% | Standard binders | WB2043 | (10%) |
| 36% - 50% | Standard binders | WB2040/3 | - |
| > 50% | Standard binders | WB2040 (20-30%) | - |

Cromax Pro Basecoat has the ability to be activated with Cromax Pro Basecoat Activator WB2075 for use in multi-toning, 3-stage ground colours, underhood/interiors and for general application (e.g. CC6750) where the basecoat requires to be activated. The table illustrates the main details, this can also be found in the Colourtools when preparing the colour ready for use. Cromax Waterborne Reducer TN800W can be added for application in lower humidity and warmer climates.

| | | Basecoat | Blender | Activator | Controller |
|----------------------|----------------|------------|---------------|-----------|--------------------------|
| | | Cromax Pro | WB2091/WB2093 | WB2075 | WB2040/WB2043/ WB2045 |
| For use under CC6750 | Effect colours | 95 | - | 5 | 20 |
| | Solid colours | 95 | - | 5 | 10 |
| | Blending | - | 95 | 5 | - |
| Underhood / interior | Effect colours | 90 | - | 10 | 20 |
| | Solid colours | 90 | - | 10 | 10 |
| Multi-toning | Effect colours | 95 | - | 5 | 20 |
| | Solid colours | 95 | - | 5 | 10 |

Mixing ratio's are on volume.

Stir after each step.

A slower controller can be used and up to 10% TN800W can be added.

For use of Tri-stage colours under CC6750 both Ground coat, Effect coat & blender need to be activated according to the above specifications.

For multi-toning every layer but the last one needs to be activated, except for use under CC6750 all layers need to be activated.

When using CC6750, the Basecoat blender needs to be activated according to the above specifications.



For optimum application properties, apply the basecoat immediately after addition of Cromax Pro Basecoat Activator WB2075 and Cromax Pro Basecoat Controller WB2040/WB2043/WB2045.

Solid colours: 5%: 1 hr 30 min - 2 hr

Solid colours: 10%: 45 min - 1 hr

Effect colours: 5%: 45 min - 1 hr

Effect colours: 10%: 30 min - 1 hr

Blender - 5%: 1 hr - 1 hr 30 min



| | Spray nozzle | Spray pressure | |
|-----------|--------------|----------------|----------------------|
| Compliant | 1.2 - 1.3 | 1.8 - 2 bar | inlet pressure |
| HVLP | 1.2 - 1.3 | 0.7 bar | atomisation pressure |

see manufacturer's instructions



1 + 0,5

1 operation

1st: closed uniform coat

2nd: apply immediately an effect coat using an increased distance to the object

flash-off until flat
before clearcoating



| | Interior 10% activator | CC6750 5% ambient/bake | CC6750 5% blowing |
|------------|------------------------|------------------------|-------------------|
| 20 °C | 12 hr - 16 hr | 15 min - 25 min | - |
| 35 - 40 °C | - | - | 8 min - 12 min |
| 60 - 65 °C | 15 min - 20 min | 10 min - 15 min | - |



Clearcoat

Clearcoat not needed for interior use

VOC compliant

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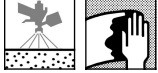


WATERBORNE BASECOAT

Product preparation - application Special Colours using Cromax Pro WB2060 Effect Adjuster



It is strongly recommended to use appropriate personal protection equipment during application to avoid respiratory, skin and eye irritation.



Old or original paintwork well sanded and cleaned.
Primer-surfacer or Surfacer, sanded and cleaned
Surfaces must be prepared and cleaned correctly before application
Repair areas should be sanded with P500-P600 (by machine) or P800-P1000 (by hand) and cleaned



| | | Basecoat | Activator WB2075 | Controller WB2040/ WB2043/ WB2045 | Effect Adjuster WB2060 |
|-----------------|----------------|----------|------------------|--------------------------------------|------------------------|
| Special Colours | Effect Colours | 100 | | 0-20%* | 300-600%* |
| Ground Colour | Effect Colours | 100 | 5%** | 20% | |
| Ground Colour | Solid Colours | 100 | 5%** | 10% | |
| Blender | WB2091/ WB2093 | 100 | 5%** | | |

*please refer to the "ready-for-use" function in Chromaweb to select the appropriate product adjustment of the Cromax Pro Basecoat Colour in use.

All amounts are cumulative.

**limited potlife, please refer to page "application with Cromax Pro Basecoat Activator WB2075"



| | Spray nozzle | Spray pressure | |
|-----------|--------------|----------------|----------------|
| Compliant | 1.2 - 1.3 | 1.8 - 2 bar | inlet pressure |

see manufacturer's instructions



1.5 - 2 Ground coats (2K Activated)

flash-off until matt Forced drying recommended

3 - 5 Effect Coat (Special Colour) 1.: Close fluid control (material delivery) on spray gun completely. 2.: Open fluid control by 0.75 to 1 turn (SATA RP1.2)***. 3.: Apply initial coats with 25-30 cm distance to the object and close overlap technique. Effect coats should be applied in a closed even film to create a semi wet appearance. 4.: Final coat of effect is applied at approx. 35 cm distance to correct any slight mottling (if needed). Tack rag between coats of effect colour is recommended (non sticky tack cloth). ***fluid control settings (material delivery) might vary depending on spray gun manufacturer

flash-off until matt blow dry between coats

VOC compliant

This product mix is not VOC compliant.

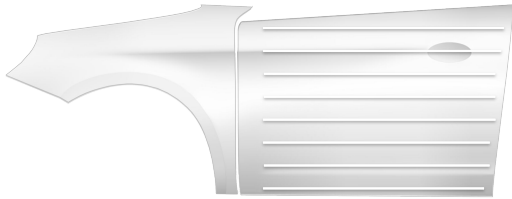
TECHNICAL DATA SHEET

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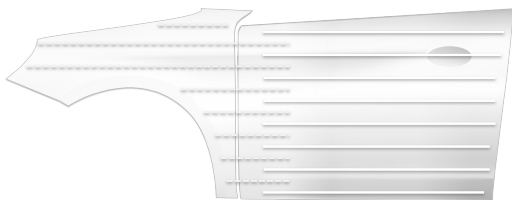


WATERBORNE BASECOAT

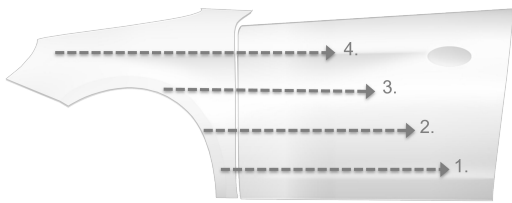
Cromax Pro Blend in Special Colours using Cromax Pro WB2060 Effect Adjuster



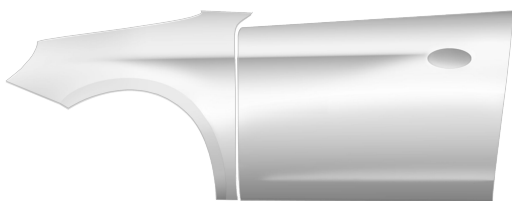
Apply a closed coat of activated Cromax Pro WB2091/WB2093 Basecoat Blender (blender +5% Cromax Pro WB2075 Basecoat Activator) to the adjacent blending area (panel). Do not fade out the blender and apply up to the edge of the panel.



Apply the activated Cromax Pro ground colour in 1.5 coats over the repair area (repair panel) and into the still wet WB2091/WB2093 Basecoat Blender. When using white solid colours, reduced fluid control (material delivery) and fading out towards the repair area will help to avoid the formation of heavy droplets. For appropriate product adjustment, please refer to Chromaweb ready-for-use information of the colour in use. Flash off and dry (forced drying is recommended - do not use hand blowers at this stage).



Allow panel to cool down completely. Adjust effect colour accordingly to ready-for-use recommendation given in Chromaweb for the Special Colour in use. 1.: Close fluid control (material delivery) on spray gun completely. 2.: Open fluid control by 0.75 to 1 turn (SATA RP1.2)***. 3.: Apply the first effect coat to the widest area and flash off. Apply subsequent coats using an out-side-in technique, flash off between coats. Ensure a distance to the object of approx. 25-30cm. Effect coats should be applied in a closed even film to create a semi wet appearance. 4.: Final coat of effect is applied at approx. 35 cm distance to correct any slight mottling (if needed). Tack rag between coats of effect colour is recommended (non sticky tack cloth). 5.: Finally flash-off in readiness for clearcoat. ***fluid control settings (material delivery) might vary depending on spray gun manufacturer.



Apply clearcoat to finish the repair.

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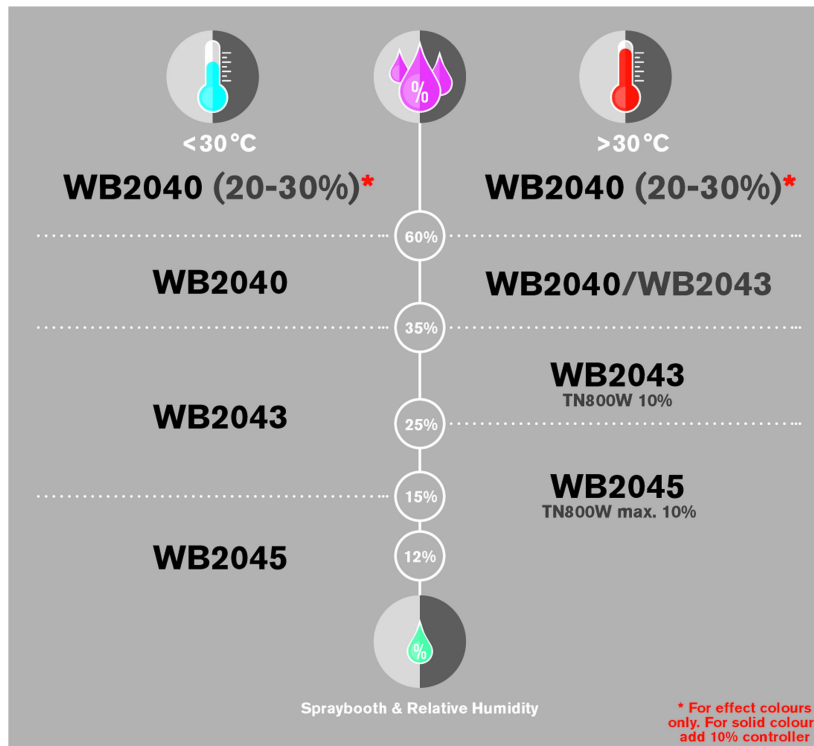


WATERBORNE BASECOAT

Climate guide

CLIMATE GUIDELINE

Solid colours : + 10% controller
Effect colours: + 20% controller



30% of WB2040 can be added when relative humidity is above 65%, only for Metallic and Pearl colours.

Refer to booth temperature on spray cycle, check relative humidity in booth with Hygrometer
Do not leave Hygrometer in booth during bake cycle

TECHNICAL DATA SHEET

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WATERBORNE BASECOAT

Products

WB01-WB99 Cromax® Pro Mixing Color (solid)
WB1001-WB1099 Cromax® Pro Mixing Color (effect)

WB2010 Cromax® Pro Basecoat Binder I
WB2020 Cromax® Pro Basecoat Binder II
WB2030 Cromax® Pro Basecoat Viscosity Balancer

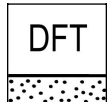
WB2075 Cromax® Pro Basecoat Activator

WB2040 Cromax® Pro Basecoat Controller Standard Condition
WB2043 Cromax® Pro Basecoat Controller LH
WB2045 Cromax® Pro Basecoat Controller XLH

TN800W Cromax® Pro Waterborne Reducer

WB2091 Cromax® Pro Basecoat Blender
WB2093 Cromax® Pro Basecoat Blender LH

WB2011 Cromax® Pro Basecoat Binder I LH
WB2021 Cromax® Pro Basecoat Binder II LH
WB2031 Cromax® Pro Basecoat Viscosity Balancer LH



10 - 20 µm Effect Colors
12 - 25 µm Solid Colors

Theoretical coverage

145 m²/l at 1 micron dry film thickness
Due to different activator characteristics and different mixing ratios of the ready-to-use mixture in some TDS versions, the theoretical coverage calculation may vary.
Note: The practical material consumption depends on several factors, e.g. geometry of the object, surface formation, application method, spray gun setting, inlet pressure, etc.



Clean after use with a suitable waterborne guncleaner.

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Remarks

- Material has to be at room temperature (18-25°C) before use.
- Cromax Pro Basecoat has to be filtered through waterproof 125 µm quick sieves before application by cup system (e.g. SATA or 3M).
- All tools and equipment used with this product must be approved for waterborne paint.
- Flash-off time can be reduced by using air blowers, spray booth blower systems or increasing spray booth temperature.
- Allow additional time for preheating up to panel temperature.
- All stated drying and flash-off times are related to relative humidity and type of blowing equipment.
- Best to be used within one working day after addition of the Cromax Pro Basecoat Controller.
- Cromax Pro activated and non-activated has to be overcoated with clearcoat within 72 hours.
- Ready for use, non-activated, Cromax Pro Basecoat can be used within 6 months, but Cromax Pro Basecoat Controller must be added again in the same ratio before using. We advise to make a colour spray-out card prior to applying on the vehicle. Opacity may be affected by this 2nd addition of Cromax Pro Basecoat Controller.
- The addition of a Cromax Pro Basecoat Controller prior to application of Cromax Pro Basecoat is mandatory.
- The use of Cromax Pro Basecoat will depend on external conditions (relative humidity, air flow, temperature, ...). Under conditions of low humidity, see mixing ratio table/colourtools.
- Mixing machine should not exceed 2 x 15 minutes cycles in 24 hour period.
- New unopened cans of toners/tints should be adequately stirred before use.
- Recommended transport and storage between 5 and 35°C (do not expose at temperature below 5°C).

Consult Safety Data Sheet prior to use. Observe the precautionary notices displayed on the container.

All other products referred to in the refinish build up are from our Cromax product range. System properties will not be valid when the related material is used in combination with any other materials or additives which are not part of our Cromax product range, unless explicitly indicated otherwise.

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