

COLOUR CREATION FOR MAZDA 46V SOUL RED CRYSTAL

CLEARCOAT
PIGMENTED CLEARCOAT
CLEARCOAT
METALLIC
BASECOAT

MAZDA 46V SOUL RED CRYSTAL was developed by Mazda as a three-coat body colour with a pigmented clearcoat.



FORMULA-SPECIFIC SPECIAL PIGMENTS

SPECTRAL T-10 RED INK; SPECTRAL T-11 CARMIN INK

Special ink-type pigments, which are pigment solutions for the vehicle. Their features include low opacity. The pigments are added to the clearcoat to increase its colour volume while remaining transparent (by which they transmit light and colour the vehicle). This leaves the 1st metallic-pigmented layer visible.

The final effect (colour) depends on the coat thickness of the pigmented clearcoat – the thicker the clearcoat, the darker the colour, shifting to burgundy (in this formula).

EXAMPLE COLOUR 46V FORMULA

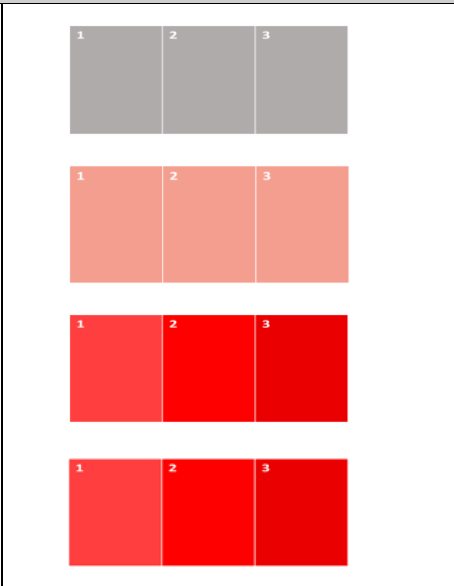
<p>1st layer: Basecoat - (WAVE 2.0)</p>	<p>1. SA 822 – 416.1g 2. SA 103 – 414.7g 3. SA 311 – 192.9g</p> <p>Proportion with thinner SA-R10 5 % - 15 %</p>
<p>2nd layer: Pigmented clearcoat (KLAR 565, KLAR 565-00, KLAR 525-00 or KLAR 545-00)</p>	<p>1. Klar 565-00 – 834.8g 2. T11 – 109.5g 3. T10 – 60.1g</p> <p>Proportion with hardener H6115 2:1</p>
<p>3rd layer: Clearcoat</p>	<p>The same type of clearcoat as used for tinting</p>

SELECTING THE CORRECT COLOUR OPTION

- Find the colour MAZDA 46V in CarColor®.
- Check the references to the colour box and pick all the listed colour cards.
- Polish the part adjacent to the part to be recoated.
- From the selected colour cards, choose the tone which is the best match for the polished part (inspect and compare in daylight to avoid metamerism).
- Compose the pigment mixture as specified in the formula from CarColor®.

COLOUR MATCH CHECK AND TEST SPRAYING

- Prepare 3 (three) test cards with the correct spectral grey colour of the primer specified in CarColor®.
- Apply the 1st layer of the colour on all three test cards according to the metallic colour processing application guidelines listed in SPECTRAL WAVE 2.0.
- Apply the pigmented clearcoat to each test card to produce the colour match the cards with 1, 2, and 3 thin layers of the pigmented clearcoat.
- Apply one layer of pure clearcoat to each test card.



SELECTING THE CORRECT APPLICATION OPTION FOR MAZDA 46V

- With the processed test cards dry, choose the one which best matches the body colour of the vehicle.
- Apply the MAZDA 46V colour just like the coats on the test card having the best colour match.



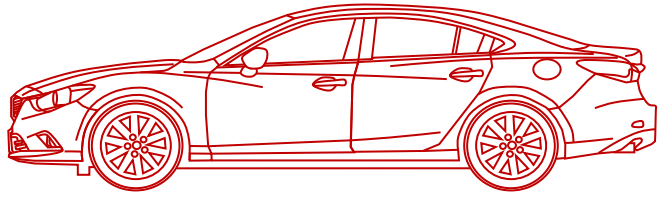
PREPARING THE SUBSTRATE FOR COLOUR APPLICATION

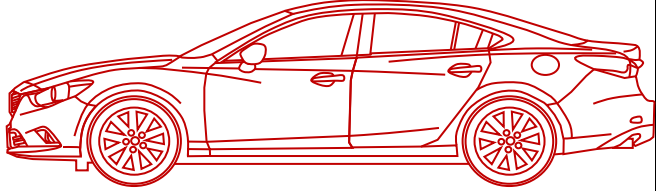

- SPECTRAL acrylic and epoxy primers: fill or priming version
- Wet-on-wet version
- OEM finish


Dry machine sand:
 → Initial: P320÷P360
 → Finish: P400÷P500
 → Work out the finish with grey abrasive cloth and matting compound.
 → Degrease with EXTRA 785, follow with EXTRA W785.

Follow the guidelines specified in the TDS of the SPECTRAL wet-on-wet primers..

Dry machine sand with
 → P400÷P500.
 → Work out the finish with grey abrasive cloth and matting compound.
 → Degrease with EXTRA W785, follow with EXTRA W785.

1ST LAYER APPLICATION (METALLIC BASECOAT) TO THE WHOLE ELEMENT			
<ul style="list-style-type: none"> • It is recommended to apply SPECTRAL BASE 2.0 at over 18°C with a humidity of 75% or lower. • Apply a check layer (to verify correct substrate preparation) at 30% of the full layer. • Apply 2 full layers. <ul style="list-style-type: none"> – Leave to flash off until matt after the last layer. • Apply 2 single drop layer. <ul style="list-style-type: none"> – spraying distance: as for the concealing layer. • Dry the layers until fully matt <ul style="list-style-type: none"> + 5 min before applying the pigmented clearcoat. 			
SPRAY GUN SETTINGS FOR THE 1ST LAYER OF METALLIC BASECOAT			
	Nozzle	Pressure	Gun setting, material quantity
Full layer	1.3 mm	1.8 ÷ 2.0 bar	100%
Drop layer	1.3 mm	1.4 ÷ 1.5 bar	30%
Recommended tool: low-pressure gravity fed spray gun.			
2ND LAYER APPLICATION (PIGMENTED CLEARCOAT) TO THE WHOLE ELEMENT			
<ul style="list-style-type: none"> • Apply 1 to 3 thin layers of the selected pigmented clearcoat (follow the best matching test spray); use 565, 565-00, 525-00, or 545-00. • The flash-off time between layers is 10 min/20°C. • The flash-off time before applying the pure clearcoat is 10 min/20°C. 			
SPRAY GUN SETTINGS FOR PIGMENTED CLEARCOAT			
	Nozzle	Pressure	Gun setting
Material quantity	1.2 ÷ 1.3 mm	1.8 ÷ 2.2 bar	80%

3RD LAYER APPLICATION (PURE CLEARCOAT) TO WHOLE ELEMENT			
<ul style="list-style-type: none"> Apply 1 layer of pure clearcoat (use the same clearcoat as the pigmented one). The flash-off time before drying is 30÷40 min/20°C. 			
	Nozzle	Pressure	Gun setting, material quantity
Full layer	1.2 ÷ 1.3 mm	1.8 ÷ 2.2 bar	100%
SHADING OF COLOR MAZDA 46V			
Due to the difficulty of color reproduction of the MAZDA 46V fade-out technique is the best choice.			
TECHNOLOGICAL PROCESS OF COLOR SHADING MAZDA 46V			
STEP 1	STEP 2	STEP 3	STEP 4
<p>Prepare the repaired element for the colour application and the adjacent element for fading out.</p> <ul style="list-style-type: none"> → Initial sand with P320-P360 (random orbital sander 2.5÷3 mm orbit). → Finish sand with P400-P500 (random orbital sander 2.5÷3 mm orbit). → Finish with grey abrasive cloth and matting compound. → Blow off all dust. → Degrease with SPECTRAL EXTRA 785. → Degrease with SPECTRAL EXTRA W785. 			
			

STEP 1	STEP 2	STEP 3	STEP 4
<p>Layer I application (base color)</p> <ul style="list-style-type: none">→ Applying the first (base) layer of color, in accordance with the recommendations of the WAVE 2.0 TDS, on the prepared surface so as to cover only the background from the primer. It is not recommended to use a blender!→ After evaporation of the covering layers, wipe with a dust-absorbing cloth.→ Apply 2 single drop layer without evaporation time between them. Dry the layers until fully matt + 5 min before applying the clearcoat.			
			
			

STEP 1	STEP 2	STEP 3	STEP 4
<p>2ND LAYER APPLICATION (PIGMENTED CLEARCOAT)</p> <ul style="list-style-type: none">→ For the shading of the 46V color, it is recommended to use the so-called "reverse fade-out" method. The first layer applied should be stretched right to the final place of the color transition, and each subsequent layer applied should be shorter than the previous one, with adequate inter-layer evaporation time.→ Before applying the tinted clearcoat, wipe the painted elements with a dust-absorbing cloth.→ Apply the appropriate number of layers (according to the application on the selected test card, 1-3 layers) of the selected, tinted clearcoat, using the reverse shading method.→ Evaporation between layers of tinted clearcoat 15 – 20min./ 20°C→ Evaporation before application of pure clearcoat 20min./ 20°C			



First coat of tinted clearcoat



Second layer of tinted clearcoat



Third layer of tinted clearcoat

STEP 1	STEP 2	STEP 3	STEP 4
<p>Layer III application (clearcoat)</p> <ol style="list-style-type: none">1. Apply 1 coat of pure clearcoat2. Due to the thickness of the clearcoat, the drying time is extended three times to the one specified in the technical sheet. <p>→ Polishing (if necessary) preferably the next day.</p>			
