

## SPECTRAL WAVE

### Water based basecoat

**Characteristics:**

Spectral WAVE – is a water based basecoat mixing system consisted of 74 concentrated paste paints (42 pigments, 10 aluminium pastes, 17 pearl paste, 5 xiralllic pastes), 2 binders and thinner. The mixing of this components allows to achieve required Basecoat color, based on the formulation data software. Any SPECTRAL WAVE Basecoat color contains volatile organic compound (VOC) < 420g/L, compliant with Directive UE 2004/42/CE of 21 April 2004.

**Complementary products:**

Water based Fade Out Agent SPECTRAL EXTRA W795  
Water based Cleaner SPECTRAL EXTRA W785  
SPECTRAL Under primers  
SPECTRAL Klar clearcoats

**Substrates:**

- acrylic, epoxy and polyurethane primers used at car refinish,
- aged paintwork including thermoplastic paints
- polyester laminates.

**Substrates preparation:**

Matt dry P400÷P500 or dry wet P800÷P1000:  
Degrease with Silicone Remover Spectral EXTRA 785.  
Wash with water based Cleaner SPECTRAL EXTRA W785 before spraying.  
Wipe with an antistatic piece of cloth.

**Basecoat preparation:**

SPECTRAL WAVE components should be stored at the temperature of about 20°C which will provide the product viscosity easy to mix the components. SPECTRAL WAVE mixing system does not require the use of stirring machinery. Due to high stability of the paste paints, manual strong shaking of the container is sufficient. New product should be shaken ca. 1 minute. The already used product should be shaken ca. 30 seconds. Containers with one-time dispenser containing the mixing system components provide tight closure and allow precise dosage (even single pigment droplets). The plug should be precisely cleaned in order to prevent pigment drying. Colored Basecoat is prepared according to the computer software formulation. If the basecoat is used within 48 hours from mixing, it could be thinned with the proper thinner. If the time the basecoat is going to be used is longer than 48 hours, the proper thinner should be delivered to the customer in a proper amount and in a sealed container.

**Mixing ratio:**

Determined separately for each formulation and described in SPECTRAL compute software.

**Potlife:**

Basecoat (without the thinner) – up to 3 months at the temperature of 20°C.  
Basecoat mixed with the thinner – up to 48 hours at the temperature of 20°C.

**Spray viscosity, nozzle, pressure:**

DIN 4/20°C 30÷60 s, depending on the color,  
 Spray gun HVLP type - 1,2-1,3 mm nozzle, inlet pressure 2 bar, nozzle pressure 0,7 bar  
 Spray gun RP type - 1,2-1,3 mm nozzle, 2-3 bar  
 Recommended spray gun – SATA JET 3000 HVLP, WSB nozzle  
 IVATA W400 LV2, 1,2mm nozzle

**Volatile Organic Compound (VOC) content:**

VOC limit (cat. B/4) = 420g/L (ready to apply mixture).  
 VOC < 420 g/L

Volatile organic compound (VOC) compliant with Directive UE 2004/42/CE of 21 April 2004.

**Procedure:**

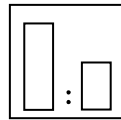
Sand dry P400-500  
 Sand wet P800-1000



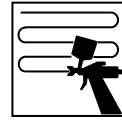
Degrease



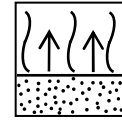
Shake



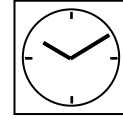
Mix according to  
 the formulation



0,5+1-2+0,5  
 1,2-1,3 mm  
 2,0 bar HVLP



Untill matt  
 + 5 minutes



Operational hardness  
 after clearcoat  
 application

**NOTICE:** A test layer of basecoat should be applied before the spraying.  
 Use primer with the proper shade of gray (according to the SPECTRAL computer software).

Apply thin and dust layer onto finished and degreased surface. The surface can be dried with the Venturi nozzle (it is not necessary), drying time is short due to the thin layer. Then apply full layer of basecoat (usually it is enough to achieve very good hiding power). Low hiding power basecoats should be covered with second full layer after drying the first one. When full covering power achieved, basecoat can be dried with Venturi nozzle or QAD system in the spray booth. Drying time until matt is about 5-10 minutes depending on the temperature, moisture, ventilation intensity and air blast strenght. Concerning basecoats with the special effect (metallic, pearl), additional dusty layer of basecoat should be applied in order to even flake apperance. It can be dried with Venturi nozzle just like the first basecoat layer but it is not necessary as the layer is very thin. Clearcoat can be applied after minimum 5 minutes from drying untill matt.

**Fade-out:**

Considering possible differences between the basecoat color and the original color, fade-out is recommended in order to level optical differences. Water based Fade Out Agent Spectral EXTRA W795 should be used. It even flake appearance. Fade Out Agent Should be used in the area where the new coat joins the old one, directly befor spraying the last dusted layer of basecoat. When dealing with no special effect basecoat colors Water based Fade Out Agent Spectral EXTRA W795 does not have to be used. When dealing with some impurities in the basecoat during spraying, they can be eliminated by sanding dried basecoat with the fine-grained sandpaper and then applying dusted basecoat layer similar to usual fading-out.

**Application:**

In case of rough steel degrease and applied primer Spectral UNDER 345.  
 - SPECTRAL Under 335 or SPECTRAL Under 325 primer with a proper shade of gray  
 - SPECTRAL WAVE basecoat  
 - SPECTRAL KLAR 505, SPECTRAL KLAR 515 or SPECTRAL KLAR 575 clearcoat

**Dry layer thickness:**

Ca. 20µm.

**Drying time:**

Between layers – to matt surface

Clearcoat can be applied after minimum 5 minutes from drying until matt.

Drying time is shorter in case of use venturi nozzle.

**Yield:**

1L of water based basecoat is enough to get ca. 7.0 -9.0 m<sup>2</sup> of 20 µm thickness dry layer.

**Tools cleaning:**

Precleaning – water

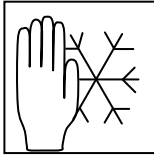
Main cleaning – NC solvent

Before application rinse spraying guns using demineralised water

**Storage time and condition:**

SPECTRAL WAVE is water borne system therefore it have to be store in temperature above +5°C.

Notice: In case of over frost, the products can not be used.



SPECTRAL WAVE pigments and binders in sealed original containers  
produced before 31.12.2009:

12 months in 20°C.

SPECTRAL WAVE pigments and binders in sealed original containers  
produced after 01.01.2009:

24 months in 20°C

SPECTRAL WAVE pigments and binders after being opened :

6 months in 20°C.

SPECTRAL special reducer SW-R10 :

12 months in 20°C.

**Industrial safety:**

See Safety Data Sheet of this article.