BIPOX 2C HB MIDCOAT

2K high build coating based on epoxy resins

Description

Bipox 2C HB Midcoat [6145] is a solvent based 2C high build primer/coating based on epoxy resins and a polyamide hardener.

Properties

- Excellent direct adhesion to electrolytically galvanised steel, thermally zinc-plated steel, aluminium and stainless steel
- Excellent anticorrosive properties
- Highly chemical resistant
- Can also be used as a sputtering structure or effect paint
- For use as a primer or as one-layer 'direct to metal'-system
- Suitable for spraying
- Bipox 2C products are lead and chromate free
- Available in almost any colour of the BC-S 8200 CMS

Typical Applications

Suitable for various heavy industrial applications structures having to meet stringent requirements on corrosion protection and on durable finishes.

For example: chassis, vehicles, containers, machinery, steel structures, etc.

Not suitable for structures immersed in water.

Substrates

- Steel
- Blasted steel (SA 2,5 blasted or hand cleaned ST 3)
- Several non-ferrous metals
- Intact old paint layers (sufficiently roughened)

Technical Specifications

(ready mixed product at 20°C)

Finish	:	silk gloss
Gloss level (¹)	:	approx. 50% (depending on colour)
Colour	:	almost any colour by BICCS CMS BCS-8200
Theoretical consumption	:	approx. 5,9 m²/ltr. at 100 µm DFT
Specific gravity	:	1,38 g/ml (depending on colour)
Solids content	:	74% by weight / 60% by volume
Flashpoint	:	22°C
Application conditions	:	min. 10°C / 80% R.V.
VOC content	:	349 g/l
Shelf life in can	:	12 months in original unopened packaging, stored at 5 – 30°C. Frostproof storage.

APPLICATION INSTRUCTIONS

Pre-treatment
The surface needs to be entirely clean, dry and degreased. Old, intact paint layers need to be abrabed/sand papered. Pre-treatment (also) depends on the substrate, but in any way needs to be done in such a way that a solid and suitable substrate is obtained, suitable to be painted.

See the additional info in this sheet. Please contact our Technical Department for further enquiries. .

Mixing ratio BC-S Colourants, 8200 series:
Add 10% BC-S Colourants (by volume)

Mixing ratio Hardener
Hardener : Bipox 2C Hardener for Midcoat [6145b]
Mixing ratio : 4:1 by volume (base:hardener)
Potlife : ca. 6 hours at 20°C

Pay attention! ***Basecoat and hardener have to be mixed carefully mechanically on the right scale. Because of quality loss, do not use products after expired potlife.***

Viscosity and thinning
BICCS Thinner 0104 [9164]
Airspray, max.: 10 – 20% / Airless, max.: 5 – 10%

Airspray
Nozzle : 1.8 – 2.0
Pressure : 3 to 4 bar
Viscosity : 20 – 30 sec., DIN cup 4

Airless
Nozzle : 0.013"- 0.015"
Pressure : 140 – 160 bar
Viscosity : 30 – 50 sec., DIN cup 4

Spraying instructions
If necessary, multiple cross-coats

Recommended film thickness
Min. 180 µm WFT < > 100 µm DFT

Tool cleaning:
Washing thinner or BICCS Thinner 0104 [9164]

Drying times
Dust-free : approx. 30 minutes
Tack-free : approx. 60 minutes
For re-spraying : 'wet-in-wet', after initial drying. (after 2 days, a little sanding is then required)
For sanding : approx. 24 hours
Hard drying time : after 7 days

Data at 20°C and 65% RH

Additional information

Bipox 2C HB Midcoat [6145] can also be applied by brush, in case of small surfaces and when flowing behaviour is no priority. The Bipox 2C Hardener for HB Midcoat [6145b] cannot be replaced by other Bipox hardeners.

Bipox 2C HB Midcoat [6145] requires a top coat in case of outdoor application. For instance a Bichothane 2C PU or Bichodur 2C top coat.

By using specific corrosion resistant pigments and fillers, the blanc base paint is somewhat grey coloured. This may result in colour deviation, especially in case of light and bright shades. The Bipox 2C Hardener for HB Midcoat [6145b] causes a strong colour deviation when combined with colour paste L maroon red and K organic orange. Because of that the bright red and orange series cannot be produced, as well as some other colour series. The CMS (Colour Mixing System) software is conclusive.

Example paint system	1st layer	: Bipox 2C HB Zinc Phosphate Primer [6142]	dft 100 µm
	2nd layer	: Bipox 2C HB Midcoat [6145]	dft 60 µm
	3rd layer	: Bichodur 2C (DTM) enamels	dft 60 µm

Besides this conventional spray quality also available:

- Bipox 2C HB Zinc Phosphate Primer Ready Mixed 1013 [6146] in standard colour approx. RAL1013
- a sprayable high solid quality: Bipox 2C HB HS Zinc Phosphate Primer Ready Mixed RAL7035 [6166]

Warning/restricted applicability
Considering the great diversity of purpose-specific aluminium alloys available in the market, it is impossible for us to recommend one single coating system that will apply to all kinds of aluminium. Our product data is generally based on pure, unalloyed aluminium, also known as the 1000 series.

([1]) Due to variable pigment content of/in the colour pastes, gloss degree of the end product may vary somewhat. Data in our datasheets are based on the average gloss degree of the RAL K7 colours, measured under an angle of 60° according to ISO 2813.

Pre-treatment

To prevent recurrent corrosion, the object/item needs to be coated immediately after blasting/grinding/degreasing. If there is any doubt about what's beneath the surface and/or about the pre-treatment, you always must do a trial to judge adhesion.

Application conditions

Data in this publication are based on a temperature of 20°C and a RH of 65%. In case of higher film thicknesses and/or lower temperatures, longer drying times apply. During application and drying, avoid temperatures lower than 10°C and an RH higher than 80%. Temperature of the object to be sprayed must be at least 3°C above dew point. See the dew point table on the download page of our website (www.biccs.nl). Good ventilation is required during application and drying.

Safety

Only for professional use. See the appropriate safety datasheet, downloadable from our website: www.biccs.nl.

For more information about this product please contact our laboratory by phone or email.

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