



Protective & Marine Coatings

MACROPOXY™ M630V2 WATER BASED EPOXY

FORMERLY KNOWN AS BIOGARD M630V2

Revised 07/2016 Issue 16

PRODUCT INFORMATION

PRODUCT DESCRIPTION

A water based two pack epoxy gloss finish

RECOMMENDED USE

For interior use only, recommended for application to suitably sealed masonry walls, floors and ceilings. May also be used on new and old concrete as well as previously painted surfaces and suitably primed steel.

ENDORSEMENTS

BS476 Part 7 - Surface Spread of Flame - for details of substrates/scheme, consult Sherwin-Williams

Approved by Campden & Chorleywood Food Research Association for: Water Absorption, Bacterial Cleanability, Resistance to Mould Growth and Sensory Evaluation of potential taint after 20 hours cure of film.

RECOMMENDED APPLICATION METHODS

Airless Spray
Brush
Roller

Recommended Thinner:

C32 (up to a maximum of 10% addition may be made AFTER base and additive have been mixed)

Note: Thinning the material with C32 will invalidate the sensory evaluation of taint accreditation++

PRODUCT CHARACTERISTICS

% Solids by Volume: 50 ± 3% (ASTM-D2697-91)

Pot Life: 2½ hours at 15°C* 2 hours at 23°C*
* **Must not be used after these periods**

Colour Availability: White and a limited range of shades.

VOC

2 gms/kilo content by weight from formulation, to satisfy EC Solvent Emissions Directive

TYPICAL THICKNESS

| Dry film thickness | Wet film thickness | Theoretical coverage |
|--------------------|--------------------|--------------------------|
| 75 microns | 150 microns | 6.75m ² /ltr* |

* This figure makes no allowance for surface profile, uneven application, overspray or losses in containers and equipment. Film thickness will vary depending on actual use and specification

PRACTICAL APPLICATION RATES - MICRONS PER COAT

| | Airless Spray | Brush | Roller |
|-----|---------------|-------|--------|
| Dry | 75 | 75 | 75 |
| Wet | 150 | 150 | 150 |

* Maximum sag tolerance typically 200µm wet (100µm dry) by brush.

The airless spray details relate to the paint after 10% thinning with Cleanser/Thinner No. 32

AVERAGE DRYING TIMES

| | @ 15°C | @ 23°C |
|------------|----------|----------|
| To touch: | 6 hours | 4 hour |
| To recoat: | 24 hours | 24 hours |
| To handle: | 24 hours | 24 hours |

These figures are given as a guide only. Factors such as air movement and humidity must also be considered.

RECOMMENDED PRIMERS

Steel substrates

Macropoxy C400 series Primer/Buildcoat
Macropoxy C425V2 Zinc Phosphate Primer/Buildcoat
Macropoxy M902 Surface Tolerant Primer

Non-ferrous metallic and non-metallic substrates -
Consult Sherwin-Williams

RECOMMENDED TOPCOATS

Macropoxy M630V2 may be self-overcoated

PACKAGE

A two component material supplied in separate containers to be mixed prior to use (see additional notes).

| | |
|----------------------|------------------------------------------------------------------------------------------|
| Pack Size: | 4.34 litre unit when mixed |
| Mixing Ratio: | 7.7 parts base to 2.3 parts additive by volume |
| Weight: | 1.34 kg/litre |
| Shelf Life: | 12 months from date of manufacture or 'Use By' date where specified - protect from frost |



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SURFACE PREPARATION

Macropoxy M630V2 can be applied over various substrates, whether previously painted or not. On unpainted substrates, an appropriate primer is needed to ensure maximum adhesion and durability. Please consult Sherwin-Williams for more information. Any surfaces requiring cleaning and/or degreasing prior to painting should be treated with W500 Degreaser.

Treatment of Concrete, Render, Plaster, Blockwork and Masonry

Ensure surfaces to be coated are clean, dry and free from visual contamination such as oil, grease and dirt. Remove all loose or flaking material to a firm substrate.

Concrete floors in good condition should not need any further specialist preparation. Floors in poor condition may require preparation by vacuum blasting or other approved method to provide a sound substrate. For advice, please consult Sherwin-Williams

Highly absorbent substrates like concrete, render and plaster may require an initial coat of Macropoxy M630V2 thinned 10% to seal the surface.

The moisture content of the substrate must not exceed 7% moisture equivalent unit, measured on a protimeter, or similar gauge prior to painting for all applications.

Treatment of Steel

Manually prepared surfaces should be prepared to a minimum standard of St.3 BS EN ISO 8501-1:2007 at the time of coating. Apply Macropoxy M902 Surface Tolerant Primer to 100 microns dft.

Treatment of Non-Ferrous Metallic Substrates

Consult Sherwin-Williams

APPLICATION EQUIPMENT

Airless Spray

Nozzle Size: 0.28mm (11 thou)
Fan Angle: 65°
Operating Pressure: 170kg/cm² (3500 psi)

The airless spray details given above are intended as a guide only. Details such as fluid hose length and diameter, paint temperature and job shape and size all have an effect on the spray tip and operating pressure chosen. However, the operating pressure should be the lowest possible consistent with satisfactory atomisation. As conditions will vary from job to job, it is the applicators' responsibility to ensure that the equipment in use has been set up to give the best results. If in doubt Sherwin-Williams should be consulted.

Brush - The material is suitable for brush application.

Roller - The material is suitable for roller application.

APPLICATION CONDITIONS AND OVERCOATING

Minimum application/cure temperatures should not be less than 10°C, with a relative humidity of not more than 85%. Good air movement is essential to ensure correct film formation and cure of water based epoxies.

If it is desired to overcoat outside the times stated on the data sheet, please seek advice of Sherwin-Williams.

ADDITIONAL NOTES

Mixing Instructions

It is essential that the base and additive components of M630V2 are thoroughly mixed together prior to use. A mechanical stirrer is recommended to fully incorporate the two components. Insufficient mixing will adversely affect the drying, gloss and performance of the applied coating. Only add water/C32 to thin the material (if required) AFTER mixing the base and additive components.

Drying times, curing times and pot life should be considered as a guide only.

The curing reaction of epoxies commences immediately the two components are mixed, and since the reaction is dependent on temperature, the curing time and pot life will be approximately halved by a 10°C increase in temperature and doubled by a 10°C decrease in temperature.

Where a non-skid profile is required P515 Fine Silica Aggregate should be stirred into the M630V2 mixed paint, immediately prior to application, at a rate of 1.0kg per 4.34 ltr unit. Application will then only be possible by brush or roller. Substrate temperature should be at least 3°C above the dew point.

Macropoxy M630V2 is an impervious non-absorbent material, if moisture should penetrate the film as a result of mechanical damage then the coating is liable to delaminate.

Epoxy Coatings - Colour Stability:

Variable colour stability is a feature of epoxy materials which tend to yellow and darken with age whether used on internal or external areas. Therefore any areas touched-up and repaired with the same colour at a later date may be obvious due to this colour change.

When epoxy materials are exposed to ultra-violet light a surface chalking effect will develop. This phenomenon results in loss of gloss and a fine powder coating at the surface which may give rise to colour variation depending on the aspect of the steelwork. This effect in no way detracts from the performance of the system.

Numerical values quoted for physical data may vary slightly from batch to batch.

HEALTH AND SAFETY

Consult Product Health and Safety Data Sheet for information on safe storage, handling and application of this product.

WARRANTY

Any person or company using the product without first making further enquiries as to the suitability of the product for the intended purpose does so at their own risk, and Sherwin-Williams can accept no liability for the performance of the product, or for any loss or damage arising out of such use.

The information detailed in this Data Sheet is liable to modification from time to time in the light of experience and of normal product development, and before using, customers are advised to check with Sherwin-Williams, quoting the reference number, to ensure that they possess the latest issue.