

MACROPOXY® HM MASTIC EPOXY BONDING LAYER

Revised 07/2023 Issue 1

PRODUCT DESCRIPTION

A solvent-free 2-pack epoxy bonding layer.

Solvent-free according to Protective Coatings Directive of German Paint Industry Association (VdL-RL 04).

- · Excellent bonding properties
- · Exceptional adhesion
- Over 30 years track record

RECOMMENDED USE

Can be used as a bonding layer, part of the waterproofing system underneath mastic asphalt on orthotropic steel bridge decks.

PRODUCT TECHNICAL DATA

Volume Solids: 100 ± 2% (ISO 3233-3)

Weight Solids: 100 ± 2%

VOC: 0 g/l determined practically in accordance with

Protective Coatings Directive of German Paint

Industry Association (VdL-RL 04).

0 g/l calculated from formulation to satisfy

EC Solvent Emissions Directive.

0 g/kg calculated from formulation to satisfy EC Solvent Emissions Directive (UK).

Colours: Light grey

Flash Point: Base: >101°C, Hardener: >101°C

Cleaner/Thinner: Cleaner 26 (for cleaning)

Thoroughly clean tools and equipment immediately

after use.

Do not thin Macropoxy® HM Mastic.

Pack Size: A two component material supplied in separate

containers to be mixed prior to use:

Macropoxy® HM Mastic: 25 kg (14.7 litre) unit when

mixed.

Sikalastic-827 HT: 25 kg bag (adhesive pellets). Volume will vary with colours and density.

Mixing Ratio: 75 parts base to 25 parts hardener by weight

Density: 1.7 kg/l (may vary with colours)

Shelf Life: 2 years from date of manufacture, stored in originally sealed containers in a cool and dry environment.

Recommended Application Methods:

Airless Spray, trowel, squeegee, serrated trowel

Typical Thickness:

Recommended Spreading Rate Per Coat

Macropoxy® HM Mastic	Typical	
Dry	1000 μm	
Wet	1000 μm	
Theoretical Consumption*	1.7 kg/m² 1.0 l/m²	
Theoretical Coverage*	0.59 m²/kg 1.00 m²/l	
Sikalastic®-827 HT	Typical	
Theoretical Consumption*	0.8 - 1.0* kg/m²	

Theoretical Coverage* 1.0 - 1.25 m²/kg

Pot Life:

+ 10°C	+ 20°C	+ 30°C
1.5 hours	1 hour	0.5 hours

Pot life is dependent on temperature and volume.

^{*} This figure makes no allowance for surface profile, uneven application, overspray or losses in containers and equipment.

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AVERAGE DRYING TIMES

Minimum and maximum recoat intervals (at + 20°C)

Between primer and bonding layer:

Min. 1 day / max. 6 days.

Between bonding layer and adhesive layer (peletts):

At 12°C: Broadcasting approx. 30-40 min after application of the bonding layer.

At 20°C: Broadcasting approx. 10-20 min after application of the bonding layer.

At 35°C: Broadcasting approx. 5-10 min after application of the bonding layer

Between bonding layer, broadcasted with the adhesive layer and asphalt: Min. 1 day / max. 3 weeks.

Prior to further applications all contamination must be removed. In the case of extended recoating times consult Sherwin Williams customer service

APPROVALS & ENDORSEMENTS

Approved according to the German standard 'TL BEL-ST' (waterproofing system underneath asphalt on orthotropic steel bridge decks).

SURFACE PREPARATION

Ensure surfaces to be coated are clean, dry and free from all surface contamination such as oil, grease, dirt and corrosion products to achieve satisfactory adhesion.

Steel surfaces shall be blast-cleaned to Sa 2½ according to ISO 8501-1 (ISO 12944-4)

Roughness 'medium (G)' according to ISO 8503-2.

Note: Priming of surface with Macropoxy® HM Primer Plus immediately after blast-cleaning.

MIXING

Stir component A very thoroughly using a mechanical paint mixer (start slowly, then increase up to approx. 300 rpm). Add component B carefully and mix both components very thoroughly (including sides and bottom of the container). Mix for at least 3 minutes until a homogeneous mixture is achieved. We recommend to fill the mixed material into a clean container and mix again shortly as described above to avoid incorrect mixing. During mixing and handling of the materials always wear protective goggles, suitable gloves and other protective clothing.

APPLICATION CONDITIONS

Substrate temperature shall be above + 10°C and at least 3°C above the dew point.

Material temperature shall be above + 10°C.

Relative air humidity shall be below 85%.

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for satisfactory application characteristics. Always purge spray equipment before use with listed cleaner.

Airless Spray

Unit: Efficient airless equipment

Tip Size: 0.48 - 0.58 mm (0.019 - 0.023 inch)

Fan Angle: 40° - 60°

Operating Pressure: min. 200 bar (2900 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 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 consult Sherwin-Williams customer service.

Trowel, squeegee, serrated trowel

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RECOMMENDED SYSTEMS

Stee

Primer: 1 x 80 µm Macropoxy® HM Primer Plus Bonding layer: 1 x 1000 µm Macropoxy® HM Mastic

Adhesive layer: broadcasting with 0.8 - 1.0 kg/m² Sikalastic[®]-827 HT

(pellets)

Road surfacing: Mastic asphalt

ADDITIONAL NOTES

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

Epoxy Coatings - Tropical Use

Epoxy coatings at the time of mixing should not exceed a temperature of 35°C. Use of these products outside of the pot life may result in inferior adhesion properties even if the materials appear fit for application. Thinning the mixed product will not alleviate this problem. If the air and substrate temperatures exceed 40°C and epoxy coatings are applied under these conditions, paint film defects such as dry spray, bubbling and pinholing etc. can occur within the coating.

Chemical resistance:

Resistant to water, weathering, de-icing salts and petrol.

Colour changes:

When exposed to sunlight, the colour of Macropoxy® HM Mastic may change to greyish red without any negative effects.

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

HEALTH & SAFETY

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

WARRANTY

Whilst all statements made about our products (whether in this data sheet or otherwise) are correct and accurate to the best of our knowledge, we have no control over the quality or the condition of the substrate, the application conditions or the many other factors affecting your use and application of our product.

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