

EPIGRIP M922M

PRODUCT TECHNICAL DATA

FULL DESCRIPTION	: EPIGRIP M922M MASTIC ALUMINIUM		
MATERIAL TYPE	: High solids 2-pack epoxy brushing and spraying mastic whose main pigmentation comprises micronised glass flake, aluminium and anti-corrosives.		
RECOMMENDED USE	: Anti-corrosive protection of blast cleaned steel and cathodically protected steel. : Possesses excellent abrasion resistance and has excellent resistance to immersion in sea water. : Formulated for high build application by brush, allowing applicators to achieve full specified thickness in a single coat, even on sharp edges and difficult access areas. : For application onto hand or mechanically prepared surfaces and/or damp gingered blasted surfaces, giving excellent wetting and adhesion characteristics. : Suitable for application onto hot substrates up to 100°C – see Notes on Application overleaf.		
ENDORSEMENTS	: Network Rail Item 7.2.6		
RECOMMENDED APPLICATION METHODS	: Brush : Airless Spray		
COLOUR AVAILABILITY	: Aluminium shades		
FLASH POINT	: Base : 32°C		: Additive : 23°C
% SOLIDS BY VOLUME	: 83 ± 4% (ASTM-D2697-91)		
V.O.C.	: 146 gms/litre determined practically in accordance with UK Regulations PG6/23 : 179 gms/litre calculated from formulation to satisfy EC Solvent Emissions Directive : 110 gms/kilo content by weight from formulation, to satisfy EC SED		
TYPICAL THICKNESS	Dry film thickness : 400 microns	Wet film thickness : 482 microns	Theoretical coverage : 2.1 m 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	Brush	Airless Spray (see note overleaf)	
: Dry	400*	400	
: Wet	482	482	
	* Maximum sag tolerance typically 2000µm dry by brush.		
AVERAGE DRYING TIMES	At 5°C	At 15°C	At 23°C
To touch	: 12 hours	: 6 hours	: 4 hours
To recoat	: 6 hours	: 4 hours	: 3 hours
To handle	: 30 hours	: 16 hours	: 8 hours
	These figures are given as a guide only. Factors such as air movement and humidity must also be considered.		
RECOMMENDED THINNER	: Leighs Cleanser/Thinner No. 9		
RESISTANCE TO	: Moisture - Excellent	Aliphatic solvents - Excellent	
	: Acid spillage - Moderate	Abrasion - Excellent	
	: Alkali spillage - Excellent	Weather – Excellent (subject to chalking)	
	: Petroleum solvents - Excellent		
RECOMMENDED PRIMERS	: Primers are optional. M922M can be applied directly onto steel. : Epigrip C425V2 Zinc Phosphate Primer/Buildcoat : Epigrip M111 Wet Blast Primer : Metagard L574 Blast Primer		
RECOMMENDED TOPCOATS	: Indefinitely self overcoatable provided the coating has been suitably cleaned. For optimum intercoat adhesion with other epoxy topcoats, overcoating should occur within 14 days. Where atmospheric exposure is required, overcoat with Resistex C137V2 and Resistex C237 within 7 days at a minimum dft of 50 microns or in the case of Resistex K651 and Leighs C750V2 overcoat within 4 days. These overcoating times refer to achievement of optimum adhesion at 23°C and will vary with temperature. For overcoating outside the above parameters and with alkyd systems, consult Leighs Customer Service Department for advice		
POT LIFE	: 3 hours at 5°C (see notes on tropical use overleaf)	: 1½ hours at 23°C	: 1 hour at 35°C
PACKAGE	: A two component material supplied in separate containers to be mixed prior to use.		
Pack Size	: 1 litre and 4 litre units when mixed		
Mixing Ratio	: 3 parts base to 1 part additive by volume		
Weight	: 1.50 kg/litre (may vary with shade).		
Shelf Life	: 2 years from date of manufacture or 'Use By' date where specified.		

SURFACE PREPARATION:

Manually prepared surfaces should be prepared to a minimum standard of ST.3 BS EN ISO 8501-1:2001 at the time of coating.

Application to such surfaces should be by brush where the mechanical action will aid adhesion.

Ensure surfaces to be coated are clean and free from all surface contamination.

For spray application it is recommended that surfaces should be blast cleaned to Sa.2½ BS EN ISO 8501-1:2001.

Quill/wet abrasive blast to produce surface equivalent to Sa.2½. Light surface gingering (ie not removable by rubbing) is permissible.

UHP blasted surfaces must reveal an underlying surface equivalent of Sa.2½. Light surface gingering is permissible as above.

Average surface profile in the range 50-75 microns.

APPLICATION EQUIPMENT:

Brush

Epigrip M922M is capable of being applied by brush at 400 microns dft.

It is possible to apply M922M onto a damp substrate (no running or pooled water) by brush application. Ensure that the paint fully displaces any water on the substrate.

M922M may be applied by brush onto hot surfaces up to 100°C. Multiple coats will be necessary to achieve required film build. Ensure good ventilation and adequate PPE due to rapid vapourisation of solvent from the film at high temperatures.

Airless Spray

Nozzle Size : 0.38-0.53mm (15-21 thou)

Fan Angle : 40°

Operating Pressure : 210kg/cm² (3000 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 Leighs Customer Service Department should be consulted.

N.B. M922M may be thinned up to 5% volume with Cleanser/Thinner No. 9 for airless spray application – adjust wft accordingly, sag tolerance may be affected if the product is thinned.

Application by roller is not recommended, as a stippled, uneven film may be achieved.

APPLICATION CONDITIONS AND OVERCOATING:

In conditions of high relative humidity, ie 80-86%, good ventilation conditions are essential. Substrate temperature should be at least 3°C above the dew point and always above 0°C.

At application temperatures below 10°C, drying and curing times will be significantly extended, and spraying characteristics may be impaired.

Application at ambient air temperatures below 5°C is not recommended.

In order to achieve optimum water and chemical resistance, temperature needs to be maintained above 10°C during curing.

If it is desired to overcoat outside the times stated on the data sheet, please seek advice of Leighs Customer Service Department.

For full notes, see data sheet entitled 'Spreading Rates and Overcoating Times'.

ADDITIONAL NOTES:

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.

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.

Epoxy Coatings - Tropical Use

Epoxy paints at the time of mixing should not exceed a temperature of 35°C. At this temperature the pot life will be approximately halved. 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.

The maximum air temperature for application is 50°C providing conditions allow satisfactory application and film formation. If the air temperatures exceed 50°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.

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.

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 Leighs Paints 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 Leighs Paints, quoting the reference number, to ensure that they possess the latest issue.