

Solarmastic

Epoxy Mastic

FEATURES

Excellent performance over minimal surface preparation of steel.
Unique formulation with aluminium pigment provides exceptional barrier protection.

BENEFITS

- Excellent choice for field touch-up of zinc rich primers and galvanised steel
- VOC compliant to current AIM regulations

DESCRIPTION

Solarmastic is a two-component aluminium-pigmented, low-stress, high solids epoxy mastic with a proven field history.

BASIC USES

Solarmastic provides unmatched levels of barrier protection and corrosion resistance over sheeted metal roofing, existing finishes and prepared rusted or ISO 8501 St2 or St3 cleaned surfaces.

PACKAGING

10 litre kit

COLOUR

Aluminium

Colour variations within a batch and from batch to batch may occur due to the metallic pigments and variations in application techniques and conditions. Neither product is colour matched, nor will they match each other.

PRIMER

Self-priming. May be applied over most tightly adhering coatings as well as inorganic zinc primers.

TOPCOATS

May be coated with acrylics, epoxies, alkyds or polyurethanes, depending on exposure and need.

GRADE

Spray, Brush, Roller

STORAGE

Store indoors.

Shelf life is a minimum of 36 months at 25°C, when kept at recommended storage conditions and in original unopened containers.

This product is solvent-based and not affected by excursions below these published storage temperatures, down to -12°C, for a duration of no more than 14 days. Always inspect the product prior to use to make sure it is smooth and homogenous when properly mixed.

Temperature: 7 to 43°C

Humidity: 0 to 90%

APPLICATION

Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating

Roof Sheeting: ISO 8501 St2 for maximum protection.

Previously Painted Surfaces: Lightly sand or abrade to roughen and de-gloss the surface.

Existing paint must attain a minimum 3A rating in accordance with ASTM D3359 "X-Scribe" adhesion test.

Mixing: Power mix separately, then combine and power mix. DO NOT MIX PARTIAL KITS.

Thinning: May be thinned up to 25% with Thinner # 10 for normal conditions. Use of thinners other than those supplied by StonCor Africa may adversely affect product performance and void product warranty, whether expressed or implied.

**APPLICATION
(Continued)**

Airless Spray Application:

Pump Ratio: 45:1
GPM Output: 3.0 (min)
Material Hose: 10mm I.D. (min)
Tip Size: .019" to .025"
Output psi: 1900 to 2100
Filter Size: 60 Mesh

Teflon packings are recommended and are available from the pump manufacturer.

Plural Component: May be applied by plural component spray equipment. Contact StonCor Africa Technical Service for specific recommendations.

Brush & Roller: Multiple coats may be required to obtain desired appearance, recommended dry film thickness and adequate hiding. Avoid excessive re-brushing or re-rolling. Use clean natural bristle brush or medium nap phenolic core roller. Work coating into all irregularities.

COVERAGE RATES

12.0m²/litre at 75 microns
7.2m²/litre at 125 microns
3.6m²/litre at 250 microns
Allow for loss in mixing and application

RECOMMENDED THICKNESS

75 to 125 microns over existing coatings
175 to 250 microns in 1 or 2 coats in severe exposure

Do not exceed 250 microns in a single coat

THEORETICAL SOLIDS CONTENT

By volume: 90% ± 2%

TEMPERATURE RECOMMENDATIONS

	Material	Surface	Ambient	Humidity
Minimum	10°C	10°C	10°C	0%
Maximum	32°C	54°C	38°C	95%

This product simply requires the substrate temperature to be above the dew point. Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel and interfere with proper adhesion to the substrate. Special application techniques may be required above or below normal application conditions.

CURE TIME

Surface Temperature	Dry to Recoat & Topcoat with other finishes	Final Cure	Maximum Recoat Time
10°C	5 Days	15 Days	21 Days
16°C	3 Days	10 Days	14 Days
24°C	24 Hours	5 Days	7 Days
32°C	18 Hours	3 Days	7 Days

For Solarmastic, dry to touch is 5 hours at 25°C.

These times are based on a 125 to 175 micron dry film thickness. Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure. Excessive humidity or condensation on the surface during curing can interfere with the cure, can cause discolouration and may result in a surface haze. Any haze or blush must be removed by water washing before recoating. If the maximum recoat time is exceeded, the surface must be abraded prior to the application of additional coats.



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CLEAN-UP

Use Thinner # 2. In case of spillage, absorb and dispose of in accordance with local applicable regulations.

SAFETY

Read and follow all caution statements on this product data sheet and on the material safety data sheets for this product. Employ normal workmanlike safety precautions. Hypersensitive persons should wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.

VENTILATION

When used as a tank lining or in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. In addition to ensuring proper ventilation, appropriate respirators must be used by all application personnel.

LIMITATIONS

- Not for use under continuous immersion or prolonged (longer than 48 hours) ponding water. Not recommended for areas of high pedestrian traffic.
- Consult Tremco Roofing sales consultant for trafficable or walkway solutions.

MAINTENANCE

Your local Tremco Roofing sales representative can provide you with effective maintenance procedures which may vary, depending upon specific conditions. Periodic inspections, early repairs and preventive maintenance are all part of a sound program.

TECHNICAL SUPPORT

Your local Tremco Roofing sales representative, working with the Technical Service staff, can help analyse conditions and needs to develop recommendations for special applications.

VOC VALUES

Thinner # 10: 25% - 242g/litre
As supplied: 88g/litre
These are nominal values

PERFORMANCE DATA

Test Method	System	Results
Flexibility ASTM D522	Blasted steel 1 coat Solarmastic	A) Conical – crack 9.65mm, actual elongation 48.57% B) Cylindrical – no cracking observed
Impact Resistance ADTM G14	A) Blasted steel 1 coat Solarmastic B) Rusted steel 1 coat Solarmastic	Area damaged A) 6.35mm B: 6.35 to 14.27mm
Salt Spray ASTM B117	Rusted steel 1 coat Solarmastic	No blistering, rusting or softening. No rust creep from scribe
Taber Abrasion ASTM 4060	1 coat Solarmastic	130mg loss; 1000 cycles using CS 17 wheel and 1000gm load
Water Fog ASTM D1735	Rusted steel 1 coat Solarmastic	No blistering or softening. No creep from scribe

Test reports and additional data available upon written request.

Pot life:

- 4 Hours at 25°C – thinned 25%
- 2 Hours at 32°C – thinned 25%
- 2 Hours at 25°C – unthinned
- 1 Hour at 32°C – unthinned

