

# SHIELD – 2 Pack HIGH BUILD EPOXY Primer

## PRODUCT INFORMATION

### Coating type:

2-pack epoxy high build primer/build coat with anti-corrosive pigmentation.

### Typical uses:

A high build epoxy primer/build coat with excellent adhesion to a wide range of substrates including mild steel, stainless steel, galvanised steel, grp, concrete etc. Can also be used as a sealer coat over single pack paint systems prior to applying a 2 pack topcoat. Suitable for use above and below the waterline.

### Colours available:

Wide range of colours available. Choose final coat colour to closely match topcoat colour.

### Appearance:

Sheen

### Features and benefits:

- High build reduces number of coats required
- Hard film with high abrasion and wear resistance for excellent durability
- Extremely water resistant – helps prevent osmosis in grp when applied to a dry hull
- Good sanding properties, giving very smooth finish ready for top coating
- Cures down to 5°C
- Low VOCs to assist in achieving solvent emissions obligations

## TECHNICAL INFORMATION

### Typical coverage using brush/roller:

A spreading rate of 7.5m<sup>2</sup> per litre of paint used gives 100 microns dry film thickness per coat

### Film thickness:

	Wet film thickness	Dry film thickness	Spreading rate
<b>Typical:</b>	125microns	94microns	8m <sup>2</sup> per litre
<b>Range:</b>	100-275 microns	75-200 microns	10m <sup>2</sup> - 3.6m <sup>2</sup> per litre

### Sag tolerance:

Maximum wet film thickness per coat 475 microns (356 microns dry film thickness – equivalent to a spreading rate of 2.1m<sup>2</sup> per litre)

### Recommended topcoats:

**LUSTRE** - GLOSS - POLYURETHANE 2 Pack Topcoat

**LUSTRE** - SATIN - POLYURETHANE 2 Pack Topcoat

### V.O.C.:

185gram/kg calculated from formulation to satisfy EU Solvent Emissions Directive

### % Volume solids:

75% ± 2% calculated from laboratory formulation

### Drying time:

Temp.	Touch dry	Firm dry	Overcoat	Full cure
10°C	2 hrs	16 hrs	8 hrs	14 days
15°C	1 hr 30 mins	12 hrs	6 hrs	10 days
20°C	1 hrs	8 hrs	4 hrs	7 days

*Drying times, curing times and pot life should be considered as a guide only as many factors will influence these properties.*

## SURFACE PREPARATION

### Surface preparation:

All surfaces to be coated should be clean, dry, and free from contamination. Single pack types of paint must be well rubbed back. Not suitable for application over rubberized or flexible coatings.

### No of coats required:

For lasting protection below the waterline apply 3 coats, each at a spreading rate of 8m<sup>2</sup> per litre. Apply 2 coats above the waterline.

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## MIXING RATIOS

### Paint preparation before use:

Stir the base component thoroughly, then add the comp B to the base in the ratio mentioned below. Mix the comp B and base until they become homogenous.

### Mixing ratio by volume:

5-part base to 1-part comp B.

### Mixing ratio calculated by weight.\*

All weights are in grams.

Amount to be mixed	Light Colours Weight in grams			Dark Colours Weight in grams		
	Comp A	Comp B	Total	Comp A	Comp B	Total
500ml	742	64	806	986	64	1050
1 litre	1484	128	1612	1972	128	2100
1.5 litres	2226	192	2418	2958	192	3150
2 litres	2968	256	3224	3944	256	4200

\* Mixing table is based on average weight of Comp A and is intended only as a guide. Overall weight of Comp A supplied will vary according to amount of pigment we add to make your colour. Part mixing by weight is likely to result in a quantity mismatch of Comp A & Comp B.

## APPLICATION

### Application conditions:

This material should preferably be applied at temperatures more than 10°C. Relative humidity should not exceed 90% and in these conditions good ventilation is 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.

### Airless spray:

Tip size: 15-17 thou (0.38-0.43mm)

Tip pressure: Min 2000psi (135 Bar)

May require up to 10% addition of SML Epoxy Thinner to achieve application characteristics.

### Thinning:

SML Epoxy Thinner

### Conventional spray:

Tip size: 55 thou (1.4mm)

Tip pressure: 40-50psi (2.7-3.4 Bar)

May require up to 10% addition of SML Epoxy Thinner to achieve application characteristics. Conventional spray isn't recommended.

### Brush application:

Use a full wet brush. Do not attempt to 'brush out' or 'layoff'.

### Roller application:

Care should be taken to work the paint into any pitted or damaged areas. To ensure an adequate film thickness is applied, do not roll out too thinly.

### Clean-up:

Clean all equipment after use with SML Epoxy Thinner. All surplus product should be disposed of in accordance with appropriate regional regulations/legislation.

## STORAGE AND PACKAGING

### Storage:

Under cover within temperature range of 5°C to 32°C. Keep containers dry and tightly sealed to avoid moisture contamination.

### Shelf life:

At least 2 years from date of manufacture in unopened containers when stored within a temperature range of 5°C to 32°C

Pot life (at 20°C): 3 hours

### Packaging:

2.5 litre (nom) composite packs

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## HEALTH AND SAFETY

All work involving the application and use of this product should be performed in compliance with all relevant national, health, safety & environmental standards, and regulations

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## ADDITIONAL NOTES

The airless spray information given above is intended as a guide only. As conditions vary from job to job it is the applicators responsibility to ensure all equipment in use has been set up to give the best results.

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 later may be obvious due to this colour change.

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## IMPORTANT INFORMATION

The information supplied in this product datasheet is not intended to be exhaustive. Any person using the product for any other purpose than that specifically recommended in this product datasheet, without first obtaining written confirmation from SML Paints and Coatings as to the suitability of the product for the intended purpose does so at their own risk. All advice given about the product is correct to the best of our knowledge, however we have no control over the condition of the substrate, preparation or the many factors affecting the use and application of the product. Therefore, unless specifically agreed in writing to do so, we do not accept any liability at all for the performance of the product or for (subject to the maximum extent permitted by law) any loss or damage arising out of the use of the product.

SML Paints and Coatings warrants its products to be free from defects in material and workmanship. SML Paints and Coatings obligations and buyer's exclusive remedy relating to the products shall be limited, at SML Paints and Coatings option, to either replace the products not conforming the warranty or the credit of the buyers account in the invoiced amount of the non-conforming product. Any claim under this warranty must be made by the Buyer to SML Paints and Coatings in writing within five (5) days of the Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. The Buyer's failure to notify SML Paints and Coatings of such non-conformance as required herein shall bar the Buyer from recovery under this warranty.

The information detailed in this datasheet is liable to modification from time-to-time in the light of experience and our programme of product development. Before use, it is the customers responsibility to check with SML Paints and Coatings, quoting the product reference number and version reference at the bottom of the data sheet, to ensure that they have in their possession the latest issue.

Technical product datasheets are available from our website at [www.smlmarinepaints.co.uk](http://www.smlmarinepaints.co.uk), and should be the same as this datasheet. Should there be any discrepancies between this document and the website version, then please contact SML Paints and Coatings.

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