



# BERGER PRODUCT DATA SHEET

## EPIMASTIC 4100

Surface Tolerant Epoxy

### PRODUCT DESCRIPTION

A two component, high solids, high build, self-priming surface tolerant epoxy coating with excellent hardness and abrasion resistance.

### DESIGN FEATURES

Excellent protection for Steel and Concrete  
 Can be easily recoated if required  
 Chemical Resistant finish for structural steel and pipings  
 General Maintenance coating for offshore installations  
 Maintenance coat for structural steel  
 Suitable as top coat for up to C4 Environment as per ISO12944 Part 2

### PHYSICAL CHARACTERISTICS

Recommended Application Data	Wet [ $\mu\text{m}$ ]	Dry [ $\mu\text{m}$ ]	$\text{m}^2/\text{l}$
	Theoretical Coverage	188	150
Volume solids	80 $\pm$ 2 % (based on ASTM D2697)		
Dry Film Thickness Range	100 $\mu\text{m}$ to 200 $\mu\text{m}$		
Flash Point	28 °C		
Finish	Low Sheen		
Colour Range	Standard Colour Range		
Standard Packing Size	5 Litres set 20 Litres set		
Mix Ratio (by volume)	7 Base : 1 Hardener		

### APPLICATION METHOD

AIRLESS SPRAY	Tip Size : 0.48 – 0.68 mm (19 – 27 thou)
Recommended method of application	Pressure : 110 – 160 kg/cm <sup>2</sup> (1600 – 2300 psi)
CONVENTIONAL AIR SPRAY	May be used. May require additional dilution to achieve good atomisation.
BRUSH OR ROLLER	May be used. However, additional coats may be required to achieve the recommended film thickness. Suitable for stripe coating, weld-seams, edges, corners, rivets, etc.

### DRYING & CURING TIME

Substrate Temperature	Touch Dry	Hard Dry	Over coating Interval		Pot Life
			Minimum	Maximum	
15 °C	12 hours	24 hours	16 hours	Indefinite	4 hours
25 °C	6 hours	14 hours	12 hours	Indefinite	3 hours
35 °C	2 hours	7 hours	4 hours	Indefinite	2 hours

### USEFUL INFORMATION

THINNER	: SOLVALUX 7-45 (Maximum 5% addition)
CLEANER	: SOLVALUX 7-77
STORAGE	: Store in a cool dry shaded area.
SHELF LIFE AT 25 °C	: 24 months minimum when stored as prescribed in the MSDS.



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## SURFACE PREPARATION

The service life span and the service performance of EPIMASTIC 4100 is directly related to the degree of surface preparation.

### STEEL

- Remove all wax, oil and grease by solvent cleaning in accordance with the guidelines given by SSPC-SP1. Soluble salts, dirt and dust must be removed by dry brushing and freshwater washing. Remove scale by chipping, needle gun or spot blasting. Any loose or flaking coatings should be taken back to a firm edge.
- Where necessaries remove weld spatter and round off all rough weld seams and sharp edges to smooth surface.
- For immersion applications, abrasive blast clean to a minimum surface preparation standard of Sa2½ (ISO 8501-1:1988) or SSPC-SP10, with an average surface profile of 75 – 100 microns. Apply Epimastic 4100 immediately after blasting to prevent oxidation and recontamination of the steel surface. In case of oxidation or recontamination, re-blast to the required standard.
- Can be applied over recommended primers. Do not exceed the over coating interval of primer.

### CONCRETE

- New concrete should be left for at least 21 days to cure before coating.
- The moisture content of the concrete surface should be checked and ensured to be below 6% when measured with a reliable moisture meter, such as the Sovereign Moisture Meter.
- The surface should be dry, free from surface contaminants, sound and undamaged.

To avoid condensation of moisture onto substrate prior to coating application, relative humidity should not exceed 85% and substrate temperature should be more than 3°C above Dew Point

## SUITABLE PRIMERS

Zincanode 620, Epimastic 5100, Epilux 219

## SUITABLE FINISH COATS

Luxathane 5160

## NOTES

- The coating specifications given above are typical. For specific recommendations to suit individual applications, please refer to your Berger Paints representative.
- Common to all epoxies this product will experience yellowing and chalking on prolonged exposure to sunlight. However, this phenomenon is not detrimental to coating performance. As such, for atmospheric exposure where gloss and colour is important, this product should be over coated with a suitable weather resistant finish coating.
- Exposure to very low temperatures, high humidity or water ponding during and / or immediately after application may result in incomplete cure and / or discolouration that may compromise subsequent intercoat adhesion.

## SAFETY PRECAUTION

Avoid contact with eyes and skin. Wear suitable protective clothing such as overalls, goggles, dust mask and gloves. Use barrier cream.

Ensure that there is adequate ventilation in the area where the product is being applied. Do not breathe in vapour or spray mist.

This product is flammable. Keep away from sources of ignition. Do not smoke.

Take precautionary measures against static discharge.

In case of fire, blanket flames with foam, carbon dioxide or dry chemicals.

## FIRST AID

**Eyes** : In the event of accidental splashes, flush eyes with warm water immediately and seek medical advice.

**Skin** : Wash skin thoroughly with soap and water or approved industrial cleaner. Do Not Use solvents or thinners.

**Inhalation** : Remove to fresh air, loosen collar and keep patient rested.

**Ingestion** : In case of accidental ingestion, DO NOT INDUCE VOMITING. Obtain immediate medical attention.

For further safety information, please refer to our **Material Safety Data Sheet (MSDS)**

## DISCLAIMER

*The information provided on this data sheet is not intended to be complete and is provided as general advice only. It is the responsibility of the user to ensure that the product is suitable for the purpose for which he wishes to use it. As we have no control over the treatment of the product, the standard of surface preparation of the substrate, or other factors affecting the use of this product, we are not responsible for its performance nor would we accept any liability whatsoever or howsoever arising from the use of this product unless specifically agreed to in writing by us. The information contained in this data sheet may be modified by us from time to time, and without notice, in the light of our experience and continuous product development.*