

EPIMASTIC 5100

PROTECTIVE COATING

Surface Tolerant Epoxy Primer

PRODUCT DESCRIPTION

A high-solids, high-build, low VOC self-priming aluminum flaked anticorrosive universal epoxy coating which can be used in new construction & maintenance projects over old or new steel, galvanized structures, aluminium & stainless steel with recommended surface preparation.

- Can be applied over most existing coatings systems including aged alkyd systems.
- Can be used as a universal primer as well as an intermediate / midcoat for building thickness.

DESIGNED USE

- As a chemically resistant finish for process equipment, pipe work etc.
- As a general maintenance coating for onshore and offshore installations.
- Suitable as surface tolerant primer for upto C5 Environment as per ISO12944 Part 2 along with suitable topcoats

PHYSICAL DATA

Properties	Value
Volume solids (Based on ASTM D 2697)	82 % + 2 %
DFT range	100-200 microns
Typical dry film thickness	125 microns
Equivalent wet film thickness	152 microns
Theoretical spreading rate	6.56 m ² /litre @ 125 microns dft
Colour	Aluminium & selected shade range
VOC "as supplied" (Based on US-EPA 24)	162 gms/ltr
Gloss level	Semi - glossy

APPLICATION DETAILS

METHOD OF APPLICATION

Airless Spray:

This is the recommended method of application. The Thinner percentage may be varying depends upon the line and atmospheric conditions.

Tip Size: 0.48 - 0.68 mm (0.019 - 0.027 in)

Pressure: 110 - 160 kg/cm² (1600 – 2300 psi)

Conventional Spray:

This is also a suitable method of application. The Thinner percentage may be varying depends upon the line and atmospheric conditions.

Tip Size: 1.80 - 2.20 mm (0.071 - 0.087 in)

Pressure: 2.75 - 3.45 kg/cm² (40 - 50 psi)

Brush or Roller:

May be used for intricate shapes or small area or touch-up. However, additional coats may be required to achieve the recommended film thickness. This method of application is recommended for stripe coating welds, edges, rivets etc.

Drying Time

Surface Temperature	Touch Dry	Hard Dry	Re coating Interval		Pot Life
			Min.	Max.	
20°C	5 Hrs	16 Hrs	12 Hrs	7 Days	6 Hrs
30°C	2 ½ Hrs	12 Hrs	10 Hrs	7 Days	4 Hrs
40°C	1 ½ Hrs	6 Hrs	5 Hrs	7 Days	2 Hrs

To obtain the drying time stated, it is important to maintain sufficient ventilation during application, drying and curing. If the maximum overcoating interval is exceeded, roughening of the surface is necessary to ensure intercoat adhesion.

Properties	Value
No. of components	Two

Properties	Value
Mixing ratio (by volume)	1 parts Base to 1 part Hardener Mix until to get homogeneous mix. Allow mixed paint to rest for several minutes before use to allow air bubbles to escape.
Application conditions	Do not apply this product if the relative humidity exceeds 85% or if the substrate temperature is within 3°C of the dew point

ADDITIONAL INFORMATION

Properties	Value
Thinner / Cleaning solvent	Solvalux 7-45 / Berger Tool cleaner
Storage instruction	Store in dry, shaded conditions away from sources of heat and ignition. Containers must be kept tightly closed and upright position.
Flash point	Mixed 36°C
Shelf life @ 23°C	For base & Hardener 24 months from the date of manufacture

Packing

Unit Size	Part A			Part B		
	Vol.	Pack	Weight (typical)	Vol.	Pack	Weight (typical)
20 Lt	10 Lt	10 Lt	13.5 kg	10 Lt	10 Lt	9.32 Kg
5 Lt	2.5 Lt	2.5 Lt	3.38 Kg	2.5 Lt	2.5 Lt	3.38 Kg

SURFACE PREPARATION

All surfaces to be coated should be clean, dry, and free from contamination. Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504:2000. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning

Carbon steel: Abrasive blast clean to a minimum of Sa2 (ISO 8501-1:2007) or SSPC-SP6. Surface defects revealed by the blast cleaning process should be ground, filled, or treated in the appropriate manner. A surface profile of 35-50 microns is recommended. May be applied to surfaces prepared to Hand or power tool clean to a minimum of St2 (ISO 8501-1:2007) or SSPC-SP2.

Stainless Steel: Abrasive sweep blasting cleaning to achieve a surface profile using non-metallic abrasive media which is suitable to achieve an anchoring surface profile depending on service condition according to ISO 8501-1:2007.

Galvanized Steel: High pressure washing is recommended as zinc salts formed may be difficult to remove. Do not use detergents. Use stiff brushes, alternatively Sweep blast the surface with a non-metallic abrasive to a sharp, dense and uniform profile giving a dull appearance.

Fiberglass (GRP): Wipe the surface with a strong solvent or wash with water using a suitable detergent to remove any remains of mould release agents. Sand the surface with coarse sand paper or sweep blast with a small size, non-metallic abrasive

Concrete: Should be at least 28 days old or have a moisture content of less than 5% before proceeding with epoxy primer application. Laitance and deposits on new concrete surface are preferably removed by light grit/ shot blasting, mechanical scarifying or grinding to achieve an open textured surface.

Shop primed steel: Sweep blasted or alternatively blasted to Sa 2 (ISO 8501-1) of at least 70 % of the surface. EPIMASTIC 5100 is suitable as a mid-coat over EPILUX primers and can also be overcoated with LUXATHANE and ROBBIATHANE finishes. The Epimastic 5100 coated surface is to be prepared before the subsequent coating application.

PRODUCT USE RESTRICTIONS

- Epimastic 5100 will have delayed curing if temperature falls below 10°C.
- Dry heat resistant 120°C (Continuous) 140°C (Intermittent).
- As common with all Epoxy products, this product also will tend to discolor and chalk on exposure to direct sunlight.
- This product is not suitable for use in immersed conditions.

SYSTEMS COMPATIBILITY

- The following under coat are recommended : Epilux primers.
- The following Top coat are recommended : Luxathane 5160 and Robbiathane Topcoats.
- For alternative system, consult Asian Paints Berger representative.

SAFETY PRECAUTIONS

- Avoid contact with the skin and eyes. Wear suitable protective clothing such as overalls, goggles, dust masks and gloves. Use a barrier cream.
- Ensure that there is adequate ventilation in the area where the product is being applied. Do not breathe vapor or spray.
- 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
- Refer to SDS for further information.

FIRST AID

- Eyes: In the event of accidental splashes, flush eyes with water immediately and obtain medical advice

- Skin: Wash skin thoroughly with soap and water or approved industrial cleaner.
- Do not use solvent 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

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.