

Sam Epoxy primer ZP- EC

Product description.

A two-component, high solid, polyamide-cured epoxy Primer with excellent anticorrosive properties due to pigmentation by Zinc phosphate pigments.

Characteristics

- Good abrasion and impact resistance.
- Designed to be used in industrial and marine environment.
- Can be used with water jetting surface preparation.
- Designed to be used as a holding primer that can be recoated after a period of time.
- Compatible with well-designed cathodic protection system.

Physical properties.

Colour Red brown, (specific colours)

Texture Egg Shell

Mixing and application Information

Number of components	Two	
Mixing ratio	By Volume, base to hardener: 80 / 20	
Specific gravity	Approx. 1.45 g/ml	
Volume solids	65±2%	Tested acc. ASTM D 2369
VOC	Approx. 300 g/liter	
Flashpoint	>25°C	
spray	Airless spray Recommended Pressure at nozzle: 180 - 250 bar. Nozzle size: 0.38 - 0.53 mm.. Spray angle: 40 - 80 degrees. Thinning Ratio: 0 - 5%.	
	Convention Air spray Thinning Ratio: 0 - 10%.	
Brush	Suitable for stripe coat and touch up. Thinning Ratio: 0 - 10%	
Roller	Suitable for stripe coat and touch up. Thinning Ratio: 0 - 10%.	
Thinner/Cleaner	SAM Thinner No. 1 Thinning should only be added after the two components have been thoroughly mixed.	
Pot life	3 Hours at 25 C°	

Recommended film thickness range

Dry film thickness per coat (µm)	50 – 100 µm	ASTM D1186
Wet film thickness per coat (µm)	77 – 154 µm	ASTM D1212
Theoretical spreading rate (m ² /L)	13 – 6.5 m ² /L	

Sam Epoxy primer ZP- EC

Surface Preparation

Carbon Steel.

Blast Cleaning

- Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.
- Surface shall be treated in accordance with ISO, ASTM or SSPC standards.
- The abrasives shall be free from oil, grease, moisture, chloride contamination, etc. and comply with ISO 8504-2 and SSPC AB1.
- The surface roughness shall be complied with ISO 8503 and ASTM D4417 with roughness between 40µm: 70µm.

	Recommended
Carbon steel	ISO 8501-1 Sa 2½, SSPC-SP10.

Power Tool Cleaning

- The Surfaces must be clean, dry and free from oil and other contamination.
- For Repair and Touch up only.
- Surfaces shall be treated in accordance with ISO 8504-3.
- Power-tool cleaning to recommended degree St 3, SSPC-SP3.
- Feathering the coated surface "**decreasing the edge thickness of a coat film**".

Water Jetting

- Water jetting in accordance with ISO 8501-4 and SSPC
- Flash rust degree is recommended to not exceed M (medium) and preferred to be L (light).

	Recommended
Atmospheric	Wa 2 or SSPC-WJ3.
Immersion	Wa 2.5 or SSPC-WJ2.

Drying and recoating information

Substrate temperature	10°C	23°C	30°C		
Touch dry	3 Hours	1.5 Hour	45 min	ASTM D 1640	
Dry to handle	10 Hours	5 Hours	3 Hours		
Full cure	10 Days	7 Days	5 Days		
Dry to recoat	Min.	15 Hours	12 Hours		10 Hours
	Max	Indefinite	Indefinite		Indefinite

The drying and curing periods are established by subjecting the product to controlled temperatures and a relative humidity level that does not exceed 85%, and at average DFT range for the product.

Sam Epoxy primer ZP- EC

Application conditions

- Avoid the formation of moisture on the surface, it is recommended that the temperature of the substrate remains at least 3°C higher than the dew point of the surrounding air, during painting process and until hard dry of the paint. It is important to take measurements of the temperature and relative humidity in the area surrounding the substrate according to ISO 8502-4.
- It is recommended to not exceed the surface temperature of approximately 45°C, as this can lead to the formation of dry-spray, pinholes, and sagging.
- For optimal results, it is important to mix the product thoroughly, making sure to combine the base and hardener in the recommended ratio.
- Thinning should only be added after the two components have been thoroughly mixed.
- To achieve the best results, it is advised to follow the product's TDS recommendations for thinning. Over-thinning the product can cause sagging and may also result in a weaker paint film.
- When working in small, cramped, confined spaces, it is important to ensure sufficient ventilation during both application and drying time.
- It is important to monitor the temperature of the paint, as it can impact its viscosity. To achieve the desired film thickness, it may be necessary to control thinning in order to reach the appropriate viscosity, for additional information, please get in touch with your Local SAMCO office.

Safety Precautions

- This is a solvent-borne paint and care should be taken to avoid inhalation of spray mist or vapor, as well as contact between the wet paint and exposed skin or eyes.
- Avoid inhalation of spray mist, it is important to take appropriate precautions. Skin contact should also be avoided, and any spills should be promptly cleaned up using soap, water, and a suitable cleanser. If the product comes into contact with the eyes, they should be thoroughly flushed with water and medical attention should be sought immediately.
- To ensure safe handling and use, please follow the guidelines below:
 - Wear appropriate personal protective equipment, such as gloves, eye protection, and respiratory protection, when handling or using this product.
 - Avoid direct skin contact and inhalation of dust, mist, or vapor.
 - If skin contact occurs, immediately wash the affected area with soap and water.
 - If the product comes into contact with the eyes, flush them thoroughly with water and seek medical attention immediately.
 - Use this product in a well-ventilated area to minimize the risk of inhalation.
 - Store the product in a cool, dry place, away from sources of heat or ignition.
 - Keep the product out of reach of children and animals.
 - Follow all applicable regulations and guidelines for handling, transportation, and disposal of this product.

Storage and shelf life

Ensure compliance with national regulations, proper storage guidelines must be followed for the product. The cans should be stored in a well-ventilated area that is dry, cool, and kept away from any heat or ignition sources. It is important to ensure that the cans are tightly closed at all times to maintain safety.

Disclaimer

All information in this document has been prepared to the best of SAMCO's knowledge, based on laboratory testing and practical experience to ensure good workmanship. However, the responsibility for executing the work stays with the applicator/ contractor/sub-contractor. SAMCO products are used under conditions beyond SAMCO's control. Users should always consult SAMCO for specific guidance on the general suitability of this product for their needs and specific application practices. SAMCO reserves the right to change the given data without further notice.