



WATERBORNE PRIMER

Waterborne epoxy gray anti-rust primer

[XGE-305]

Product Intro

This product is a two-component quick-drying waterborne epoxy anti-rust primer containing active anti-rust pigments and flash rust inhibitors.

Recommended Applications

Used as a universal primer for steel surfaces in slight and moderate corrosive environments, the surface can be coated with waterborne acrylic, waterborne epoxy, waterborne polyurethane, and suitable solventborne coatings.

Film thickness and coating rate

	Minimum	Maximum	Typical
Dry film thickness(μm)	25	60	40
Wet film thickness(μm)	40	100	70
Theoretical coating rate (m ² /kg)	12	6	8

Physical character

Color	Gray
Solid contents	60%
Flashing point	Nil
Glossness	Semi-gloss
Water-resistance	Favorable
Flexibility	Excellent

Surface Treatment

All surfaces should be clean, dry and free from dirt, and the surface should follow ISO8504 before evaluation and processing.

Bare steel

Cleanliness: Sand blasting to a minimum of Sa 2^{1/2}(ISO 8501-1: 1988) or ultra-high pressure spray water treatment to WJ 2 during maintenance (NACE No.

5/SSPC-SP 12) . Roughness: Treated to fine to medium (30-85 μm, Ry5) (ISO 8503-2) with angular sand (G).

Steel coated with primer

clean, dry and approved primer

Other surfaces

This product can be applied on other substrate. Refer the details to the company.

Engineering Conditions

Substrate temperature must not be lower than 10 °C and should be at least 6 °C or more above the dew point of the air. Temperature and relative humidity should be measured near the substrate. In narrow area, good ventilation is usually required to ensure proper drying.

Manner of application

Spray coat	Use airless spray or air spray.
Brush coat	It is recommended for pre-coating and small-area coating, but the required dry film thickness must be achieved.
Roll coat	It can be used in small areas, but it is not recommended as the first primer. In the case of roller coating, sufficient materials must be applied to achieve the specified dry film thickness.

Engineering Specs

Mixing ratio (mass ratio)	component A: component B=5 : 1, stir evenly. To ensure proper mixing, the two components are mixed. Use a mechanical stirrer to stir the mixture, and use a mechanical stirrer after mixing the two components.
Service life after mixture(23°C)	Stir evenly. (at least 1 minute) 4hours. Attn: The paint can no longer be used beyond its service life. It is recommended to use the alarm notice before its expiry.
Thinner/ Cleaner	Water
Spraying parameters	When applying by spray coating, it is necessary to adjust according to the actual spraying conditions. It is recommended to test the spray in a small area and obtain the proper spray parameters before coating.

Factors such as ventilation conditions, temperature, film thickness, and coating degree will affect drying time. Typical data listed in the table below are based on the following conditions:

** Good ventilation (outdoor or natural air circulation) * *Typical film thickness

** Upgrade coating on inert substrates * *Relative humidity 70%

Drying time

Substrate temperature surface dry solid dry	15°C	23°C	40°C
Solidify	80 minutes	60 minutes	45 minutes
The shortest coating time interval	2 days	2 days	15 hours
	14 days	10 days	7 days
	24 hours	16 hours	10 hours
			5 days
			6 hours

The above data is for guidance only, actual drying time/The time interval before coating can be long or short, depending on the film thickness, ventilation conditions, humidity, the underlying paint, advance loading and unloading requirements, and mechanical strength. For the complete package, see the corresponding supporting records which include all parameters and special conditions.

Typical package

Corrosion environment classification: C4 (ISO 12944) slight corrosion environment	
waterborne epoxy iron red anti-rust primer	2 x 40 μm (dry film thickness)
waterborne epoxy zinc-rich primer	2 x 35 μm(dry film thickness)
Corrosion environment classification: C5-I (ISO 12944) Moderate corrosion environment	
waterborne epoxy zinc-rich primer	1 x 40 μm (dry film thickness)
waterborne epoxy iron red anti-rust primer	2 x 40 μm(dry film thickness)
waterborne epoxy zinc-rich primer	2 x 35 μm (dry film thickness)

The specific circumstances can be formulated with other supporting records.

Tech Data

Technological Statement	Technical index	Testing Method	Remark
1. Appearance	Two-component	Visual inspection	
2. The viscosity out of factory	80-105	GB/T1723-93	
3. fineness (μm)	≤45μm	GB1724-89	
4. Solid content (%)	≥ 55	GB1725-89	
5. Theoretical coating rate (m ² /kg)	8	Plates coated inside the factory	
6. Covering power g/m ²	≤70	GB1726-89	
7. Adhesion (circling method)	Class 1	GB1720-89	
8. Drying time	surface dry 30 min, solid dry 24h	GB6753.2-86	Temperature≥25°C; Humidity≤70
9. Thickness of dry film (um)	≥ 40	GB1764-89	
10. Dry film gloss %	semi-gloss		
11. Pendulum hardness	≥ 1	GB/T1730-93	
12. Impact resistance (kg/cm)	50	GB/T1732-93	
13. Flexibility (mm)	1	GB6742-86	
14. Alkali resistance (h)	120	GB9265-88	Soaked in 2% NaOH solution
15. Acid resistance (h)	100	GB9266-88	Soaked in 2% H ₂ SO ₄ solution
16. Salt-fog resistance	850	GB/T1771-91	
17. water-resistance (h)	1000	GB/T1733-93	
18. VOC emission	≤48	HBC12-2002	National Standard below 200

Other information

Construction equipment preparation and cleaning procedures

In order to avoid contamination of the waterborne paint by the solvent, the spray equipment must be properly adjusted before use. All solvent-contacting pumps, tubes, guns, etc. must be thoroughly cleaned according to the following steps:

If the construction equipment is made of stainless steel and is used exclusively for the construction of waterborne paints, this preparation and cleaning work is not required.

Before spraying: Rinse with water in equipment and pipes until it is thoroughly clean.

After spraying: Rinse the equipment and piping with water and leave no residual paint.

Storage

It must be stored in accordance with national regulations. The storage environment should be dry, cool, well ventilated, and away from sources of heat and fire. The packaging container must be kept closed and frozen.

Storage life: 23 °C, Component A, 1year; Component B, 1 year Then it is necessary to check again to determine. The increase in storage temperature will significantly shorten the storage life.

Loading

Loading with caution. Stir evenly before use.

Package Spec

20Kilos: component A 17.5Kilos, component B 2.5 Kilos

Depending on local needs, different packaging specifications may be available in different countries.

Health and safety

Please note the warning label on the container. Use in good ventilation. No inhaling coating fog. No contact with skin. Paint splashed on the skin should be immediately flushed with a suitable cleaning agent, soap and water. Paint splashed into eyes should be thoroughly cleaned with water and seek medical attention immediately.

For detailed health and safety information and precautions for this product, please consult our Material Safety Handbook.

Anhui SGtech Coating Technology Co., Ltd