



Product Overview

Water-based epoxy zinc-rich primer is a two-component, quick-drying, water-based epoxy anti-rust primer that contains a large amount of active zinc powder to inhibit corrosion.

This primer contains a mass of active zinc powder to inhibit corrosion, with bi-component and quick drying functions.

Recommended Applications

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

Film thickness and coating rate

	Minimum	Maximum	Typical
Dry film thickness (μm)	28	70	50
Wet film thickness (μm)	40	100	70
Theoretical coating rate (m ² /kg)	8	4	6

Physical character

Color	Gray	Color
Solid contents	65%	Solid contents
flashing point	nil	flashing point
Gloss	Semi-gloss	Gloss
Water-resistance	Favorable	Water-resistance
Flexibility	excellent	Flexibility
Color	Gray	Color

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° and should be at least 6° 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.

Since the zinc powder in the primer is easy to settle, the primer in the bucket must be frequently stirred during the painting to ensure the uniformity of the primer.

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): A component: B component: C component = 2:1:6. To ensure proper mixing, before components A and B are mixed, components A and B should be stirred evenly respectively, after that, component C are then added.

Pay attention to component C for its metal property. If the viscosity is too high, add a certain amount of water to adjust, until the process is over. After the three components are mixed, they should be mixed with a mechanical stirrer and stir to the bottom of the barrel (stirring for at least 5 minutes). Note that such process should be done after being filtered with an 80-mesh screen

service life after mixture (23°C) is 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.

Drying time

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

** Ungraded coating on inert substrates

* *Relative humidity 70%

Substrate temperature	10°C	15°C	23°C	40°C
surface dry	60 minutes	45 minutes	30 minutes	10 minutes
solid dry	1 days	15 hours	10 hours	3 hours
Solidify	10 day	8 day	7 day	4 day
The shortest coating time interval	16 hours	12 hours	6 hours	3 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 includes all parameters and special conditions.

Typical supporting system

Corrosion environment classification: C5-I (ISO 12944) Moderate corrosion environment

waterborne epoxy zinc-rich primer 2 x 40 um (dry film thickness)

Waterborne epoxy iron coating 1 x 60 um (dry film thickness)

waterborne epoxy zinc-rich primer 2 x 35 um (dry film thickness)

The specific circumstances can be formulated with other supporting records.

Other information

Construction equipment preparation and cleaning procedures

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

Items 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, 6months 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. The C component is a metal powder and care should be taken during operation.

Package

18Kilos: Component A 4Kilos, Component B 2 Kilos, Component C 12 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

Declaration

The information provided in this product specification is based solely on the knowledge we have gained in the laboratory and in practice. However, since the use of products is usually out of our control, we only guarantee the quality of the products. We reserve the right to modify this manual without prior notice.

For more details, please check our website: www.towercoating.com.

XGE-HY-D (A, B)
Water-based epoxy zinc-rich primer



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