

WANECO®WE510

Water-Based

Epoxy Paint

Product Description

WANECO®WE510 is a two-component waterborne epoxy coating specifically designed for severe corrosion environments. Its dense, abrasion-resistant film is suitable for application directly as an anti-corrosion primer on sandblasted steel surfaces.

Product Characteristics

Environmentally friendly water-based formulation, exceptional corrosion protection performance, and excellent adhesion to special substrates.

Recommended Uses

Can be used as a primer and intermediate coat for water-based coating systems, and is also suitable for primer and topcoat systems in indoor environments where no special weather resistance is required.

Technical Specifications

Physical Parameters

Color	Gray
Gloss	Matte
Specific Gravity	Approx. 1.3 kg/L
Solids By Volume	48±2%
Theoretical Spreading Rate	8 m ² /L, DFT: 60μm
Flash Point	100°C
VOC	120 g/L

Surface Preparation

Application Conditions: Substrate temperature must be at least 3 °C above dew point, with relative air humidity not exceeding 85%.

New Projects (New Steel): Surfaces must be free of oil, contaminants, and impurities. Sandblasting must achieve ISO 8501-1:2007 Sa 2½ grade, with surface roughness meeting ISO 8503-2 Medium (G) standard.

Repair Projects: Remove loose contaminants such as oil from the surface. Sandblasting to Sa 2½ grade or manual cleaning to St 3 is recommended. Requirements may be appropriately relaxed for localized areas that are difficult to treat

Application Guidance

Application Method

Airless spraying, air spraying.

Mixing Ratio

Mass Ratio: 10 (Base): 1 (Hardener)

Pot Life: 2 hours at 20 °C

Hardener

CWE5100

Thinner

Clean Water

Film Thickness

Film Thickness	
Wet Film	125µm
Dry Film	60µm

Drying time

Surface Temperature	20°C
Surface Dry	1 h
Hard Dry	6 h
Fully Cured	7 days

Overcoating Interval

Product Name	20°C	
Water-Based Acrylic Topcoat	Lowest	12 h
WE510	Highest	Extendable

Ambient Temperature

15°C~40°C. Avoid application when relative humidity exceeds 85%.

Surface Temperature

Above the dew point by 3°C or more.

Recommended Method

Tools	Application Parameters
Airless Spray	Nozzle Pressure: 15 MPa
	Nozzle Size: 0.43 – 0.58 mm

WANECO®WE510 can be applied using airless spraying, roller application, or conventional spraying.

Mixing and Thinning

WANECO®WE510 is a two-component product with a pre-determined mixing ratio. First, stir the Base until uniform and free of lumps for no longer than 2 minutes. Then slowly add the hardener and stir for 3 minutes. Use a variable-speed power mixer. Avoid overmixing, as this accelerates curing and reduces product shelf life. High temperatures shorten the mixture's pot life, while low temperatures extend it. Add a small amount of clean water (0 – 5%) if required by application conditions.

Ventilation

Ensure adequate ventilation throughout the work area for operator safety and proper product performance.

Packaging and Storage

Packaging

Two-component, 22 kg combination package.

Storage

Product storage must comply with national regulations. Store in a cool, well-ventilated area away from heat and ignition. Containers must be kept tightly closed.

Shelf life

1 year

Safety Precautions

Warning

May cause eye and skin irritation. Vapors may cause respiratory irritation in sensitive individuals. May cause skin sensitization. Avoid breathing vapors. Avoid contact with eyes and skin. Use eye, ear, and skin protection, and wear an appropriate respirator to avoid potential respiratory irritation. After use, thoroughly wash skin with water. If discomfort occurs, consult a physician. Wash clothing before reuse. If breathing has stopped, perform artificial respiration, preferably mouth-to-mouth, and seek medical attention. Burns: Exothermic reactions may cause product to become excessively hot. Handle mixtures with caution. Wear gloves. First Aid: If product contacts eyes, immediately flush with water for at least 15 minutes. Remove contaminated clothing and shoes. Wash exposed skin with soap.

Before and during use, observe all safety labels on the packaging. Consult the Safety Data Sheet and comply

with relevant national or local government safety regulations.

Statement

The information listed in this document is reliable. Each value provided is calculated as theoretical data based on the product formulation. Upon request, our company can disclose the internal standard measurement methods used to determine any of the above data. Since usage conditions are beyond the manufacturer's control, this information is provided without warranty. The product is intended for professional use only. For any inquiries, please contact our company.

Our Technical Support and Customer Service Center is available to provide consultation and application technical services regarding the product. We welcome your inquiries via mail or phone. National Customer Service Hotline: 400-059-1116 ext. 3.