

Wanshield®62103

Anti-Static Water-Based

Epoxy Primer

Product Description

Wanshield®62103 Anti-Static Waterborne Epoxy Primer is a two-component waterborne epoxy resin adhesive, reaction-curing type, and an environmentally friendly coating. It serves as a conductive black primer for anti-static epoxy flooring and can also be mixed with fillers such as quartz sand to form conductive epoxy mortar intermediate coats.

Product Characteristics

Environmentally friendly, benzene-free, with extremely low VOC content; High adhesion to damp substrates; Strong penetration and excellent sealing properties; Coating exhibits durable and consistent conductivity.

Recommended Uses

Suitable for concrete substrates and properly prepared steel surfaces.

Technical Specifications

Physical Parameters

Condition in Container		After mixing, the mixture should be uniform with no lumps.
Drying Time	Surface Dry/h	≤8
	Full Cure/h	≤24
Volatile Organic Compound Content (VOC), g/L		≤60
Alkali Resistance (Immersion in Saturated Ca(OH) ₂ , 48h)		Paint film is intact, free of blistering and peeling, with slight discoloration permitted.
Tensile Bond Strength, MPa	≥	2.0
Surface Resistivity (Electrostatic Discharge Type), Ω		5*10 ⁴ -1*10 ⁶

Surface Preparation

Construction Conditions: Ambient temperature during application must be between 10-35 °C . The substrate temperature must exceed the ambient dew point by at least 3 °C . Relative humidity in the work area must be below 85%. The substrate surface must be free of standing water, and the work area must be well-ventilated and dust-free. Avoid strong winds that could introduce dust and compromise the surface finish.

- (1) For new or existing concrete surfaces, concrete strength must reach C25 with a pull-off strength of 1.5MPa. Thoroughly remove all surface debris, oil stains, old coatings, loose dust, and other contaminants that may impair adhesion until sound concrete is exposed.
- (2) Grind the concrete substrate using a grinder, continuously checking surface flatness with a 2m straightedge and feeler gauge. Level high spots with a grinder and fill low areas with epoxy mortar to ensure overall surface flatness does not exceed 3mm.
- (3) Treat the surface using mobile shot blasting tools or grinding equipment to thoroughly remove laitance and achieve concrete surface roughness meeting “CSP 3-6” requirements.
- (4) For new concrete substrates, ensure the curing period has been exceeded and the moisture content is below 6%. It is critical to use mobile sandblasting tools or grinding equipment to achieve the correct surface roughness.
- (5) Apply water-based epoxy primer and intermediate coat. Refer to the product manual for detailed application procedures.

Application Guidance

Mixing Ratio

Mass ratio: Component A : Component B = 3 : 1. Mix thoroughly until completely homogeneous.

Pot life: 50 minutes at 23°C. Higher temperatures reduce pot life.

Application is generally not recommended when ambient temperature exceeds 40°C.

Thinner

No thinners may be added to the paint.

Film Thickness

Film Thickness	
Base coating	0.08-0.15mm

Drying time

Substrate Surface	20°C
Surface Dry	8 h
Fully Cured	48 h

Recoating Interval

Product Name		20°C
Wanshield®62103	Lowest	24 h
Anti-Static Waterborne Epoxy Primer	Highest	Confirm that the coating has completely dried.

Ambient Temperature

10°C – 35°C. Relative humidity of the construction environment must be less than 85%.

Substrate Temperature

Above the dew point by 3°C or more.

Mixing and Dilution

Wanshield®62103 Anti-Static Waterborne Epoxy Primer is a two-component product with a precise component ratio. Once the mixing time is determined, consistency must be maintained throughout the entire application process. Inconsistent mixing times per batch may result in surface color variations and differing textures.

1. During mixing, use a straight-edge trowel to scrape material adhering to the sides and bottom of the container. This operation should be performed at least once to ensure complete final blending.
 2. Only mix the entire contents of the factory packaging. Temperature affects both application time and product curing time.
 3. Mixing equipment may cause variations in flow properties; use the recommended mixing paddle.
- No thinners may be added to the coating.

Ventilation

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

Packaging and Storage

Packaging

Steel drum packaging;

Wanshield®62103 Anti-Static Waterborne Epoxy Primer Component A: 12kg

Wanshield®62103 Anti-Static Waterborne Epoxy Primer Component B: 4kg

Storage

Storage and Transportation Conditions: The coating should be stored in a sealed container at 5-35°C in a dry, cool, and well-ventilated environment, away from high temperatures and open flames. During transportation, stack materials steadily to ensure the cargo compartment remains dry, enclosed, and protected from moisture and freezing.

Shelf Life

Components A and B, in their original sealed packaging and stored under specified conditions, have a shelf life of six months from the date of manufacture.

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.