Wanshield®62235 Epoxy Anti-Static Self-Leveling Floor Coating

Product Description

Wanshield®62235 Epoxy Anti-Static Self-Leveling Floor Coating is a solvent-free, two-component floor coating. It incorporates well-dispersed, high-performance conductive fiber pulp, providing excellent anti-static properties with stable and long-lasting effectiveness. This coating effectively prevents electrical sparks and electromagnetic interference, with surface resistivity ranging from 10^6 ~ 10^9 Ω. Customization is available to meet specific requirements.

Product Characteristics

High mechanical strength, wear-resistant and pressure-resistant, with a long service life, suitable for heavy-duty areas;Resistant to corrosion from chemical media such as acids, alkalis, salts, and oils, with stable and long-lasting anti-static properties to ensure safe production;Smooth and glossy paint film surface, vibrant colors, and excellent decorative effect;Solvent-free epoxy resin system, meeting environmental protection requirements.

Recommended Uses

Primarily suitable for flooring in environments requiring static control, such as precision electronics factories, telecommunications equipment facilities, hospital operating rooms, military installations, and chemical storage warehouses.

Technical Specifications

Physical Parameters

Tensilebond strength,	Standard Conditions	≥2.0

Project		Technical Specifications
Condition in Container		After mixing, the mixture should be uniform with no lumps.
Paint Film Appearance		The coating is smooth and even.
Drying Time	Surface Dry h	≤8
	Full Cure h	≤48
Initial Flow/mm		≥140
Pencil Hardness, H		≥3H
Abrasion Resistance (750g/500r), g		≤0.03

	After Immersion/MPa	≥2.0
Impact resistance	Light Load (500g Steel Ball)	The coating film shows no cracks or peeling.
	Heavy Load (1000g Steel Ball)	The coating film shows no cracks or peeling.
Abrasion Resistance (750g/500r), g		≤0.03
Slip Resistance (Dry Friction Coefficient)		≥0.5
Water Resistance (168h)		No bubbling, No peeling, Minor discoloration permitted
Oil Resistance (120# Solvent Oil, 72h)		No bubbling, No peeling, Minor discoloration permitted
Alkali Resistance (20% NaOH, 72h)		No bubbling, No peeling, Minor discoloration permitted
Acid Resistance (10% H_2SO_4, 48h)		No bubbling, No peeling, Minor discoloration permitted

Surface Preparation

Construction Requirements

1. For all new and existing concrete surfaces, concrete strength must reach C25 or higher, with flatness meeting the 2m straightedge tolerance of ±3mm.
2. The floor must undergo at least 28 days of curing before floor coating application to achieve optimal results.
3. Optimal floor coating application temperature ranges from 5℃ to 35℃. Do not apply below 5℃, as this compromises project quality and cured film strength.
4. Substrate moisture content must not exceed 5%, with ambient humidity below 80%. Exceeding these limits may cause bubbling and other cosmetic defects.
5. Ensure the work area is well-ventilated and dust-free, but avoid strong drafts that could introduce dust particles and affect surface appearance.

Surface Preparation

Typically, grinding is performed to ensure complete removal of surface stains and loose debris down to sound concrete. Any concrete damaged by chemical exposure, loose sections, or contamination by any material should be removed down to sound concrete. Grinding removes surface dust, stains, and loose layers from the substrate while roughening the surface, thereby enhancing adhesion between the substrate and the epoxy flooring system.

Application Guidance

Application Method

Trowel application, roller application

Primer application

Use Wanshield®62201 solvent-free epoxy primer or Wanshield® 62305 universal flow-out epoxy primer. Apply with a trowel or roller. Application rate: approximately 0.15 – 0.25 kg/m² . Ensure complete coverage

without overspray or excessive thickness. Apply a second primer coat or touch up missed areas as needed.

Substrate Repair and Leveling

Use Wanshield®62208 Solvent-Free Epoxy Intermediate Coat or Wanshield®62306 Universal Flow-Out Epoxy Intermediate Coat. Mix with 80 – 120 mesh quartz sand at an appropriate ratio to form epoxy mortar. Apply with a trowel to repair pits in the floor. Remove dust from cut joints, then fill with the prepared epoxy mortar and trowel to create a level surface.

Copper Foil Installation and Grounding

Utilize existing building structures as grounding rods. Position copper or stainless steel plates (pre-connected with wiring and a 1MΩ safety resistor in series) onto the floor according to grounding rod locations. Install copper foil at specified intervals and connect it to the grounding terminals.

Conductive Coating Application

Apply one coat of Wanshield®62103 water-based epoxy anti-static primer using a short-nap roller at a rate of 0.15 – 0.25 kg/m² . After drying, verify the film resistance does not exceed 10^4 Ω before proceeding to the next step.

Topcoat Application

Use Wanshield®62235 anti-static epoxy self-leveling topcoat. Confirm substrate, temperature, and airflow meet application requirements before mixing the coating according to the specified ratio. Before mixing, thoroughly blend components A and B separately using a high-speed mixer. Accurately weigh both components, mix them in the specified ratio, and blend thoroughly with the high-speed mixer to prevent sedimentation, layering, color variation, or incorrect ratios.

Pour the thoroughly mixed floor coating onto the surface. Apply evenly using a large notched trowel, controlling the film thickness and preventing material buildup or accumulation. Immediately use a needle roller over the applied area to release trapped air, eliminate bubbles, and assist in leveling.

Mixing Ratio

Mass ratio: Component A : Component B = 5 : 1. After mixing, thoroughly blend using a high-speed mixer.

Pot life: 1 hour 30 minutes (1 hour if poured onto the floor) at 25℃. Higher temperatures reduce pot life.

Application is generally not recommended when ambient temperatures exceed 35℃.

Thinner

No thinners may be added to the paint.

Film Thickness

	Film Thickness
Surface Coating	Minimum 0.6 mm

Drying time

Substrate Surface	**20℃**
Surface Dry	8 h
Fully Cured	7 days

Drying time is measured under standard conditions (25℃, 60% humidity) and is provided for reference only. Drying speed varies significantly under different temperatures and humidity levels, and is also influenced by film thickness, ventilation conditions, and underlying coatings. Generally, drying time shortens as temperature increases and lengthens as temperature decreases.
Prior to formal project commencement, the buyer must conduct trials under conditions identical to the actual construction environment to ensure the reliability of the coating system for this specific project. Formal application shall be deemed as the buyer's acceptance of the product's performance as qualified. Failure to follow the above procedures shall result in the buyer bearing all responsibility.

Ambient Temperature

The optimal temperature range for floor coating application is between 5℃ and 35℃. Application should not be performed below 5℃, as this may compromise project quality and the strength of the cured coating film. The moisture content of the substrate should not exceed 5%, and ambient humidity should not exceed 80%, otherwise issues such as bubbling may occur, affecting the aesthetic appearance.

Substrate Temperature

Above the dew point by 3℃ or more

Mixing and Dilution

Wanshield®62235 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 flowability; 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;
Wanshiled®62235 Epoxy Anti-Static Self-Leveling Floor Coating Component A: 20kg
Wanshiled®62235 Epoxy Anti-Static Self-Leveling Floor Coating Component B: 4kg

Storage

Product storage must comply with national regulations. Storage and transportation conditions: Coatings

should be stored in sealed containers at 5-30℃ in a dry, cool, and well-ventilated environment, away from high temperatures and open flames. During transportation, materials should be stacked securely to ensure the cargo compartment remains dry, enclosed, and protected from moisture and freezing.

Shelf Life

When stored under specified conditions, the shelf life of the product in its original packaging is 12 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.