

**Wanshield®62209****Solvent-Free Epoxy****Topcoat**

## Product Description

Wanshield®62209 Solvent-Free Epoxy Topcoat is a two-component floor coating featuring low viscosity, excellent flow properties, and comfortable application feel. It can be applied in a single thin coat to form a film with outstanding mechanical strength, hardness, wear resistance, compression resistance, impact resistance, and chemical stability.

### Product Characteristics

Low viscosity facilitates easy application, enabling thin-film coating in a single pass; Excellent self-leveling properties yield a smooth, even finish with rich color saturation, ensuring easy cleaning and maintenance; High hardness provides superior abrasion resistance, compression strength, impact resistance, and protection against dust and moisture; Strong adhesion prevents peeling and blistering of the paint film.

### Recommended Uses

This flooring material features strong adhesion, exceptional hardness and wear resistance, excellent self-leveling properties during installation, and produces a smooth, even finish. It is easy to clean and maintain, making it widely used in hospitals, pharmaceutical plants, food processing facilities, shopping malls, electronics factories, and other environments demanding high surface cleanliness.

## Technical Specifications

### Physical Parameters

| 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  |
| Pencil hardness, H                 |                                | ≥3H  |
| Abrasion resistance (750g/500r), g |                                | ≤0.03  |
| Tensile bond strength, MPa         | Standard conditions            | ≥2.0   |
|                                    | After being submerged in water | ≥2.0   |

## 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  $\pm 3\text{mm}$ .
2. The floor must undergo at least 28 days of curing before application to achieve optimal results.
3. Optimal application temperature ranges from  $5^{\circ}\text{C}$  to  $35^{\circ}\text{C}$ . Do not apply below  $5^{\circ}\text{C}$ , 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

Grinding is generally selected to ensure complete removal of surface stains and loose debris down to sound concrete. All concrete damaged by chemical exposure, loose sections, or contamination by any substance must be removed down to sound concrete. Grinding removes surface dust, stains, and loose layers from the substrate while roughening the surface, enhancing adhesion between the substrate and the epoxy flooring system.

## Construction Guidance

### Construction Method

Trowel application, roller application

Primer application:

Use Wanshield® 62201 solventless epoxy primer or Wanshield® 62305 universal flow-out epoxy primer. Apply with a trowel or roller. Application rate: approximately  $0.15 - 0.25 \text{ kg/m}^2$ . Ensure complete coverage without overspray or excessive thickness. Apply a second primer coat or touch up missed areas as needed.

Intermediate Mortar Layer Application Method:

After the primer is fully cured, mix components A and B of Wanshield® 62208 Solvent-Free Epoxy Intermediate Coat according to the specified ratio. Add an appropriate amount of 80-120 mesh quartz sand and stir thoroughly. Apply with a trowel, ensuring no missed areas or material buildup. Since the intermediate mortar layer typically has a rough surface, apply putty to level the substrate and fill gaps. This ensures a smooth surface and decorative finish for the topcoat application.

Intermediate Putty Layer Application Method:

After the intermediate mortar layer has fully cured, mix components A and B of Wanshield® 62209 solvent-free epoxy intermediate coating according to the specified ratio. Add an appropriate amount of quartz powder or putty powder, stir thoroughly, then apply with a trowel to level the surface. Remove dust from cut joints, pour the prepared putty mixture into the joints, and trowel to form a smooth surface. Ensure no missed areas or material buildup occurs.

### Mixing Ratio

Mixing Ratio: Component A:Component B = 20:4. Thoroughly mix with a high-speed mixer after blending.  
Pot Life: 1 hour 30 minutes (1 hour if poured onto the floor) at 25°C. Higher temperatures reduce pot life.  
Application is generally not recommended when ambient temperatures exceed 35°C.

### Thinner

No thinners may be added to the paint.

### Film Thickness

| Film Thickness  |            |
|-----------------|------------|
| Surface Coating | 0.08-0.1mm |

### Drying time

|                   |        |
|-------------------|--------|
| Substrate Surface | 20°C   |
| Surface Dry       | 24 h   |
| Fully Cured       | 7 days |

Note: Drying times are measured under standard conditions (25 °C , 60% humidity) and are provided for reference only. Drying rates vary significantly under different temperatures and humidity levels, and are also influenced by film thickness, ventilation conditions, and underlying coatings. Generally, drying times shorten as temperatures rise and lengthen as temperatures drop.

Prior to formal project commencement, the buyer must conduct preliminary tests 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 all liabilities being borne by the buyer.

### Recoating Interval

| Product Name                                  |         | 25°C                              |
|---|---------|-----------------------------------|
| Wanshield®62209 Solvent-Free<br>Epoxy Topcoat | Lowest  | 24h                               |
|   | Highest | The coating has completely dried. |

### Ambient Temperature

The optimal construction temperature ranges from 5 °C to 35 °C . Do not apply below 5 °C , as this may compromise project quality and the strength of the cured coating. The moisture content of the substrate

should not exceed 5%, and ambient humidity should not exceed 80%, otherwise issues such as blistering may occur, affecting the appearance.

### **Substrate Temperature**

Above the dew point by 3°C or more.

### **Mixing and Dilution**

Wanshield®62209 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;

Wanshield®62209 Solvent-Free Epoxy Intermediate Coat, Component A: 20kg

Wanshield®62209 Solvent-Free Epoxy Intermediate Coat, Component B: 10kg

### **Storage**

Product storage must comply with national regulations. Storage and transportation conditions: Coatings should be stored in sealed containers at 5-35°C in a dry, cool, and well-ventilated environment, away from high temperatures and open flames. During transportation, materials must be stacked securely to ensure the cargo compartment remains dry, enclosed, and protected from moisture and freezing temperatures.

### **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.