

WANARMOR®PU163

Polyurethane Topcoat

Product Description

WANARMOR®PU163 is an exceptional two-component aliphatic polyurethane topcoat offering excellent gloss retention and color stability. When applied over epoxy or polyurethane primers, it forms a high-strength, long-lasting corrosion protection system.

Product Characteristics

Superior corrosion resistance, excellent recoatability, and low-temperature curing capability.

Recommended Applications

Decorative topcoats for bridge and stadium steel structures; high-weatherability coatings for wind turbine towers, port machinery, and other steel structures or equipment requiring high performance.

Technical Specifications

Physical Parameters

Color	White, or as per user requirements
Gloss	High gloss
Specific Gravity	Approx. 1.35 kg/L
Solids By Volume	60±2%
Theoretical Spreading Rate	12 m ² /L, DFT 50 µm
Flash Point	33 °C
VOC	380 g/L

Surface Preparation

Prior to application, the surface of the object to be coated must be free of grease, dust, moisture, and other contaminants, and must have an appropriate primer applied. To ensure the appearance of the paint film, the primer must be smooth and level, free of surface defects such as dry spray or orange peel.

Application Guidance

Application Method

Brush application, airless spraying.

Mixing Ratio

Mass Ratio: 6(Base):1 (Hardener)

Pot Life: 1.5 hours at 20 °C

Hardener

CPU1630

Thinner

WANARMOR®TH004

Cleaning Agent: WANARMOR®TH004

Film Thickness

Film Thickness	
Wet Film	100μm
Dry Film	60μm

Drying time

Surface Temperature	20°C
Surface Dry	1h
Hard Dry	8 h
Fully Cured	7 days
DFT 50 μm	

Overcoating Interval

Product Name	10°C	20°C	30°C
Polyurethane	Lowest	12 h	8 h
PU163	Highest	Extendable	Extendable

Ambient Temperature

5 °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: 25 MPa
	Nozzle Size: 0.53 – 0.64 mm

WANEKO®PU163 can be applied using airless spraying, roller application, or conventional spraying.

Mixing and Thinning

WANARMOR®PU163 is a two-component product with a precise mix ratio. First, stir the Base until uniform and free of lumps, taking 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 lifespan. High temperatures shorten the mixture's pot life, while low temperatures extend it. If necessary for application conditions, add a small amount of thinner (5% or less), subject to local regulations regarding volatile organic compounds (VOCs) and air quality.

Ventilation

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

Packaging and Storage

Packaging

Two-component, 21 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.