

WANARMOR®PS166

Acrylic Polysiloxane

Topcoat

Product Description

WANARMOR®PS166 is a two-component, chemically cured acrylic polysiloxane coating. This high-solids product offers excellent gloss retention and color stability, along with outstanding mechanical properties and chemical resistance. It is isocyanate-free and does not generate diisocyanates during pyrotechnic/welding operations or in the event of fire.

Product Characteristics

Excellent gloss retention, outstanding color durability, superior chemical resistance, good recoatability, and low-temperature curing capability.

Recommended Uses

Industrial Protection Applications: Recommended for marine engineering, oil depots, refineries, power plants, and bridges. Also widely applicable in industrial buildings and similar structures.

Marine Protection Applications: Recommended for ship sides and superstructures.

Technical Specifications

Physical Parameters

Color	White, or as per user requirements
Gloss	Glossy
Specific Gravity	Approx. 1.4 kg/L
Solids By Volume	70±2%
Theoretical Spreading Rate	14 m ² /L, DFT:50 μm
Flash Point	33°C
VOC	280 g/L

Surface Preparation

WANARMOR®PS166 requires that the surface of the object to be coated be free of grease, dust, moisture, and other contaminants prior to application, and that an appropriate primer be 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

Airless spraying, brushing, rolling.

Mixing Ratio

Mass Ratio: 3(Base) : 1(Hardener)

Pot Life: 3hours/20 °C

Hardener

CPS1661

Thinner

WANARMOR®TH021

Cleaning Agent: WANARMOR®TH021

Film Thickness

Film Thickness	
Wet Film	75μm
Dry Film	50μm

Drying Time

Surface Temperature	20°C
Surface Dry	1 hours
Hard Dry	6 hours
Fully Cured	7 days
DFT:50 μm	

Overcoating Interval

Product Name	10°C	20°C	30°C	
Acrylic Polysiloxane Topcoat PS166	Lowest Highest	5 hours Extendable	3 hours Extendable	2 hours 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: 20 MPa
	Nozzle Size: 0.43-0.48mm

WANARMOR®PS166 can be applied using airless spraying, roller coating, or conventional spraying.

Mixing and Thinning

WANARMOR®PS166 is a two-component product with a precise mix ratio. First, stir the Base until uniform and free of lumps for no more 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

For the safety of construction personnel and the proper performance of this product, all areas of the construction site must be well ventilated.

Packaging and Storage

Packaging

Two-component, 20 kg combination packaging.

Storage

Products must be stored in accordance with national regulations. Keep 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.