



# High elasticity polyurethane waterproofing coating

## YHCoat-910

### Description

YHCoat-910 is a single-component, cold applied, moisture-cured polyurethane waterproofing membrane. It cures to form a seamless and durable waterproofing layer intended for use as the base coat under aliphatic top coat for exposed roof areas, as well as below tiles or mortar protecting layer on balconies terraces and other non-exposed waterproof projects.

### Features & Benefits

- No mixing needed, easy and ready to use
- Cold applied-requires no heat or flame
- Seamless membrane
- Can be reinforced with fleece where required
- Easily recoated when needed, no stripping required
- Elastic-retains flexibility even at low temperatures
- Good adhesion to most substrates
- Rain resistant after 2 hours of application
- Can be easily applied by spraying and squeegeeing

### Uses

- For general non-exposed waterproofing solutions in both new construction and refurbishment projects.
- For projects displaying complex detail areas, even when accessibility is limited.
- For waterproofing underneath tiles on balconies and terraces.

### Packing and Specifications



Item	Description
Appearance	Black Viscous Liquid
Solid Content by Weight	92 %
Density	1.45-1.55 kg/L
Pot Life	4 h
Package	20kg /pail
Shelf life	12 months from date of production

## High elasticity polyurethane waterproofing coating

### Typical Properties and Characteristic

Description	Test Methods	Values
Tensile Strength	ASTM D412	2.81 MPa
Elongation at Break	ASTM D412	1190%
Dynamic Viscosity at 25 °C (77 °F)	ASTM D445-23	15470 mPa.s

### Application Information

Ambient Air Temperature	+5°C to +40°C.	
Relative Air Humidity	10% RH to 85% RH.	
Substrate Temperature	+5°C to +60°C. Minimum 3°C above dew point	
Substrate Moisture Content	≤ 7%	
Minimum Overcoating Waiting Time	+5°C/50%RH	24 hours
	+15°C/50%RH	18 hours
	+25°C/50%RH	8 hours
	+30°C/50%RH	5 hours
Materials Consumption	1.6-1.8 kg/m <sup>2</sup> for 1mm dry film thickness	

### Application Instructions

#### Surface Preparation

The substrate must be sound, solid, clean, dry and free of dirt, oil, grease and other contaminants. Surface defects such as blowholes and voids must be repaired. Depending on the material, the substrate must be primed or mechanically cleaned. For porous substrates including concrete and wooden materials, it is recommended to use epoxy primer to block substrate for coating pinhole prevention, especially when surface humidity or temperature is rising.

#### Application

Prior to the application of YHCoat-910, the primer if used must have cured to be tack-free. Refer to the TDS of primer and be careful to the recommended maximum application time gap between the tack-free primer and PU coating.

#### Mixing

Mixing normally is not required. However, if the product is settled or separated on opening, stir the material thoroughly in order to achieve a homogeneous state, and stir gently to minimize air entrapment.

# High elasticity polyurethane waterproofing coating

## Non-exposed Projects

YHCoat-910 is applied in 2-3 layers to achieve required thickness. The application of the next layer should be upon a cured previous layer with perpendicular installation direction. Partial reinforcement with fleece over areas of stress or predictable movement, e.g., overlaps, detailing and joints, is needed. Install reinforcement materials between two wet coats to ensure thorough penetration.

YHCoat-910 can also be applied in combination with fleece on the entire surface, for the reinforced waterproof layer would prolong service lifetime expectation.

1. Apply first coat of approximately 1.5kg/m<sup>2</sup> of YHCoat-910. Work only so far that the material stays liquid.
2. Roll in the reinforcement material and ensure no bubbles or creases. Overlapping of reinforcement material a minimum 3-5 cm and ensure overlaps are sufficiently wet and penetrated. Only a little extra material is required to keep the roller wet at this stage.
3. After the coat is dry enough to walk on, install a final layer coat at roughly 1 kg/m<sup>2</sup>. After passing the water-tight test, protect the waterproof layer with a layer of pebbles or concrete.

## Waterproofing below tiles

For waterproofing below tiles, follow the instructions for non-exposed projects. After the last layer of waterproofing coating has been cured, apply another coat of YHCoat-910 broadcasted with quartz sand as bonding bridge. Apply the tile adhesives and bond it on the coating surface after loose and excessive sand has been removed.

## Exposed Roof Systems

For exposed waterproof projects, such as roof and balcony, a final layer of aliphatic polyurethane top coat is necessary for UV barricade. Please refer to the TDS of aliphatic coat for further information. Be aware of application window after the drying of last layer. Normally additional inter-layer adhesion promotion measures are not necessary when previous PU layer has been dried for less than 5 days.

## Cleaning Equipment

Clean all tools and application equipment with organic solvents immediately after use. Liquid YHCoat-910 can be dissolved and removed by Xylene, alcohols, ketones and esters. Cured materials can only be removed mechanically.

## Transportation & Storage

The product should be stored at ventilated places with no exposure to sunlight, rain or fire. Avoid collision during transportation. The storage temperature is 5°C - 40°C. The shelf life is 12 months under normal transportation and storage conditions.

## Basis of Product Data

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## Precautions

Do not apply YHCoat-910 on substrates with rising moisture.

YHCoat-910 is not recommended to directly contact

## High elasticity polyurethane waterproofing coating

water for permanent immersion.

Highly recommended to apply YHCoat-910 during falling ambient and substrate temperature to avoid coating pinholes by substrate outgassing.

Dilution of YHCoat-910 with solvent is not recommended. Alcohol impurities in solvent may disrupt curing.

Apply YHCoat-910 only when ventilation is effective. Assess discreetly for any indoor application.

Do not apply close to the air intake vent of a running as well as any plastic water pipelines. air circulation system.

Do not apply YHCoat-910 directly on insulation board, Direct application on bituminous materials may result in coating discolor and/or bituminous material softening.

The water that contact cured YHCoat-910 is prohibited for drinking and aquaculture.

### Basis of Product Data

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

### Ecology, Health and Safety

Users shall refer to the latest Material Safety Data Sheet (MSDS) containing physical, ecological, toxicological and other safety-related data for information and advice on safe handling, storage and disposal of chemicals.

### Local Restrictions

The performance of this product may vary from country to country due to specific local regulations. For an exact description of the field of application, please refer to your local Product Data Sheet.

### Legal Notes

This information, especially the recommendations related to the application and final use of Oriental Yuhong's products, is provided based on Oriental Yuhong's current knowledge and experience of the products when stored, handled, and applied properly in accordance with Oriental Yuhong's recommendations under normal conditions. In practice, the differences in materials, substrates, and actual site conditions make it impossible to infer any guarantee of merchantability or suitability for a specific application from this information, any written suggestions, or any other advice provided, nor can any liability arise from any legal relationship. The user of the product must test the product's suitability for the intended a cation and purpose. Oriental Yuhong reserves the right to change the characteristics of its products. Ownership of third parties must be observed. All orders are subject to our current Terms of Sale and Delivery. Users must always refer to the latest issue of local Product Data Sheet for the products concerned, copies of which will be provided upon request. The above disclaimer may need to be tailored to specific local laws and regulations.