

Acothane MF

Self-Leveling MF Polyurethane Coating Paint

Product description

Acothane MF is a 4-component, solvent-free, self-leveling and seamless Polyurethane coating paint. The finished surface is solid, matte, and waterproof.

Acothane MF is applied with a thickness of 4-6 mm on concrete floors in dry environments, can be walked on lightly after 8-12 hours and after 36 hours with heavy loads, can be exposed to chemicals after 7 days and put into use after 14 days.

Acothane MF has high thermal shock resistance, mechanical abrasion resistance, strong chemical resistance, durability and long life, suitable for environments that are often exposed to strong cleaning chemicals at high temperatures and require requires high mechanical abrasion resistance.

Advantage

- Resistant to many chemicals
- Resists mechanical abrasion and abrasion due to movement of high-load equipment
- Finished surface is easy to clean and maintain
- Withstands hot water and steam (when cleaning floors)
- Odorless so it does not contaminate food, complies with HACCP requirements
- There is no risk of catching fire or causing a fire.

Application

Acothane MF is used for pharmaceutical, food processing and seafood factories; Cold storage; Chemical factory; Factory for manufacturing and assembling electronic components.



Technical specification

Color	Wide range of colors, see adchem color chart
Solid content	99%
Mixing ratio A : B : C : D	3 : 3 : 14 : 0.2-0.3 (kgs)
Packaging	20 kgs + 0.2-0.3 kgs color powder
- Component A	3 kg
- Component B	3 kg
- Component C	14 kg
- Component D	0.2-0.3 kg (depending on color)
Material consumption	About 1.9 kg/ m ² / mm thickness
Expiry	6 months
Storage	Store in a dry place at 10-25°C Avoid direct sunlight

Physical parameter

Taber abrasion resistance	0.1 gms/ 1000 gms load 1000 rpm
Impact resistance (BRE substrate tester)	< 0.5 mm
Compressive strength	50 N/mm ²
Bending strength	7 N/mm ²
Adhesion strength	21 N/mm ²
Life time at 25°C	10 -15 minutes
Surface drying time at 25°C	About 30 minutes
Complete drying time	About 8-12 hours

Paint layer thickness suitable for environmental temperature:

- **4mm thickness:** Withstands maximum temperatures up to 70°C and negative temperatures down to -15°C
- **6mm thickness:** Withstands maximum temperatures up to 80°C and negative temperatures down to -25°C.

Chemical resistance

Acothane MF is resistant to many chemicals. A few common chemicals are listed below:

- Hydrochloric acid, nitric, dilute and concentrated phosphoric; sulfur
- Dilute and concentrated alkalis, including 50% NaOH
- Most dilute and concentrated organic acids
- Fats, oils and sugars
- Mineral oil; kerosene, gasoline and brake fluid; organic solvents.

USING INSTRUCTION

Surface preparation

- The concrete foundation must be strong, reaching a compressive strength of 25 MPa and a minimum tensile strength of 1.5 N/mm²
- Clean the surface, remove weak concrete, dirt, grease and moss or any impurities that reduce the bond between the PU paint layer and the concrete floor.
- The most important thing is to make sure the floor surface is completely dry, the floor surface moisture does not exceed 5%
- New concrete surface: must be allowed to dry for at least 28 days
- Old concrete surface: repair holes and cracks on the concrete surface with specialized mortar
- Grinding - roughening the concrete surface to increase adhesion between concrete and paint layer. Cut grooves 3mm wide and at least 5mm deep right inside the construction area, on both sides of joints, columns and protrusions where **Acothane MF** will be applied..

Mixing

- Mix 4 ingredients A+B+C+D (depending on color) in the correct ratio. Do not split or change proportions..
- Mix part D with part A until homogeneous (about 1 minute) using a spiral mixer at 350-600 rpm. If the ambient temperature is below 20°C, you can add a catalyst (use amount according to the manufacturer's instructions) to part A before adding part D and mix (1 minute) until homogeneous. Add part B to the mixture and mix (1.5-2 minutes) until homogeneous. Gradually add part C to the mixture (with the mixer running). Move the paddle from side to side, top to bottom, and scrape the sides of the mixer to ensure thorough mixing, until homogeneous (2-3 minutes). Transfer the mixture to another clean mixing bowl and mix for 1 minute.

Construction

- **Construction temperature:** 10-30°C (minimum 3°C above dew point). The temperature must not drop below 5°C within the first 24 hours after application.
- Apply **Acothane MF** rough primer 1mm thick and then **Acothane MF** top coat once the rough primer has dried.
- Apply **Acothane MF** within the product's life time (10-15 minutes) and follow the manufacturer's application instructions..
- Pour the wet **Acothane MF** mixture onto the surface-treated floor. Spread evenly over the floor area to a thickness of 4 - 6 mm using a pin rake or notched trowel. The wet mixture must be poured continuously and not for more than 7 minutes. Roll the wet paint with a spiked roller to remove air.
- Subsequent coats should be applied within 12 hours after applying **Acothane MF**. If it takes longer than 12 hours, the surface needs to be lightly sanded before coating.

Cleaning and maintenance

- Clean floors regularly with wet towels and mops; You can mix caustic soda (NaOH) with water to clean the floor; do not use any strong acidic chemicals or solvents for cleaning because they may cause paint discoloration or peeling.
- Use thinner to clean construction tools and remove dirt. Follow the safety warnings on the solvent container.

Construction safety

- The ingredients used for the product are manufactured to minimize factors affecting health during use.
- Some ingredients in this product can be harmful when in contact with skin and eyes, causing severe skin itching and eye irritation. Avoid skin and eye contact with the product.
- The product application area must be ventilated and ventilated to avoid the formation of flammable and explosive solvent vapor concentrations in the air.
- Avoid breathing solvent vapors and spray dust. Suitable protective clothing, including eye protection and gloves of suitable materials, must be worn during mixing and application.
- Close the lid of the container, do not mix paint with hardener when not in use.
- Absolutely no fire sources at the mixing and construction sites.
- The product must not be used for purposes other than those mentioned in the technical data sheet unless the manufacturer's opinions and instructions are obtained.

For any information related to the product, please contact your sales representative or technical department of adchem.