

Floor Systems / Polyurethane Floor Coatings

POLAN[®] AFM

Polyurethane Aliphatic Top Coat Paint – Semi Matte Finish (UV Resistant)

DESCRIPTION

Polyurethane/aliphatic isocyanate based, double component, solventborne, mechanically resistant, **UV resistant, semi-matte** top coating with high color stability and resistance to scratching.

APPLICATION AREAS

- Indoor and outdoor
- Horizontal and vertical applications
- Concrete, steel and wooden surfaces
- Epoxy and polyurethane coverings
- Floor coatings of sports fields
- Outer surfaces of vehicles such as tanks, tankers and concrete mixers
- Applications where glossiness is not required
- As last coating in places open to atmospheric conditions where high UV resistance, color permanency and semi-matte finish looking is required.

TECHNICAL PROPERTIES

Components	A: Polyurethane resin, B: Hardener
Color	Standard semi-matte RAL colors (Except metallic and phosphorous colors)
Mixture Ratio	A: 20 kg, B: 4 kg
Mixture Density	1.35 ± 0.05 kg/L (23°C TS EN ISO 2811-1) (Changes depending on the color)
Viscosity	100 - 1100 mPas (23°C)
Bond Strength by Pull-off	> 2 N/mm ² (EN 1504-2) 7 days
Abrasion Resistance (Taber)	75 mg, 1000 cycle (EN 1504-2)
Impact Resistance	Class III (EN 1504-2)
Capillary Absorption and Water Permeability	w < 0.1 kg/(m ² . h ^{0.5}) (EN 1062-3)
Solid Content (Mixture)	By weight 78% ± 2, by volume 67% ± 2 (Changes depending on the color)
Flash Point	> 21°C
Pot Life	4 - 6 hours (23°C, 200 g)
Application Temperature	Between +10°C and +30°C
Dirt Pick-up Time	20 minutes (23°C)
Dry to Touch Time	60 minutes (23°C)
Time to Use	8 hours (23°C)
Top Coat Time	No later than 24 hours following primer application (23°C TS 4317)
Complete Curing Time	7 days (23°C TS 4317)

ADVANTAGES

- Semi-matte.
- Keeps the color stable, resistant to UV, does not turn to yellow.
- Resistant to atmospheric conditions.
- Flexible, covers cracks on the surface.
- Resistant to scratches, resistant to aging.
- Resistant to salt water, salt solutions, bases, diluted weak acids, gasoline and mineral oils.
- Forms a seamless and jointless surface, does not require maintenance.
- Easy to apply with a airless spray gun or roller.
- Easy to clean thanks to its smooth surface.

CONSUMPTION

90 - 150 g/m² for maximum 80 µ thickness in single layer (Varies depending on the absorption and roughness of the surface, and the application method. Recommended to apply at least 2 layers)

PACKAGING

Sets of 24 kg (A+B) tin cans

APPLICATION

PREPARATION OF THE SURFACE

- The surface must be free of weakly adhered parts, clear of materials that prevent bonding, such as dust, oil, tar, paint, silicone, curing materials, detergents and mold oils and be rough to improve adhesion. The surface must be dry and porous to increase adherence. The humidity of the floor concrete should be maximum 4% and the floor temperature should be at least 3°C above the condensation point.
- If there is no suitable system coating on the surface, prime the surface with **POLAN A** or one of the **REPOX** surface primers.

MIXTURE

- POLAN AFM is packaged as two components in appropriate quantities. First mix each component in itself. Add 4 kg of component B (hardener) to 16 kg of component A (resin). Mix for 3-4 minutes until a homogeneous consistency is obtained with a drill with a 300 - 400 rpm mixer tip. Take the whole mixture into a clean container and mix again. If a part of the product is to be used, pay attention to the mixing rates.
- You can dilute by 5 – 15% with acrylic thinner if needed.

APPLICATION

- Apply POLAN AFM on epoxy or polyurethane coating with a roller or airless gun to provide UV resistance.
- Apply two coats. Wait 2 – 3 hours between layers.
- In multi-coat applications, apply the second coat before the coat acceptance period. Otherwise, there is no chemical adhesion between the layers and there is a risk of peeling of the top layer. If the coat acceptance time has passed, the bottom layer should be roughened by mechanical methods.

CAUTION

- Avoid application at temperatures below +10°C and above +30°C.
- Use a suitable drill in mixing POLAN AFM, never mix by hand or with a trowel.
- Do not add water, solvent, etc. to the mixture. You can dilute by 5 – 15% with acrylic thinner if needed.
- Bring the materials to the application area at least 24 hours before in order for them to adapt to the ambient conditions.
- Working and curing times of polyurethane based products depend on the ambient and floor temperature. As the viscosity increases at low temperatures, the amount of consumption also increases. The chemical reaction slows down, thus extending the pot life and working time. At high temperatures, the opposite is true.
- If heating is required in the application area, use only electrical, warm air blowing systems so that it does not affect the surface appearance.
- Protect from water, rain, dew, frost and snow until it is completely dry.
- Do not walk on for at least 8 hours after the application. Avoid water contact and condensation 48 hours.
- After the application is finished, clean the equipment only with acrylic or cellulosic thinner. Hardened grout can only be removed mechanically.
- The opened package should be consumed within a maximum of 24 hours under appropriate storage conditions.

SHELF LIFE

Expires in 6 months. Store unopened packages in a cool, dry environment, protect from sun, between +15°C and +25°C. Protect against freezing.

HEALTH AND SAFETY

As with all chemical products, avoid contact with food, skin, eyes and mouth during use and storage. In case of contact, wash immediately with plenty of water and soap, and if swallowed, consult a doctor immediately. During application, wear work clothes, protective gloves, goggles and masks in accordance with occupational health and safety rules. Do not bring food and beverage into the application areas. Do not approach the storage and application areas with fire. Ventilate the area. Store out of reach of children.

* The application instructions and technical values given for the products have been obtained in our tests in accordance with international standards and our experience, at 23 ± 2°C temperature and 50 ± 5% relative humidity. These values may vary depending on ambient conditions. High temperatures shorten the durations, low temperatures extend them. Before starting the application, whether the product is suitable for the application and purpose should be tested by the user. FIXA Construction Chemicals is not responsible for application errors that may occur if the product is used outside of its intended purpose or if the application conditions and recommendations mentioned above are not followed. This Technical Data Sheet is valid until the next revision is published. FIXA reserves the right to change the values specified in this Technical Data Sheet, provided that a new version is published. It is the user's responsibility to check the currency of the document. For more information, please contact our sales department.