

# INNO-FLOOR FOX PURATHANE<sup>®</sup> EPDM BINDER 111

# Polyurethane Based One Component, Solvent Free, Bulk Type Epdm Rubber Binder Material

# Description

Manufactured for sports floorings **FOX PURATHANE® EPDM BINDER 111** is polyurethane based, one component, flexible, solvent free binder for bulk type sbr and epdm rubber binder material, designed to adhere seamless floor coating mattresses to the floor. It has a structure resistant to chemical effects, physical stresses and minor ground movements.

# **Fields of Application**

- As a binder for rubber granules in shock absorbing layer in industrial EPDM and rubber coatings,
- Interiors and exteriors,
- Sports fields,
- Park, garden and playgrounds,
- Decorative coatings.

# **Advantages**

- Can be used in interiors and exteriors.
- Solvent free.
- High splice strength.
- It has a structure resistant to chemical effects, physical stresses and minor ground movements.
- Impact resistant.
- It has high bonding strength with 20% ratio in SBR and EPDM granules.
- It never changes the current colour of the granules.

# **Technical Features**

Colour Density	Transparent 1,06 kg/lt	A Contraction of the second se
Working Time	30 minutes	
Working Temperature	+10°C / +30°C	
Fully Cures	7 days	LAT.

The above values are given for +23°C and 50% relative humidity. High temperatures shorten the time, low temperatures increase the time.

# Surface Quality

Concrete substrates to be applied must have a strong and sufficient compressive strength (at least 25 N/mm<sup>2</sup>), tensile strength at least 1.5 N/mm<sup>2</sup>, humidity should be maximum 4%, ground temperature minimum +8°C. In addition, it should be noted that the dew point of the ground is above +3°C. The substrate should be clean, dry and free from all kinds of dirt, oil, grease, coating and surface curing materials etc.

#### **Application Procedure**

# **Substrate Preparation**

Concrete substrates to be applied should be prepared in such a way as to obtain an open porous surface by removing cement grout by using abrasive equipment (Shot Blasting, milling, diamond polishing etc.). Weak concrete pieces should be removed from the surface, small gaps; holes should be made completely open. The resulting dust should be cleaned with the help of an industrial vacuum cleaner. Sub-surface repairs, filling the gaps and levelling the surface should be done with **FOX MORTAR FC188 T** repair mortar.

# **Application Conditions**

- Substrate moisture content should be below 4%.
- Test method: CM measurement or drying in the oven.
- There should be no rising humidity according to ASTM. (Polyethylene cover test).
- Relative air humidity should be 80% maximum.
- Pat attention to dew and condensation!
- Dew and water vapour condensation on the floor that has not been applied or newly coated will damage the coating. To prevent this, the floor temperature should be above +3°C.







#### Watch Points in Application

Surface Temperature	; Minimum +10°C - Maximum +30°C
Ambient Temperature	; Minimum +10°C - Maximum +30°C
Material Temperature	; Minimum +10°C - Maximum +30°C

#### Mixing

Since the curing reaction in the binder takes place with atmospheric humidity, the temperature and humidity of the environment is important. Curing time may differ according to the humidity and temperature of the air. While high humidity and high temperature reduce curing time; low temperature and low humidity can increase curing time. The amount of moisture in the rubber granule is also important.

Binder is suitable for use between 20 °C-35 °C temperature and 50% - 80% humidity. It can be mixed with SBR or EPDM dry granules at the rate of 18-20% binder and 80-85% rubber granules. The mixture is made by mixing all the rubber granules in a clean and dry mechanical mixer with the binder and mixing them homogeneously. The mixing time in the mixer can vary depending on the amount of granules and binders involved.

Before starting the application, temperature and humidity measurement should be done to determine the suitability of the binder. The mixture should not be applied to the wet surface. The mixture should not be prepared and applied while the weather is rainy.

Mixing Tools: (300 - 400 rpm) electric mixer and epoxy/polyurethane resin mixing tip

# Application

**FOX PURATHANE® EPDM BINDER 111 -** rubber granule mixture is poured into the paver machine and can be applied to the surface in the desired thickness.

#### **Cleaning of the Tools**

After the application, the tools and equipment used should be cleaned with solvent or polyurethane thinner. **FOX PURATHANE® EPDM BINDER 111** can only be removed from the surface by mechanical methods after hardening.

#### **Watch Points**

- Concrete surfaces to be coated with epoxy / polyurethane must be at least 3 weeks old before application, forming a vapour barrier layer on the floors that sit on the ground, and the roof, walls, doors and windows of the building have been made, the ambient and surface temperature must be at least +10°C and +30°C.
- The materials to be used must be brought to the application site 1-2 days prior and must adapt to the ambient conditions.
- In applications to be carried out in cold weather, the ambient and ground temperature should be increased, and the packaging should be prepared at +20 °C 25°C and ready for use in order to increase the processability of the products.
- Rain, dust, wind, animals and pests should be prevented from entering the building while the coating is fresh.
- In resin-based systems, pot life and curing times are affected by ambient temperature, ground temperature and humidity in the air. Curing slows at low temperatures, which increases pot life, over coating time and working time. Curing accelerates at high temperatures, which shortens pot life, over coating time and working time. In order for the entire product to complete its curing, the ambient and ground temperatures should not be lowered below the minimum temperature levels given. After the application is completed, the coating should be protected from direct water contact for at least 24 hours. If water contact occurs, there will be softening and blistering on the coating, which will cause the coating to lose its properties. Therefore, the coating should be completely removed and rebuilt.
- Consumptions are given for ideal conditions where ambient and surface temperatures are considered as 20°C. Actual consumption may vary depending on the surface structure and ambient temperature. It should be remembered that consumption will increase in bad surfaces and cold weather conditions.
- Mixing must be done with an electric mixer of 300-400 rpm and the specified epoxy / polyurethane resin mixing tip. In case of not mixing with the specified mixing tip, air will be dragged into the product, which will cause air bubbles to form on the coating after application.

# Coverage

18-20% of the amount of EPDM and rubber granules

# Package

20 kg Tin 200 kg Barrel

# Shelf Life

When stored properly at room temperature, away from direct sunlight, between  $+5^{\circ}C$  and  $+30^{\circ}C$ , its shelf life is 6 months from the date of manufacture.







#### Storage

It should be stored in its original package, in a cool and dry place protected from frost. For short term storage, maximum 2 pallets should be placed on top of each other and shipment should be made with the first in, first out system. In long-term storage, pallets should not be placed on top of each other.

### Safety Precautions

It is dangerous to approach the storage and application areas with fire. Storage and application areas should be ventilated. During the application, work clothes, protective gloves, goggles, masks in accordance with the occupational health and safety rules should be used. During storage and application, it should not be contacted with the skin and eyes, should be washed immediately with plenty of water and soap, and if swallowed, seek medical attention immediately. Food and drink materials should not be brought to the application areas. It should be stored out of the reach of children.

For detailed information, please refer to the Material Safety Data Sheet.

#### Disclaimer

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