Technical Data Sheet

ARMOFLOOR PU150

Polyurethane Floor Coating

Description:

ARMOFLOOR PU150 is an elastomeric solvent based polyurethane floor coating, manufactured in dual pack system, colored to choice for mechanical and chemical protection of floors pavements, reinforced concrete and metallic surfaces.

ARMOFLOOR PU150 adheres perfectly to a variety of supports like: concrete, metal, wood, stoneware, etc. and used as a chemical and abrasion resistant coating for pedestrian or traffic flooring.

Uses:

ARMOFLOOR PU150 is used as a floor coating or within a system at:

- Car parks and pedestrian walk areas.
- Hospitals and clinics walls and floors.
- Production faculties and mechanical rooms.
- Decorative flooring for shops and showroom.
- Application on metallic and wood surfaces.
- ARMOFLOOR PU150 can be used for coating concrete floor in alimentary, pharmaceutical industries, warehouses, mechanical rooms, showrooms, workshops, etc.

Advantages:

- Elastomeric coating, with excellent impact resistance.
- Excellent mechanical and abrasion resistant.
- Durable and low maintenance cost.
- Excellent resistance to a wide range of chemicals.
- Excellent adhesion to substrate.
- Ease of application, requires no thinner.

Instructions for Use:

ARMOFLOOR PU150 should be applied by specialist contractors who must follow the Product Method Statement. Consult with MATEX Technical Department for a list of approved applicators.

Surface Preparation:

All surfaces should be sound, clean, dry and free from loose material, efflorescence, laitance, curing compounds, dirt oil and grease. Ensure that concrete floors are fully cured and have moisture content less than 4%. Prepare surface utilizing mechanical preparation method: grinding, captive blasting, sand blasting in order to provide suitable profiled open texture surface. If the substrate is restricted to access, utilize preparation by handy mechanical tools.

All repairs to cracks, levelling of floor, filling voids should be completed by LAVAPOXY or LAVAPOXY FINISH-epoxy based repair products. Once the repair is completed, allow the product to cure then remove the dust from the surface. Consult MATEX Technical Department for further advice.

Apply a rich coat of primer ARMOPRIME EP100 or ARMOFLOOR PU to the substrate prior to application of ARMOFLOOR PU150. The primer can be applied in a spread rate of 8 to 10 m^2/Lt. depending on substrate porosity. If slip resistance finish is required, spray on to the wet primer 1.0-1.5 Kg/m^2 of Quartz.

For applications on metal surfaces, the surface should be mechanically cleaned by sand blasting or by wire brush to remove the rust and corrosion residues. Apply the primer immediately after cleaning to prevent oxidization process to start again.

Mixing:

Mix the contents of component A (Base) with a low speed mixer for one minute to homogenize the contents of the container. Slowly add the contents of part B (Hardener) to Part A container and mix thoroughly the material with low speed mixer fitted with a suitable paddle for an interval of 3-4 minutes confirming a homogenous, color consistent, lump free mixture.

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Application:

Apply two coats of ARMOFLOOR PU150 with a roller, squeegee or airless spray to the well prepared substrate. Each coat is applied at a rate of 4-5 m^2/ltr achieving a thickness of 150-200 microns per coat. The total dry film thickness of the coating shall be a minimum of 400 microns.

For anti-slip flooring, spread Quartz No.2 in the rate set by design while the coating is wet. Once the surface is dry (8-24 hours), remove excess silica sand and apply the second coat as required. For heavy traffic areas such as drive lanes, ramps, turn areas, or other areas subjected to high abrasive traffic, apply a third coat of ARMOFLOOR PU150. Subsequent coats of ARMOFLOOR PU150 should be applied within a time frame of 24 hours.

Standards:

- ASTM D4541, ASTM D4060, ASTM D412

TECHNICAL PROPERTIES	
Color	Standard Matex Color Chart
Density	1.32 ± 0.03 kg/lit
Pot-life time at 25°C	40 minutes
Application Temperature	+5°C to +40°C
Adhesion (ASTM D4541)	Bonding strength to concrete surface is greater than cohesive strength of concrete substrate.
Tensile Strength (ASTM D412)	11.0 N/mm²
% Elongation (ASTM D412)	>20%
Abrasion Resistance (ASTM D4060)	40 mg/ 1000 cycle
Completely Hardened	7 days
Temperature Resistance	5°C to +80°C

*Values indicated may vary depending on the environment and conditions of the material. Figures given are tested according to standard laboratory conditions.

CHEMICAL RESISTANCE		
Material	**Concentration**	**Resistance**
Lactic Acid	10%	Excellent
Citric Acid	10%	Excellent
Butanol	-	Excellent
Crude Oil	-	Excellent
Mineral Oil	10%	Excellent
Sea Water/Jet Fuel		Excellent

Coverage:

ARMOFLOOR PU150 achieves approx. coverage of 4-5 square meters per liter @ 200 micron DFT (dry film thickness).
*Coverage rate is an approximate value, and subject to actual site conditions.

Packaging:

ARMOFLOOR PU150 is available in 4 liter and 15 liter set of two parts metal containers.

Storage:

Store in original packing in dry conditions away from direct sunlight in a temperature controlled warehouse. Store at +15°C to 25°C

Shelf Life:

ARMOFLOOR PU150 can be utilized within 12 months of production date if stored in proper conditions in an unopened original packing.

Cleaning:

Tools can be cleaned using ARMOSOLVENT before the mix hardens. Hardened material can only be removed mechanically.

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Remarks:

- Do not apply ARMOFLOOR PU150 when the humidity exceeds 80%.
- Make sure that the substrate temperature is higher than 5°C.
- The curing time of ARMOFLOOR PU150 Is influenced by the weather conditions.
- At high temperatures, chemical reactions are speeding up thus shortening the potlife, open time and the curing times.
- ARMOFLOOR PU150 should not be applied on surfaces with a risk of rising dampness.
- Incorrect assessment treatment of cracks may lead to reduced service life and reflective cracking.

Health and Safety:

Avoid contact with eyes and skin. Wear suitable protective clothing such as coveralls, goggles, dust mask and gloves. Use barrier cream. Ensure that there is adequate ventilation. Do not breathe vapor or spray mist. The product is flammable, keep away from sources of ignition. DO NOT SMOKE. Take precautionary measures against static discharge.

FIRST AID:

Eyes:	In the event of accidental splashes, flush with warm water and seek medical advice.
Skin:	Wash skin thoroughly with soap and water
Inhalation:	Remove to fresh air, keep patient rested
Ingestion:	Do not induce vomiting. Seek immediate medical attention.

For further safety information, please refer to ARMOFLOOR PU150 Material Safety Data Sheet.

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