

MARIPUR® 7100

Polyurethane Floor Coating

Product description

The MARIPUR® 7100 is a colored, one component, highly durable, heavy duty aromatic polyurethane floor coating.

The MARIPUR® 7100 is specially designed for use as a thin-layer floor coating, providing high mechanical strength, high abrasion and chemical resistance.

Cures by reaction with ground and air moisture.

Advantages

- Simple application (roller or airless spray).
- High abrasion resistant.
- Decorative.
- Resistant to constant, heavy abrasion and wear conditions.
- Heat and frost resistant
- When applied does not absorb liquids or dirt.
- Stops the creation of dust.
- Gives a glossy and easy-to-clean surface.
- Chemical resistant.
- Maintains its mechanical properties over a temperature span of -20°C to +90°C.

Uses

The MARIPUR® 7100 is mainly used on concrete floors, on interior surfaces.

Due to its long lasting unchangeable properties is widely used for:

- Car repair garages,
- Car parking areas,
- Warehouses,
- Storage rooms,
- Factories,
- Animal breeding farms,
- Cold storage rooms (Freezers), etc.

Consumption

300-400 gr/m² in two layers. This coverage is based on practical application by roller onto a smooth surface in optimum conditions. Factors like surface porosity, temperature, humidity, application method and finish required can alter consumption.

Colors***

The MARIPUR® 7100 is supplied in light grey, dark grey and beige. Other RAL colors supplied on request.

Technical data*

PROPERTY	RESULTS	TEST METHOD
Composition	Pigmented Polyurethane pre-polymer. Solvent based	
Elongation at Break	>50 %	DIN 53504
Tensile Strength	>3 N/mm ²	DIN 53504
Adhesion to Concrete	>2 N/mm ²	ASTM D 903
Hardness (SHORE D Scale)	20	ASTM D 2240
Resistance to Water Pressure	No Leak (1m water column, 24h)	DIN EN 1928
Application Temperature	5°C to 35°C	Conditions: 20°C, 50% RH
Tack Free Time	2-3 hours	
Light Trafficking	12-24 hours	
Final Curing time	7 days	

Chemical properties**

Potassium hydroxide 5%	+	Sodium hydroxide 5%	+
Ammonia 5%	+	Hydrochloric acid 5%	+
Citric acid 5%	+	Sea water	+
Domestic detergents (diluted)	+	Dichlormethane	-
Diesel fuel	+	N-methyl pyrrolidone (brake fluid)	-

{+ Stable, - Not stable, ± Stable for a short period.

Application

Surface Preparation

Careful surface preparation is essential for optimum finish and durability.

The surface needs to be grinded with a stone- or a diamond-grinding machine. The surface needs to be clean, dry and sound, free of any contamination, which may harmfully affect the adhesion of the coating. Maximum moisture content should not exceed 5%. Substrate compressive strength should be at least 25MPa, cohesive bond strength at least 1.5MPa. New concrete structures need to dry for at least 28 days. Old coatings, dirt, fats, oils, organic substances and dust need to be removed by a grinding machine. Possible surface irregularities need to be smoothed. Any loose surface pieces and grinding dust need to be thoroughly removed.

WARNING: Do not wash surface with water!

WARNING: Do not use a metal-ball blasting machine to grind the surface, because the heavy metal-ball impacts destroy the cohesion of the concrete surface and lower its stability.

Repair of cracks:

Clean cracks and hairline cracks, of dust, residue or other contamination. Fill all cracks with suitable putty. The next day smoothen the putty surface with a sandpaper or a mechanical grinder.

Absorbent surfaces

Prime absorbent surfaces, like concrete, cement screed and wood with the MARIPUR® 7000 primer, for the first layer by using a roller, brush or a spray gun.

After 2-3 hours (not later than 4 hours) and while the primer is still a bit tacky, apply the first layer, of the coloured MARIPUR® 7100 coating. Stir well before using.

Once again allow 3-4 hours for the coating to cure (not more than 4 hours) and apply the second layer of the coloured MARIPUR® 7100.

Non-absorbent surfaces

Prime non-absorbent surfaces like metal, terrazzo, mosaic, specific types of power-floated concrete and ceramic tiles with the MARIPOX® 2510 Primer, for the first layer by using a roller, or a brush.

After 12 hours (not later than 18 hours) apply the first layer, of the coloured MARIPUR® 7100 coating. Stir well before using.

Once again allow 3-4 hours for the coating to cure (not more than 4 hours) and apply the second layer of the coloured MARIPUR® 7100.

For best results, the temperature during application and cure should be between 5°C and 35°C. Low temperatures retard cure while high temperature speed up curing. High humidity may affect the final finish.

WARNING: The MARIPUR® 7100 and/or the MARIPUR® SYSTEM is slippery when wet. In order to avoid slipperiness during wet days, sprinkle suitable aggregates onto the still wet coating to create an anti-slip surface.

Anti-slip Finish

In order to achieve an anti-slip effect we need to evenly sprinkle corundum (or silica sand) on the first layer of MARIPUR® 7100 while still wet. When the layer is dry, we brush off any excess aggregate and continue with the application of the second layer of the MARIPUR® 7100. If necessary apply a third layer of MARIPUR 7100, always following the inter-coat time intervals (2-4h).

Packaging

MARIPUR® 7100 is supplied in 20 kg, 10 kg, 5 kg and 1kg pails. Pails should be stored in dry and cool rooms for up to 9 months. Protect the material against moisture and direct sunlight. Storage temperature: 5^o-30^oC. Products should remain in their original, unopened containers, bearing the manufacturers name, product designation, batch number and application precaution labels.

Safety measures

MARIPUR® 7100 contains isocyanates. See information supplied by the manufacturer. Flammable. Make sure personal protection (gloves, mask, goggles) are used and ventilation is adequate. Please study the Safety Data sheet. **PROFESSIONAL USE ONLY.**

Our technical advice for use, whether verbal, written or in tests, is given in good faith and reflect the current level of knowledge and experience with our products. When using our products, a detailed object-related and qualified inspection is required in each individual case in order to determine whether the product and /or application technology in question meets the specific requirements and purposes. We are liable only for our products being free from faults; correct application of our products therefore falls entirely within your scope of liability and responsibility. We will, of course, provide products of consistent quality within the scope of our General Conditions of Sale and Delivery. Users are responsible for complying with local legislation and for obtaining any required approvals or authorizations. Values in this technical data sheet are given as examples and may not be regarded as specifications. For product specifications contact our R+D department. The new edition of the technical data sheet supersedes the previous technical information and renders it invalid. It is therefore necessary that you always have to hand the current code of practice.

* All values represent typical values and are not part of the product specification. ** Chemical resistance tests time : 24hours. *** Due to the sensitivity of aromatic polyurethane to UV rays, colors tend to yellow / fade upon exposure to UV radiation. Nevertheless mechanical properties remain unchanged.