

MARICOAT® 2000

Polyurethane self-leveling Floor Coating

Product description

The MARICOAT® 2000 is a self-leveling, two component, hard-elastic, self-leveling polyurethane coating with high impact and abrasion strength and very good resistance to acidic and basic solutions, used for self-leveling floor coating constructions.
Cures by reaction (cross linking) of the two components.

Advantages

- Solvent free.
- Hard-elastic.
- Provides high tensile and impact strength.
- Provides enough elasticity to withstand constant abrasion due to working conditions.
- Provides strong resistance to chemicals
- Self-leveling, so it provides perfectly even flooring results.
- Resistant to bacteria and fungus.
- Stops the creation of dust.
- Decorate the surface and improves the working environment.
- Gives a glossy and easy-to-clean surface.

Uses

The MARICOAT® 2000 is mainly used in medium duty floor coating as an hard-elastic self leveling coating.
Due to its properties is widely used for:

- Offices
- Show rooms
- Interior Sports floors
- Warehouses
- Cold Storage rooms, etc.

MARICOAT® 2000 is also suitable for coating of metal surfaces in marine like: ship decks, engine rooms, etc.
It is a specialized product used for filling shallow holes on floors, which will be coated by a thin-layer polyurethane floor coating.

Consumption

Self-leveling coating: 2 – 4 kg/m², depending on the coating thickness required.

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 MARICOAT® 2000 is supplied in grey.

Technical data*

PROPERTY	RESULTS	TEST METHOD
Composition	Pigmented Polyurethane resin + Hardener. Solvent free.	
Mixing Ratio	A : B = 100 : 40 by weight	
Hardness (Shore A Scale)	75 + 5	ASTM D 2240
Adhesion to Concrete	>2 N/mm ²	ASTM D 903
Solids Content	100 %	CALCULATED
Flash point	> 200°C	IN HOUSE LAB
Temperature strength	110°C (Fully cured)	IN HOUSE LAB
Application Temperature	5°C to 35°C	Conditions: 20°C, 50% RH
Pot Life	30 min	
Light Trafficking	24 hours	
Final Curing time	7 days	

Chemical properties**

Water	+	Sodium hydroxide 5%	±
Sea Water	+	Potassium hydroxide 5%	±
Ammonia 5%	±	Sulfuric acid 5%	+
Ethanol 10%	±	Hydrochloric acid 5%	+
Domestic detergents (diluted)	+	Dichlormethane	-
Salt Water (50%)	+	Citric Acid 5%	+
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 smoothened. Any loose surface pieces and grinding dust need to be thoroughly removed.

WARNING: Do not wash surface with water! 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.

Priming

Prime all surfaces with the MARIPOX® 2510 Primer, by using a roller, or a brush. Sprinkle oven dry silica sand (corn size 0,3-0,5mm) evenly onto the wet primer. After 12 hours (not later than 18 hours), brush off any excessive aggregate and apply the MARICOAT® 2000.

Mixing

Stir Component A well before using. MARICOAT® 2000 Component A and Component B should be mixed by low speed mechanical stirrer, according to the stipulated mixing ratio, for about 3-5 min.

ATTENTION: The mixing of the components has to be effected very thoroughly, especially on the walls and bottom of the pail until the mixture becomes fully homogeneous.

Self-leveling coating

Pour the MARICOAT® 2000 A+B mixture onto the surface and lay it out by trowel as a scratch coat, until all the surface is covered. Backroll with spike roller, until encapsulated air can escape. Ensure that backrolling is done efficiently. Alternatively heat the still wet coating with a industrial heat blower, to help encapsulated air escape. Hold blower at 10-15cm distance from the surface.

The next day apply another layer of the MARICOAT® 2000, by suitable sized teeth trowel and use same procedure to help encapsulated air escape, while the coating is still wet.

The next day apply over the MARICOAT® 2000 surface with one or two layers of colored MARIPUR® 7100/ 7200/ or other.

For best results, the temperature during application and cure should be between 5°C and 30°C. Low temperatures retard cure while high temperature speed up curing. High humidity may affect the final finish.

RECOMMENDATION: The thickness of the entire coating should not be less than 2mm.

ATTENTION: Please ensure to backroll or heat the wet coating very thoroughly, to prevent encapsulated air create bubbles and pinholes on the final surface of the coating.

ATTENTION: Please ensure consumption within the Pot Life.

Packaging

MARICOAT® 2000 is supplied in 6+2.4 kg 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°-30°C. Products should remain in their original, unopened containers, bearing the manufacturers name, product designation, batch number and application precaution labels.

Safety measures

MARICOAT® 2000 contains isocyanates. See information supplied by the manufacturer. 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. *** Colors tend to yellow upon exposure to UV radiation. Nevertheless mechanical properties remain unchanged.