

### TECHNICAL DATA SHEET

Date: 01.06.2011 – Version 10

# **MARIPOX® 2540**

## Epoxy self-leveling Floor Coating, Transparent

#### Product description

The MARIPOX<sup>®</sup> 2540 is a premium, transparent, self-leveling, rigid, two component epoxy coating with high impact and abrasion strength and very good resistance to acidic and basic solutions, used for transparent self-leveling floor coating constructions.

Cures by reaction (cross linking) of the two components.

#### Uses

The MARIPOX 2540 is mainly used in floor coating applications, either as a transparent self-leveling coating or as a transparent thin-layer coating.

Due to its properties is widely used for decorative flooring applications in:

- Offices
- Retail Stores
- Show Rooms
- Houses
- Night Clubs
- Restaurants, etc.

#### Advantages

- Solvent free.
- Transparent.
- Provides high tensile and impact strength.
- Abrasion resistant.
- 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.

#### Consumption

<u>Self-leveling coating:</u> For 1mm thick layer, 1,1 kg/m<sup>2</sup> of the MARIPOX- 2540 is needed. A minimum of 2mm coating thickness is recommended.

Thin-layer coating (paint): 0,5-0,8 kg/m<sup>2</sup> of the MARIPOX 2540 is needed.

This coverage is based on practical application by trowel onto a smooth surface in optimum conditions. Factors like surface porosity, temperature, humidity, application method and finish required can alter consumption.

#### Colors\*\*\*

The MARIPOX 2540 is supplied transparent

PROPERTY	RESULTS			TEST METHOD	1
Composition	Pigmented Epoxy resin + Hardener. Solvent free.				
Mixing Ratio	A : B = 100 : 60 by weight				
Hardness (Shore D Scale)	40 <u>+</u> 5			ASTM D 2240	
Adhesion to Concrete	>2 N/mm <sup>2</sup>			ASTM D 903	
Solids Content	99 %			CALCULATED	
Flash point	> 200°C			IN HOUSE LAB	
Shock Temperature	Up to 120°C (15min)			INHOUSE LAB	
Application Temperature	12°C to 35°C		Conditions: 20°C, 50% RH		
Pot Life	40 min				
Light Trafficking	24 hours				
Final Curing time	7 days				
Chemical properties**					
Potassium hydroxide 5%		<u>+</u>	Sodium hydroxide 5%		<u>+</u>
Ammonia 5%		<u>+</u>	Sulfuric acid 5%		+
Hydrochloric acid 5%		+	Sea water		+
Domestic detergents (diluted)		+	Dichlormethane		-
Salt (50%)		+	Citric Acid 5%		+
Diesel fuel		+	N-methyl pyrrolidone (brake fluid)		-



# **Maris Polymers**<sup>®</sup>

POLYURETHANE SYSTEMS

#### 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.

#### Primina

Prime all surfaces with the MARIPOX 2510 Primer, by using a roller, or a brush. After 12 hours (not later than 18 hours), brush off any excessive aggregate and apply the MARIPOX 2540.

#### Mixing

Stir Component A well before using. MARIPOX 2540 Component A and Component B should be mixed by low speed mechanical stirrer, according to the stipulated mixing ratio, for about 3-5 min. 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. Empty mixture in an empty pail and mix again for 3min.

#### Application as Self-leveling coating

Poor the MARIPOX 2540 A+B mixture onto the surface and lay it out by 5mm teeth trowel, until all surface is covered. Wear spike shoes and roll the entire wet coating with a spike roller, to help encapsulated air escape.

#### Application as thin-layer coating (paint)

Apply the MARIPOX 2540 A+B mixture (pure resin) by roller in two layers. Each layer needs ~12h to cure. For best results, the temperature during application and cure should be between 12°C and 35°C. Low temperatures retard cure while high temperature speed up curing. High humidity may affect the final finish.

ATTENTION: Please ensure consumption within the Pot Life.

#### WARNING: Do not apply the MARIPOX<sup>®</sup> 2540, at ambient and ground temperatures under 10°C.

#### Anti-slip Finish

In order to achieve an anti-slip effect we need to evenly sprinkle (saturate) corundum (Al<sub>2</sub>O<sub>3</sub>) or Silica Sand on the last layer of our MARIPOX 2540 application while still wet. When the layer is cured, we brush off excess aggregate, and apply one or two thin layers of MARIPOX 2540 by roller, to seal-in the aggregates.

#### Packaging

MARIPOX 2540 A+B is supplied in 8+4.8kg and 4+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

MARIPOX 2540 contains amines and epoxy resin. 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 s 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 specifications. \*\* Chemical resistance tests time : 24hours. \*\*\* Colors tend to yellow upon exposure to UV

radiation. Nevertheless mechanical properties remain unchanged.

TÜVRheinland

SO 9001

**CFR1**