BUILDING TRUST

PRODUCT DATA SHEET

# Pulastic®-Coating 222/W

2 component polyurethane

## DESCRIPTION

2 component pigmented polyurethane finishcoat for pulastic sports flooring systems

## USES

Pulastic®-Coating 222/W may only be used by experienced professionals.

The nature of the product requires (manufacturer) trained specialists to execute the application.

## CHARACTERISTICS / ADVANTAGES

PULASTIC Coating 222/W is a durable, high quality coloured coating that meets the most stringent V.O.C. regulations in Europe and the USA known today. The product is used for the installation of seamless sports flooring systems.

This water based coating offers the optimum friction properties for sports, has a long-term very mat appearance, a high abrasion resistance, a high colour fastness and a high resistance against the usual cleaning agents. Moreover the coating has good bonding properties and is permanently flexible. The balanced viscosity liquid consistency assures a uniform texture all over the area when roller applied.

## PRODUCT INFORMATION

| | | |
|---|---|---|
| **Packaging** | Part A: 8.5 kg Part B: 1.5 kg Part A+B: 10 kg ready to mix units | |
| **Colour** | 16 as per standard colour card | |
| **Shelf Life** | Under ideal storage conditions the shelf-life, in original factory sealed cans, is 24 months for both A and B component. | |
| **Storage Conditions** | Store material in a dry, cool (10-25°C) environment where protection against damage is guaranteed. Avoid prolonged storage at temperatures below 0°C or above 40°C. | |
| **Density** | 1.20kg/litre | |
| **Volatile organic compound (VOC) content** | <45 g/L ASTM D3960 | EPA method 24 |
| **Solid content by weight** | +/- 55% | |

## TECHNICAL INFORMATION

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|---|---|---|
| **Abrasion Resistance** | 0.148 gram loss of weight | taber 1 kg, H18/1000 rev EN-ISO 5470-1 |
| **Chemical Resistance** | Neutral cleaners, common beverages | |
| **Solar Reflectance** | Depending on colour. standard colour range: 0.11-0.30 | |

| | | |
|---|---|---|
| **Skid / Slip Resistance** | 104 | EN-ISO 13036-4 |
| **Gloss level** | 4% | EN-ISO 2813 |

## APPLICATION INFORMATION

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| **Mixing Ratio** | A : B = 85 : 15 (%) = 0.85 : 0.15 (kg) | | | |
| **Consumption** | 130 ± 5 grams/m² | | | |
| **Pot Life** | +/- 40 minutes/10-30°C | | | |
| **Curing Time** | Foot traffic | 36 h/10°C | 24 h/20°C | 18 h/30°C |
| | Light loading | 5 days/10°C | 3 days/20°C | 2 days/30°C |
| | Full loading | 6 days/10°C | 4 days/20°C | 3 days/30°C |

## BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## ECOLOGY HEALTH AND SAFETY

Follow instructions on the Material Safety Data Sheet and on the labels.
Do not reseal B component container if contamination is suspected.

## APPLICATION INSTRUCTIONS

### EQUIPMENT

Low-speed 300-400 RPM electric drill, mixing-blade, brushes, microfiber rollers

Clean all tools with SikaThinner C immediately after use!

### SUBSTRATE QUALITY / PRE-TREATMENT

During installation and curing of the PULASTIC Coating 222/W it is of major importance to determine exactly the degree of humidity of the working area.
Too humid conditions during installation and curing may result in colour deviation, inconsistent appearance of the floor (“cloudy effect”), reduced strength of the coating layer and/or reduced friction of the floor.
The appearances mentioned above can be avoided if the dew point of the room is determined exactly, before starting the coating application. The dew point determines at what temperature, condensation will take place on the floor surface.
Condensation of humidity must be avoided at all times for two reasons:
1) At a too high humidity in the room the water in the coating will have great difficulties evaporating, or will not evaporate at all. The speed of evaporation of water in the coating 222/W is directly related to difference between the dew point and the floor-temperature. The closer the floor-temperature is to the dew point, the slower the coating will dry. Even if the floor temperature is equal to the dew point, the coating will stop drying completely.

2) Curing of a 2-component system, waterborne PU system consists of 2 processes. First the evaporation of the water. Secondly curing of the A-with the B-component. Important to note that the B-component also reacts with water. If evaporation takes too long, too much of the B-component will react with the water of the coating and reaction between A and B component may be insufficient, resulting in the deviations mentioned above such as discoloration, cloudy effects in the floor and/or lower coating abrasion resistance.
Basically the following working conditions must be respected* :
Temperature of material and working area: 10°C - 30°C.
Temperature of sub floor: minimal 4°C above the Dew-point.
Air humidity: max 75%.
If ventilation possibilities are only very limited, the conditions are even more critical and must be respected as follows*:
Temperature of material and working area: 10°C - 30°C.
Temperature of sub floor: minimal 5°C above the Dew-point.
Air humidity: max 70%.
**Example: at 20°C Air temperature and 70% relative air humidity, the dew point of the floor is at +14.4°C. If the floor temperature reading is lower than 18.4°C (14.4°C + 4°C security factor) then coating application should NOT take place.**

## MIXING

Open the cans shortly before use, assure correct content and check that the A component is free of lumps and the B component is a clear liquid without a skin. Premix the A Component and add the complete contents of the B Component. Mix A and B thoroughly to a homogeneous mixture. Visually check homogeneity on the mixing blade. Under certain exceptional circumstances minor diluting with water is allowed.

**Pulastic Coating 222/W & Adding water for dilution purposes**

Because of difference in oil-absorption of the different pigments used in the PULASTIC Coating 222/W (during production), it may show a difference in viscosity between the different colours.
It may contribute to the final result to add a minor quantity of water to the coating and make the application a little easier. Please take good notice of the relative humidity percentages in combination with air temperature before adding the water.
Recommended quantity of water for dilution of PULASTIC Coating 222/W under common conditions
7.5% per 10 kg can
Which is equal to
750 ml per 10 kg can:
* Point of departure: Floor temperature = Air temperature.
Determine dew point and measure floor temperature
** Below 30% relative humidity the reaction between A- and B-components will start fairly quickly and may result in a structure difference between lane overlaps
*** Coating 222/W to be used only with sufficient ventilation of the working area.
Please note:
All PULASTIC Coating 222/W Standard colours can be used in a normal undiluted form.
It is at the judgement of the installer, in relation to the roller used, conditional circumstances, colour used and personal preference , how much water should be added (but never more than mentioned above!)
Please be aware that water-diluted coating 222/W will be more easy to apply, thus bringing also the risk of applying too little coating on the floor. In order to ensure a good end result, do calculate the appropriate quantity in undiluted form.
Pour the mixture in a second drum and mix for a further few seconds to avoid the use of unmixed material (from the sides and bottom of the first drum).

## APPLICATION

To gain the maximum liquidity the full contents of the mixture should be poured out as quickly as possible (within the pot-life) and should be spread out immediately stringently observing of the consumption rate (130 ± 5 g/m2). Assure to apply all material within 45 minutes after mixing. Pot-life is limited by reaction time and not by liquidity; note that the end of the pot-life may not be noticeable. Assume about 1 Kg loss of material to wet each 70 cm roller. Wet the rollers with some material on the floor before starting the application. In case wet rollers have to be stored during the application (when pouring material or working on the sides) the rollers have to be placed on some plastic sheeting and not on the floor! Not even for a short time! Storage on the floor will leave marks in the finished floor surface. The sides have to be coated shortly before the floor area with side-rollers (10 cm) to assure wet-to-wet connections and minimise visibility. Never work more than 15 minutes ahead on the sides.
Pre-coat any areas that have been strongly sanded just a few minutes before the main application of the coating to minimise visibility of these spots after drying.
After pouring spread the material with the 70 cm roller in the direction of the pour and back.
Apply the coating transversal with to the pour direction starting with the same roller, followed by another two times with the same 70 cm roller. The width of the lane with the first roller should be approximately 1.35 m, the second 1.45 m and the third 1.5 m.
Assure complete absence of shining (glittering) spots and consistent structure. Roll at a limited speed.
When the sides of the rollers get too wet these have to be dried by rolling on the side of the rollers, this avoids rolling marks. Roll again over those lanes afterwards as normal.
Start the second lane, follow the same procedure.
When rolling through the first time the material should not overlap with the previous lane. The second roll should overlap the previous lane with a few centimetres and the third roll should overlap with 10 to 15 cm. Make overlaps with the second and third roller with the previous lane within 15 minutes after application of that lane. If, due the length of the lanes, overlaps cannot be made within 15 minutes, multiple men should apply the material simultaneously, each taking care of their own lane. One man can typically handle a section with a maximum width of approximately 8 meters. Decide on the appropriate number of men working simultaneously depending on floor size and climate conditions (curing speed). Since the wet product tacks less to the substrate compared to solvent based coatings, it is necessary that some pressure is applied on the roller on the first and second roll through. The third time the roller should not be too dry.
Although the coating is a water based product, it still should not enter the environment. Dry waste can be

disposed of as normal waste.

## LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

## LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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