

PU Gym Refresh

Two-component transparent or coloured water-based aliphatic polyurethane topcoating for sports flooring



DESCRIPTION

PU Gym Refresh is a water-based aliphatic polyurethane topcoating, specifically formulated in MAPEI Research & Development laboratories, for durable coating and protection of sports and leisure flooring.

WHERE TO USE

- Protecting and colouring resilient flooring such as PVC, rubber or linoleum indoor sports flooring.
- Redevelopment and refurbishment of indoor sports flooring such as in school or private gyms, fitness centres etc.

TECHNICAL CHARACTERISTICS

PU Gym Refresh is a two-component water-based aliphatic polyurethane topcoating. Thanks to the product's high hide capacity and uniform colour, **PU Gym Refresh** may be used to refurbish the surface of existing sports floors.

PU Gym Refresh is highly resistant to abrasion and chips and improves mechanical properties, thereby maintaining both the integrity of joints in prefabricated floors subjected to frequent cleaning and the durability of the surface of floors. The special water-based formulation of **PU Gym Refresh** makes the product odourless, which means it is suitable for use in closed environments and makes the work of floor layers easier during application. Thanks to its

special chemical composition, **PU Gym Refresh** is particularly resistant to UV rays.

PU Gym Refresh is specifically formulated to increase protection against bacteria, which means it is suitable for use on surfaces in settings where a high level of hygiene and extended resistance to cleaning operations are required, such as schools, the healthcare sector, etc.

PU Gym Refresh is available in a transparent version and in a wide range of different colours, which may also be mixed and combined using the **ColorMap** automatic colouring system to obtain customized colours.

RECOMMENDATIONS

- Use **PU Gym Refresh** only at temperatures between +10°C and +35°C.
- Do not apply **PU Gym Refresh** under direct sunlight or in windy weather, otherwise it may dry too quickly.
- Do not use partial quantities of the components to avoid mixing errors; the product may not harden correctly.
- Do not expose the mixed product to direct sources of heat.
- If the topcoating is applied in several coats, do not exceed the maximum recoat time of 2 to 48 hours. After more than 48 hours, the surface will need

- to be adequately prepared with **Ultracoat Pad** (red or green).
- Use suitable specific cleaning equipment and detergents to clean the surfaces coated with **PU Gym Refresh**, depending on the type of dirt or stain to be removed.
- Do not apply **PU Gym Refresh** on dusty, crumbling or weak surfaces, on substrates with oil or grease stains or with stains in general or on surfaces free from hydrostatic pressure. In such cases, the substrate needs to be treated beforehand by adopting the most appropriate technical solutions and then checked to make sure it is feasible to apply **PU Gym Refresh**.

APPLICATION PROCEDURE

Preparation of the substrate

The surface must be clean and dry and have no traces of oil, wax or any other contaminant. If the surface to be coated has already been treated with another type of finishing product, remove any residues of the topcoating in order to obtain a uniform surface.

To remove any remaining material from previous treatments which could affect adhesion of the new coating, carefully clean the surface with **Ultracoat Pad** (red or green) or with a suitable degreasing and wax-removal product (**Mapefloor Wax Remover**). Clean old external surfaces with a high-pressure water jet and then wait until the surface is completely dry before applying **PU Gym Refresh**.

Preparation and application of the product

Mix component A with component B with a drill at low speed, taking care to avoid entraining air into the product. We recommend preparing only the amount which may be applied within the maximum workability time (2 hours). Leave **PU Gym Refresh** to stand for 5 to 10 mins. after mixing and then apply the product with a short-pile roller (such as **Ultracoat Roller T3** or **T5**) or by airless spray. To ensure coverage of the surface is even and regular, it is recommended to apply the product in two criss-cross coats.

PRECAUTIONS TO BE TAKEN DURING PREPARATION AND APPLICATION

- Do not apply **PU Gym Refresh** if it is about to rain or in windy weather.
- Do not apply on wet surfaces or surfaces still damp after hydro-cleaning: adhesion of the **PU Gym Refresh** coating may be affected.

- Do not apply if the temperature is below +10°C or above +35°C.
- Do not apply if the temperature of the substrate is lower than +10°C or higher than +30°C.
- Do not apply when relative humidity is above 85%.

Cleaning

Tools and residuals of **PU Gym Refresh** may be cleaned with water while the product is still fresh. Once hardened, the product may only be removed mechanically.

CONSUMPTION

The consumption rate for **PU Gym Refresh** is heavily influenced by the absorption and roughness of the substrate and by the application method used. For substrates with an even, regular surface, the typical consumption rate is around 0.08-0.1 kg/m² for the first coat and around 0.07-0.09 kg/m² for the second coat.

PACKAGING

Transparent version:

– 6 kg unit (comp. A+B = 5+1).

Coloured version:

– 7 kg unit (comp. A+B = 6+1).

STORAGE AND DISPOSAL

PU Gym Refresh remains stable for 12 months if stored in a dry place away from sources of heat at a temperature of +5°C to +30°C. Protect from frost. For transport at low temperatures, use vehicles with temperature-controlled units.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Instructions for the safe use of our products can be found on the latest version of the Safety Data Sheet, available from our website www.mapei.com.

PRODUCT FOR PROFESSIONAL USE.

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

TECHNICAL DATA (typical values)

PRODUCT IDENTITY

	TRASPARENT		COLOURED	
	comp. A	comp. B	comp. A	comp. B
Consistency:	liquid	liquid	liquid	liquid
Colour:	transparent	transparent	coloured pigment	transparent
EMICODE:	EC1 - very low emission			

APPLICATION DATA (at +23°C - 50% R.H.)

Mixing ratio by weight:	A : B = 5 : 1	A : B = 6 : 1
Colour of mix:	transparent	coloured
Consistency of mix:	fluid	
Viscosity part A+B (Ford Cup nr. 4):	50 secs.	
Dust dry:	approx. 30 min.	
Set to the touch:	approx. 50 min.	
Re-coating (if required):	min. 2 hours - max. 48 hours (after more than 48 hours, the surface will need to be adequately prepared with a red or green Ultracoat Pad)	
Set to foot traffic:	16 hours	
Ready for use:	24 hours	

FINAL PERFORMANCE

Gloss level (approximate value):	10
Slip-resistance in compliance with DIN 51130 and AS 4586:	R11
Slip-resistance (barefoot) in compliance with DIN 51097 and AS 4586:	A+B
Slip-resistance according to EN 13036-4 (pendulum method):	– dry: 90; – wet: 55 (class P5 according to AS 4586)

RESISTANCE TO BACTERIAL ATTACKS

Bacterial strain	Measurement method	Standard test	Result
Staphylococcus aureus:	ISO 22196	≥ 99.9%	compliant
Escherichia coli:	ISO 22196	≥ 99.5%	compliant
Methicillin resistant Staphylococcus aureus (MRSA):	ISO 22196	≥ 99.9%	compliant
Pseudomonas aeruginosa:	ISO 22196	≥ 99.9%	compliant

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in force at the time of the MAPEI product installation. The most up-to-date TDS can be downloaded from our website www.mapei.com.

ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.



This symbol is used to identify Mapei products which give off a low level of volatile organic compounds (VOC) as certified by GEV (Gemeinschaft Emissionskontrollierte Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.), an international organisation for controlling the level of emissions from products used for floors.

All relevant references for the product are available upon request and from www.mapei.com