

UNIPU 030 2K PU Adhesive for Sports Surfaces

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PRODUCT DESCRIPTION

UNIPU 030 2K is a two-component, thixotropic, solvent-free, polyurethane-based adhesive used to bond materials to the substrate in closed sports surfaces.

APPLICATION AREAS

- Adhering roll rubber pad systems to concrete, asphalt, wood, or metal surfaces
- Bonding linoleum, PVC, and similar coatings to the substrate
- Used as adhesive in the installation of artificial turfs

ADVANTAGES

- Solvent-free.
- It possesses high elasticity, durability, and tear resistance.
- High resistance to moisture and optimum curing time.
- Can be safely applied on sports surfaces in all weather conditions.
- Produced for outdoor use, exhibiting high durability in external conditions.
- Easy to apply.

DURABILITY

Resistant to diluted acids, diluted and concentrated alkalis, cleaning detergents and disinfectants, vegetable, mineral, and animal oils, freshwater and seawater, diesel, gasoline, alcohol, and many other solvents.

TECHNICAL DATAS

| | |
|---|-------------------------|
| PU SEALER 2K A COMPONENT | Polyurethane resin |
| PU SEALER 2K B COMPONENT | Polyurethane hardener |
| COLOUR | Grey |
| Mixture Density (20°C) | 1,76 gr/cm ³ |
| Solid Content (by weight) | %99 |
| Application Surface and Ambient Temperature | +10°C +30°C |
| Pot Life (20°C) | 20-25 min |
| Touch dry (20°C) | 4-5 h |
| Drying Time(20°C) | 24 h |
| Full Cure | 7 days |
| %Elongation | 48 |
| Shore Value after 28 Days | A 82; D 55 |

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APPLICATION PROCEDURE

SURFACE PREPARATION

Before application, if the substrate is concrete, the surface should be primed with UNIPU 045 1K primer. For asphalt surfaces, the recommended primer product is our UNIPU 060 1K. The surface to which UNIPU 030 2K will be applied must be dry and clean. Before application, the moisture content of the surface should be measured and should not exceed 4%. Chemicals like surface hardeners should not be used on concrete surfaces during pouring, and the concrete surface should be left with a rough plaster appearance. The surface to be coated with UNIPU 030 2K must be free from dust, dirt, oil, and any other substances that may hinder adhesion. The application should be done within the recoating time of the coating system. UNIPU 030 2K is applied before the SBR Roller application on the surface. The surface where UNIPU 030 2K will be applied must be dry and clean.

MIXING

UNIPU 030 2K is produced in ready-to-use sets according to mixing ratios. Before application, ensure that the material temperatures are between 15°C and +25°C.

The A component of UNIPU 030 2K is colored. The A component should be mixed thoroughly with an appropriate mixing tip attached to an industrial mixer at 300-400 revolutions per minute for 3-4 minutes without introducing air. Then, the B Hardener component is added and mixing is continued. It is crucial to mix the A and B components thoroughly to ensure a homogeneous mixture by scraping the sides and bottom of the container. Otherwise, unmixed A or B components may form a soft, sticky film on the surface after application, leading to a faulty application. An important point to note here is that the mixing tip should touch the bottom of the container, minimizing air entry into the mixture for a healthier, issue-free surface. The mixture should then be transferred to a clean container, mixed for another 1-2 minutes, allowed to rest for 1-2 minutes, and then applied.

MIXING

| UNIPU 030 2K | A Component | B Component |
|------------------------|-------------|-------------|
| Mixing Ratio by Weight | 90 Units | 10 Units |

APPLICATION METHODS

A homogenously mixed product is spread on the surface using a notched trowel. Consumption may vary depending on the structure of the surface and temperature. The application should cover the area of rubber pads or linoleum and then the rolled pad or linoleum should be laid over the area where UNIPU 030 2K has been applied. After all areas have been adhered in this manner, a 20-kilogram roller should be passed over them within 30-60 minutes to ensure that any areas with inadequate adhesion are properly bonded.

During the first 20 hours after application, the surface should be protected from direct water contact to prevent foam or cratering issues resulting from water exposure. If the surface is expected to be exposed to rain under atmospheric conditions, the application should not be carried out.

In low temperatures and humidity, the reaction rate will decrease, prolonging the gelation time of the product, consequently extending the curing time. This should be considered for subsequent coat applications. In high temperatures, the reaction rate will increase, necessitating proper preparations for a faster application.

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CONSUMPTION

UNIPU 030 2K has an average consumption of approximately 0,9-1,0 kg/m² depending on the application thickness and surface conditions. Consumption may vary depending on the system chosen. For further information, you can contact BOYTEM's technical department.

INTERCOAT INTERVAL

Minimum 16 hours, maximum 24 hours. If this time frame is exceeded, the surface should be roughened with sandpaper for good adhesion.

IMPORTANT POINTS TO CONSIDER

- If the ambient and surface temperature is above +30°C or below +10°C during application, suitable temperatures should be awaited. Additionally, in extreme heat, rainy, or windy conditions, the application should not be carried out.
- Application materials should be brought to the application area 1-2 days in advance and their adaptation to environmental conditions should be ensured to the maximum extent.
- In cold weather applications, heaters should be used to increase ambient and surface temperature, and packaging should be conditioned at +20-+25°C to make the material ready for use.
- Two-component or more complex products like epoxy or polyurethane should be applied by professional and experienced application teams.
- Resin-based systems are influenced by working and reaction times, ambient and surface temperature, and relative humidity. Chemical reactions slow down in low temperatures, extending pot life, overcoating time, and working time. Additionally, viscosity increases leading to higher consumption. High temperatures accelerate chemical reactions, thereby shortening the previously mentioned timeframes accordingly. To ensure the material fully cures, ambient and surface temperature should not fall below the allowed minimum temperature.
- A finished coating should be protected from water contact for a minimum of 24 hours. Sudden temperature drops may cause the application surface to become dull and have a stained appearance. Therefore, temperature differences between night and day should be considered.
- Mixing should be with a mechanical mixer equipped with a polyurethane mixing tip, operating at 300-400 revolutions per minute. Manual mixing should be avoided.
- UNIPU 030 2K is produced and packaged in ready-to-use sets. Absolutely no thinning solvent should be added.
- The mixture must be transferred to a clean container to ensure that there are no unmixed A or B components. Otherwise, unmixed A or B components will not cure on the surface.

CLEANING OF TOOLS AND EQUIPMENT

Tools and equipment must be cleaned before they dry out using a special cleaning thinner, UP-002 thinner. Tools and equipment can only be cleaned mechanically (scraping, grinding) after UNIPU 030 2K has fully cured.

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Ref. No: UTD-1646
Issue Date:01.01.2004
Revision Date:12.03.2024
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PACKAGE

A Component 18,2 kg

B Component 1,8 kg

STORAGE

Unopened original sealed packaging should be stored in cool, dry places and protected from freezing.

SHELF LIFE

Under appropriate storage conditions at temperatures of 15-25°C, the shelf life from the production date is 6 months. Opened packages can be used within 2 weeks if thoroughly mixed.

SAFETY PRECAUTIONS

UNIPU 030 2K and does not contain harmful components like formaldehyde, asbestos, or mercury. Additionally, the product contains flame retardant additives. During application, appropriate workwear, protective goggles, masks, gloves should be worn for occupational health and safety. Particularly because the hardener components can be irritating, they should be kept away from eyes and skin contact, with all necessary precautions taken. In case of contact, wash with plenty of soap and water; do not clean with solvents. If swallowed, seek medical attention immediately. The application should be conducted in well-ventilated areas, with the applying company taking all necessary precautions. Contact between food and beverage materials and the product must be avoided in the application area. Employees with chemical allergies should not be allowed to work with the product.

Refer to the Product Safety Data Sheet for detailed information.

NOTE

The technical details provided on this page are based on test evaluations and results according to relevant standards for the product, aiming to guide applicators. Due to factors like craftsmanship, weather conditions, construction, equipment used, and other variables that affect results being beyond our control, UNICA does not provide any express or implied warranty regarding this material. UNICA only guarantees that the material meets product specifications and its sole responsibility towards the buyer or user of this product is limited to the replacement value of the product in case of manufacturing defects. Not under any circumstances is UNICA liable for direct or incidental, special, or consequential injury, loss, or damage arising directly or indirectly from material or work done. UNICA is not held responsible in any way for any defects, alterations, or changes in the underlying structure where its products are applied.