

SOLID PU 100 - UV RESISTANT POLYURETHANE ALIPHATIC VARNISH

PRODUCT DESCRIPTION; SOLID PU 100 - Polyurethane Based, Two Component, Solvent, High Gloss, Self Leveling, UV Resistant, Aliphatic Topcoat Polish

* TECHNICAL FEATURES

Appearance	Glossy
Color	Transparent
Intensity (gr/ml 20°C)	1,02 ± 0,05
Mixing Ratio (By Weight))	A Bucket. 7,00 Unit B Bucket. 3,00 Unit
Solids by Weight (w/w)	% 75 ± 2
Viscosity	Mixture: 100 - 1,100 mPa.s
Wear Resistance	7 day: 125mg (± %3) (CS 10/1000/1000) (ASTM D4060-14)
Application Method	Airless Spray, Air Spray, Brush, Roller
Potency Life (20°C)	40-45min.
Full Cure (days/20°C)	5-7 day
Consumption	Singel Floor 0,100 kg/m ²



PREPARATION OF THE MIXTURE

Before mixing, make sure that the material temperatures are between +15°C and +25°C. Component A is mixed separately with a low speed mixer for a reasonable time until homogenized. Then, component B is added to component A and mixed with a low speed mixer until a homogeneous mixture is obtained (approximately 3 minutes). In order to avoid possible mixing errors, the final mixture is placed in a clean and suitable container and mixed at low speed for the last time and made ready for use.

ENVIRONMENTAL CONDITIONS

Air temperature should be between +10°C and +30°C during application. Relative humidity should not exceed 80% and surface temperature should be between +10°C and +30°C. Floor concrete moisture content should not exceed 4%. The ground temperature should not be less than +8°C and should be at least +3°C above the condensation point.

It should be known that the consumption will increase in windy weather. The surface temperature should be at least -5°C and at most 45°C.

FEATURES

SOLID PU 100, Polyurethane Based, Two Component, Solvent, Glossy Appearance, Self-leveling, UV Resistant, Aliphatic Topcoat Polish Product

APPLICATION AREAS

- Indoors and outdoors,
- Museums, libraries, congress and exhibition palaces,
- Concrete and cement based mineral surfaces,
- Terrazzo, epoxy and polyurethane coated surfaces,
- To obtain a full glossy finish on smooth or sand-blasted surface applications,
- In areas where a high level of hygiene is required, such as hospitals, laboratories and sterile rooms,
- Kindergartens and elderly care homes,
- Indoor and outdoor swimming pools
- **Advantages:**
- Low viscosity.
- It has very high adhesion strength.
- It is an environmentally friendly material as it contains low amount of VOCs.
- It has excellent penetration properties.
- It has a hard elastic structure.
- Easy to apply, clean and maintain.
- It has high UV resistance.
- Provides a shiny appearance on the surface.
- Hygienic and anti-bacterial.
- Resistant to mechanical loads, abrasion and chemicals.



USAGE

The compressive strength of the application surface must be at least 25 N/mm² and the pull off strength of the floor concrete must be at least 2.5 N/mm². The floor concrete must be cured and the moisture content of the concrete must not exceed 4%. The floor temperature must not be less than +8°C and must be at least +3°C above the condensation point. Terrazzo, epoxy and polyurethane coated surfaces must be lightly wiped.

The surface must be dry. It should be cleaned from dust, dirt, paint, oil and similar substances that will reduce adherence. Eyelet gaps must be filled. Oil-soaked surfaces should be cleaned with chemical cleaning materials; then the surface should be cleaned once more with a water jet. Any puddles of water remaining on the surface should be removed with vacuum cleaners.

Mechanical surface abrasion should be applied to the cleaned surface and a fine rough surface should be obtained. The dust layer formed after mechanical cleaning should be swept with the help of industrial vacuum cleaners. After the surface preparation is completed, the concrete or coating adhered surface should be made ready for UV resistant SOLID PU 100 Topcoat application.

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It should be known that the consumption will increase in windy weather. Surface temperature should be minimum -5°C and maximum 45°C.

PACKAGING

It is produced in two-component kits in total 5.00 kg. and 15 kg. sets.

15,00 kg. Mixing ratio

One Bucket **SOLIDPU 100** Component A is 10.50 kg net.

One Bucket **SOLID PU 100** Hardener Component B is 4.50 kg net.

5,00 kg. Mixing ratio

One Bucket **SOLID PU 100** Component A is 3.50 kg net.

One Bucket **SOLID PU 100** Hardener Component B is 1.50 kg

net

SHELF LIFE

Under appropriate storage conditions, the shelf life is 12 months for component A and 9 months for component B from the date of production. Products in opened packages should be stored under appropriate storage conditions and consumed within 1 week at the latest.



HEALTH AND SAFETY INFORMATION

-Read the MSDS form (Material Safety Data Sheet) for necessary safety rules and warnings. The minimum safety rules to be followed are as follows.

- Prevent contact of the paint with skin and eyes by using gloves, protective goggles, face mask and industrial cream.

- Ensure adequate air circulation during application and until the paint dries.

- If the paint comes into contact with skin, wash with warm water and soap or industrial cleaner. If splashed into eyes, rinse with water for at least 10 minutes and seek medical attention.

- Since this type of material contains flammable components, sparks and naked flames should be avoided. Smoking should not be allowed in the area.

- All warning notes on the buckets should be read carefully and recommended working rules should be followed.

APPLICATION DETAILS

Provided that it complies with the ideal surface and weather conditions stated above;

Do not apply in weather conditions below +10°C, above +30°C, in rainy and/or windy weather. If necessary, the ambient and floor temperature should be optimized with the help of heaters. It should not be used on surfaces with moisture output.

After the mixture is completed, apply SOLID PU 100 to the surface with a roller brush. Ensure that a non-porous coat completely covers the surface. To minimize joint marks, make sure that the joints are not yet dry when applied and the surface should be thoroughly combed.

For accurate and precise color matching, ensure that SOLID PU 100 with the same production/serial number is used in each area.

If heating is required, gas, oil, paraffin or similar fossil fuel heaters should not be used. These substances produce high amounts of CO₂ and H₂O water vapor, which can affect the surface appearance. Therefore, only use electric heating systems that blow warm air.

At an average +20°C, the mixture should be consumed in maximum 200 minutes. Waiting time between coats is minimum 10 hours and maximum 48 hours at +20°C. If waiting more than 48 hours, the surface should be roughened with sandpaper. Fully cured and reaches its mechanical and chemical resistance in minimum 7 days.

Curing times of polyurethane resin based products vary depending on climatic conditions. Chemical reaction time and working time also vary accordingly. Therefore, attention should be paid to these details during application. Chemical reaction slows down under low temperature conditions. This situation prolongs the usage time, the time the material can be coated and the working time. After the coating application is completed, the floor should be protected from direct contact with water for at least 24 hours. Otherwise, carbonation and softening will occur in the area in contact with water and this will cause the coating to lose its properties. If such a situation occurs, the entire coating must be removed from the floor and re-applied.

In order to maintain the surface appearance of SOLID PU 100 after application, spilled particles should be removed immediately and the surface should be cleaned regularly using surface cleaning machines, rotary brushes, high pressure washers, vacuum cleaners and suitable cleaning and polishing materials.

Epoxy and polyurethane based floor systems should be applied by specialized applicators.

Our information about the products is based on our own laboratory tests and researches under normal conditions. Our company is not responsible for studies under unsuitable application conditions. The right to change this information is reserved by our company. Please contact R.Y.K. for more detailed information.

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