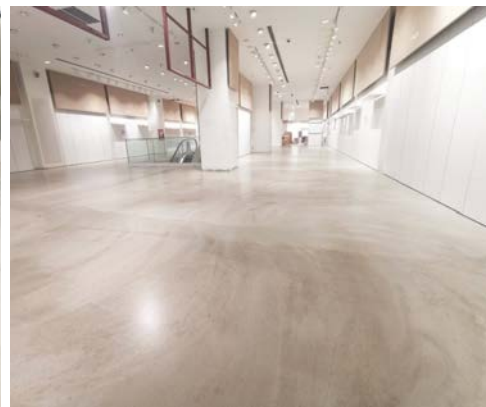


ACS MICRO CONCRETE VARNISH PU-MAX®

Water Based, Polyurethane Based, Two Component,
Protective Transparent Coating Material



■ Description

ACS MICRO CONCRETE VARNISH- PU-MAX® is a water-based, polyurethane resin-based, solvent-free, two-component, low-viscosity, transparent, new generation, high-protective floor covering material used to protect all kinds of natural stone and concrete surfaces.

■ Places of usage

- Indoor and outdoor, horizontal and vertical applications.
- On all kinds of concrete and gross concrete surfaces.
- In dustproofing concrete floors.
- On micro-concrete and self-leveling screeds.
- On helicopter polished concrete surfaces.
- It is used in natural stone, artificial stone, travertine, basalt stone, slate stone, pressed, rustic and blended bricks.
- As a colorless and transparent protective varnish with high abrasion resistance, applied directly to concrete in warehouses, production areas, shops, parking lots.
- In car parks.
- In the pharmaceutical industry.

- In hotels
- In schools and hospitals
- On the exterior decorative stone floors

■ Advantages

- Resistant to UV and weather conditions.
- High abrasion and chemical resistance
- It has low viscosity.
- Easy to apply (by roller or airless spray).
- It has high adhesion property.
- With its high wetting ability, it penetrates the surfaces such as concrete / natural stone and mineral coating very well and increases its strength.
- Its permeability against water vapor is effective. Since it has a breathing structure, it does not create moisture accumulation under the layer.
- It is elastic.
- Provides excellent adherence to non-absorbent surfaces.
- Resistant to freeze-thaw cycles.
- Fast drying and fast labor between coats.
- By penetrating deeply on the surfaces to be applied, it prevents dusting and gives a bright lively appearance.

Technical Characteristics

ACS MICRO CONCRETE VARNISH PU-MAX®	Water Based, Polyurethane Resin
Colour	Whitish, Transparent
Intensity	1.03 ± 0.02 kg/lit
Volume Solid	36% (A+B)
Number of components	two component
Mixture Usage Time (+30°C)	30-50 minutes
Waiting Between Floors	At least: 1-2 hours – at 20°C
Full Curing	2-5 days / at 20°C
Light Traffic Time	12-24 hours – at 20°C
Full mechanical and chemical resistance	2-5 days / at 20°C
Ambient temperature	at +8°C -+ 35°C
Surface Temperature	at +8°C -+ 35°C
Surface Temperature	at +8°C -+ 35°C

NOTE: The above values are given at + 23 °C and 50% relative humidity environment. High temperatures shorten the time, low temperatures prolong the time.

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Application procedure/ Surface Preparation

Surface Information: The application surface must be clean and sound.

Concrete surface: Application will be made; The surface must have a compressive strength of at least 25 N/mm² and a pull-off test result of at least 1.5 N/mm². The age of the new concrete must be at least 28 days according to the season, concrete surfaces must be at least 28 days old.

It should have 5-6% moisture content. All loose, volatile particles must be free from oil and paint residues, cement laitance. Extensive fractures and faults should be repaired beforehand. Cement shell and glossy screed on the concrete surface should be cleaned with tools such as sandblasting, notching machine, diamond drum wiping machine, driven grinder, and the surface should be roughened and wiped. The entire surface should be cleaned of dust with an industrial vacuum cleaner. Concrete surfaces in contact with the soil to be coated must be insulated against water and water vapor barrier beforehand.

Decorative Stone surface: the surface to be applied must be clean and solid. It is recommended to wash the surface with pressurized water before application.

Mineral coatings: the surface to be applied must be clean and sound. Cement-based mineral coatings must have completed their curing. It is recommended to wash surfaces such as marble - ceramic with pressurized water before application.

Mixing

ACS MICRO CONCRETE VARNISH PU-MAX® It is a two-component product; It is supplied in ready-to-use sets according to the mixing ratio. Before mixing, the material temperatures must be between +15 - +25°C.

must be sure. Component A of **ACS MICRO CONCRETE VARNISH PU-MAX®** epoxy/polyurethane resin should be mixed with a 300 - 400 rpm mechanical mixer fitted with a mixing tip for 3 - 4 minutes, without dragging air into it. Then all of the B Component should be poured into the A component and it should be ensured that there is no material left in the B component. After mixing the A and B components until they are homogeneous (at least 2-3 minutes), clean water is added into the mixture as much as the B component (0.80-1 .00 kg) and mixed homogeneously for another 2-3 minutes, and the material is ready for use.

Mixing ratios

ACS MICRO CONCRETE VARNISH PU-MAX®	Component A	Component B
Mixture Quantity	4.00 kg	0,80 kg
Mixture Density	1,03 kg/liter	

Application Method

ACS MICRO CONCRETE VARNISH-PU- MAX® mixture, which is made ready for application, is applied preferably by airless spraying or roller, at appropriate consumption or to obtain the desired dry film thickness. The recommended consumption in practice is 150-250 gr/m² in 2-3 coats. A minimum of 1 hour (20°C) for the application of a new layer on top of the layer. It is very important that the second coat is applied within the above-mentioned new coat application time. **ACS MICRO CONCRETE VARNISH-PU- MAX®** reaches mechanical and chemical resistance in exactly 7 days.

Consumption:

For dust-proofing on concrete, cement screeds, or natural stones: 80-200 gr/m² (depending on absorbency).

As abrasion resistant transparent protective varnish: 160-300 gr/m²

As protective varnish on epoxy/polyurethane coatings: 80-100 gr/m²

Tips to notice

• Relative humidity of the air up to 80%, In practice, ambient and surface temperature

It should be between +5°C and +35°C. In addition, application should not be made in extremely hot, rainy or windy weather.

• -The ground temperature must be 3°C above the current dew drop temperature. (Ask the table of Ambient temperature-Ambient Humidity-Dew Temperature table from our company.)

• Materials to be used in applications at suitable temperatures, 1

- It should be brought to the application area and stored 2 days in advance, and it should be ensured to adapt to the ambient conditions.

• In applications to be made in extremely cold weather, the ambient and ground temperature should be increased with the help of heaters, and the packages should be conditioned at +20 - +25°C to make them ready for use in order to increase the workability of the material. Epoxy and polyurethane based floor systems should be applied by expert applicators.

• Working and reaction times of resin-based systems are affected by ambient and ground temperature and relative humidity in the air. At low temperatures, the chemical reaction slows down, which extends the working time, coating time and working time. At the same time, the consumption increases as the viscosity increases. High temperatures increase the chemical reaction and the times mentioned above are shortened accordingly. After the completion of the coating, the coating will be at the air temperature within 36-48 hours at least.

It should not go below +8°C, and there should be no direct water contact or snow on the newly applied product. If there is water contact, this will create carbonation and softening on the coating, which will cause the coating to lose its properties.

Cleaning of tools

Tools and equipment used after the application can be cleaned with Cellulosic or Polyurethane thinner. **ACS MICRO CONCRETE VARNISH-PU- MAX®** can only be removed from the surface by mechanical methods after it hardens.

Package

ACS MICRO CONCRETE VARNISH PU-MAX® Component A : 4.00 kg pail
Component B : 0.8 kg gallon

Storage conditions

It should be stored in its unopened original package, in a cool and dry environment at a temperature of + 10 to + 25 degrees, protected from frost. In short-term storage, maximum 3 pallets should be placed on top of each other and the shipment should be made with a first-in, first-out system. In long-term storage, pallets should not be placed on top of each other.

Shelf life

It is 9 months from the date of production under suitable storage conditions.

Safety Information

During the application, work clothes, protective gloves, glasses and mask should be used in accordance with the Occupational and Occupational Health Rules. Due to the irritating effects of uncured materials, the components should not come into contact with the skin and eyes. In case of contact, they should be washed with plenty of soap and water. If swallowed, a doctor should be consulted immediately. Food and beverage materials should not be brought into the application areas. Should be stored out of reach of children.

Responsibility

The data which contains in this technical document is based on our scientific and practical knowledge. **ACS A PLUS CONSTRUCTION SOLUTION YAPI ANONİM ŞİRKETİ** is only responsible for the quality of the product. **ACS A PLUS CONSTRUCTION SOLUTION YAPI ANONİM ŞİRKETİ** is not responsible for results that may occur because the product is used other than advised and/or out of instructions regarding the place and the method of use. This technical form is valid only till a new version is implemented and nullifies the old ones. (06/2019)