

ACS POLYSEAL 250®

Polyurethane Based, One Component,
Liquid Waterproofing Membrane



■ Description

ACS POLYSEAL 250® is a one-component, polyurethane based elastic UV-resistant liquid waterproofing membrane.

■ Place of usage

- Waterproofing of roofs, balconies, terraces and concrete curtains.
- Car parks.
- Water tanks.
- Waterproofing of wet areas (under-tile) in bathrooms, swimming pools, kitchens etc.
- Waterproofing of metal surfaces.
- Gypsum and cement boards.
- Indoors and outdoors.
- Waterproofing of water storage and water distribution channel.
- Waterproofing and protection of concrete constructions like

- bridge decks, tunnels etc.
- Stadiums and stands.
- Waterproofing of flowerbeds and planter boxes.

■ Advantages

- UV- resistant.
- Easy to apply (roller or airless spray).
- When applied forms seamless membrane without joints.
- As it is pure polyurethane, it can continually contact with water.
- Maintains its mechanical properties over a temperature span of - 30°C to +90°C.
- Provides water vapor permeability, so the surface can breathe.
- Even if the membrane gets damaged it can be easily repaired locally within minutes. (ACS POLYSEAL 250® creates a 100% adherent insulation with the bottom surface.)
- Resistance to chemicals

TECHNICAL CHARACTERISTICS

ACS POLYSEAL 250®	Polyurethane resin
Color	White, Grey
Density	1,35 ± 0,05 kg/lt (20 °C)
Solid Volume	%82 (A+B)
Elongation at Break- Elongation Percentage (ASTM D 412)	≥ %600
Elongation Percentage (25°C ASTM D 412)	≥ %450
Adherence On Concrete (+23°C-ASTM D 903)	≥ 2 N/mm ²
Tensile Force at Break (ASTM D 412)	≥ 8 N/mm ²
Water Vapor Permeability (ASTM E96)	0,8 gr/m ² hour
Shore A (hardness) (DIN 53505)	70
Service Temperature	-30°C to +90°C
Temperature Resistance	100 days at 80°C & 200°C Dry (Shock)
Implementation Time(+30°C)	50 Minutes
Recoating	6-24 hours - 20°C
Drying Time	1/ 2 days / 20°C
Fully Cured	7 days / 20°C
Ambient Temperature	+10°C to + 35°C
Surface Temperature	+10°C to + 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

ACS POLYSEAL 250® New concrete structures need to dry for at least 28 days, Moisture content should be between 4% and 6%. The surface needs to be clean, dry and sound, free of any contamination, which may harmfully affect the adhesion of the membrane. All loose particles should be cleaned from cement grout and surface should be defatted. Damaged surfaces should be repaired beforehand. Residues, rough and shiny screed should be cleaned with tools such as sand blaster, surfacer and the surface should be roughened and wiped. The entire surface must be cleaned from dust with an industrial vacuum cleaner. Do not wash the surface with water.

PRIMING

Prime absorbent surfaces like concrete, cement screed or wood with **ACS PU PRIMER®** or with **ACS AQUA EPOXY PRIMER®** or with **ACS EPOXY PRIMER MAX®**. Prime non-absorbent surfaces like metal, ceramic tiles and old coatings with **ACS AQUA EPOXY PRIMER®**.

MIXING

ACS POLYSEAL 250® is a single component product. Before mixing, make sure that the material temperatures are between +15 and + 25 °C. **ACS POLYSEAL 250®** A component should be thoroughly mixed for 3 - 4 minutes with a mechanical stirrer of 300 - 400 rpm equipped with an epoxy / polyurethane resin mixer until homogeneous color is obtained. The material is ready for use, doesn't thin.

APPLICATION METHOD

ACS POLYSEAL 250® After mixing in the manner suggested above pour the **ACS POLYSEAL 250®** onto the primed surface and lay it out by roller or brush, until all surface is covered. After 12 hours (not later than 36 hours) apply another layer of the **ACS POLYSEAL 250®**. If desired apply a third layer of the **ACS POLYSEAL 250®**.

CONSUMPTION

1,8 - 2,0 kg/m² consumption should be applied in two or three layers. (In mesh application, you may need extra 600-800 gr consumption.)

TIPS TO NOTICE

- The relative humidity of air is highest % 80, avoid application under excessive heat or wind and/or when the ambient and/or substrate temperature is below +10°C or above +35°C.
- Surface temperature should be above 3°C then the dew point. (Please call our firm for the Ambient temperature-Ambient Moisture-Dew Point table.) The materials to be used at the appropriate temperatures should be brought and stored

in the application area 1-2 days prior to the application and enabled to adjust the ambient conditions.

- In extremely cold conditions, heaters should be used to increase the ambient and the workability of the product, the packages should be preconditioned to +20°C - +25°C to become ready to use.
- Epoxy and polyurethane based floor coatings should be applied by specialists.
- The reaction and workability times of resin based systems depend on the ambient and substrate temperatures as well as the relative humidity under lower temperatures, the chemical reaction times are prolonged and this increases the pot life, coating interval and the working time. In addition to this, the consumption is increased as the viscosity increases. High temperatures ignite stronger chemical reactions and the above mentioned times decrease accordingly. After the application the temperature should not fall below +8 °C for at least 36-48 hours, the newly applied material should be protected from direct contact with water and snow.

CLEANING OF TOOLS

Used tools and equipment must be cleaned carefully with an appropriate solvent.

PACKAGING

ACS POLYSEAL 250® supplied in 5 kg, 20 kg and 25 kg working packs.

STORAGE

The product should be stored in unopened original package at temperatures between +10 - +25 °C in a cool and dry place protected from freezing. For short term storage, maximum 3 pallets should be placed on top of each other and the shipment should be made on a 'first in - first out' basis. Pallets should not be placed on top of each other during long term storage.

SHELF LIFE

The shelf life is 9 months from the date of production under suitable storage conditions.

SAFETY

During the application, work clothes, protective gloves, goggles and masks should be used in accordance with the Occupational Health and Safety Rules. Due to the irritating effects of uncured materials, the components should not be allowed to come into contact with the skin and the eye. In case of contact, immediately wash with plenty of water and soap. If swallowed, seek medical advice immediately. Food and beverages should not be left at the application areas. Keep out of reach of children.

□ Responsibility

The technical information given in this publication is based on the present state of our best 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)