

ACS EPOXY PRIMER-N[®]

Epoxy Resin Based, Two Component,
Solvent Free Primer



■ Description

ACS EPOXY PRIMER-N[®] is an epoxy based, two component, low viscosity primer and penetration material for use on mineral substrates such as concrete and cement.

■ Place of usage

- With the addition of the appropriate amount of silica sand, it can be used as a repair mortar.
- Forms chamfering by mixing with silica sand.
- As a primer material in epoxy and polyurethane flooring systems.

■ Advantages

- Penetrates to capillary holes within concrete structure hence blocks the holes.
- Low viscosity.
- Provides excellent penetration and adherence on cement based surfaces.
- Endurance against heavy loads.
- Solvent free.
- High concrete wetting capacity

TECHNICAL CHARACTERISTICS

ACS EPOXY PRIMER-N [®] Component A	Epoksi resin
ACS EPOXY PRIMER-N [®] Component B	Epoxy hardener
Color	Brownish, translucent
Density	1,38 ± 0,05 kg/lit (A+B / 20 °C)
Solid Volume	%100 (A+B)
Mixing Ratio	12:4 (A:B - aby volume)
Applying Time (+20°C)	50 Minutes
Applying Time (+30°C)	25 Minutes
Recoating	12 Hour -20 °C
Waiting Between Coats Max	3 Days
Drying Time	2 Days / 20 °C
Fully Cured	7 Days / 20 °C
Shore D Hardness (ASTM D-412)	70 (7 Days / 22 °C)
Adhesion Strength (ASTM D4541)	>1,5 N/mm ² (Concrete break)
Ambient Temperature	+8 °C -+ 35 °C
Surface Temperature	+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.

APPLICATION PROCEDURE/PREPARATION OF SUBSTRATE

ACS EPOXY PRIMER-N[®] is a primer for epoxy polyurethane coating systems. The compressive strength of the concrete floors to be applied should be 25 N / mm² and shear test and pull-off tests' results should be minimum 1.5 N / mm². The concrete must be at least 28 days, the moisture percentage of the concrete surface onto which substance will be applied should be 4-6%. 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.

MIXING

ACS EPOXY PRIMER-N[®] is supplied as ready to use kits in the exact ratio. Before mixing, precondition both A and B parts to the temperature of +15 - +25°C. ACS EPOXY PRIMER-N[®] Component A should be thoroughly mixed in the epoxy / polyurethane resin mixer for 3 - 4 minutes at the speed of 300 - 400 rpm with a mechanical stirrer. No air-entrainment should oc-

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cur. Then all of component B must be emptied into component A. make sure that there is no component B left. Components A and B should be mixed until become homogenous (at least 3 min).

MIXING RATIOS

ACS EPOXY PRIMER-N®	Component A	Component B
Mixture Amount	12 kg	4,0 kg
Mixture Density	1,38 kg/liter	

APPLICATION METHOD

As Primer and Bonding Bridge: Apply it by brush, roller or squeegee. Make sure that a continuous, pore free coat covers the substrate. If necessary, apply two priming coats.

As Leveling Mortar: Apply it by trowel or squeegee until required thickness is reached.

As Undercoat: The material is poured over the surface and spread with the help of a toothed trowel and rolled immediately in two directions with spiked roller. If necessary, the surface is broadcast several times with quartz sand about 15 to 20 minutes later until no wetness is seen on the surface.

As Epoxy Mortar: Apply the mortar screed evenly on the still tacky bonding bridge, using leveling battens and screed rails as necessary. After a short waiting time compact and smoothen the mortar with a trowel or Teflon coated power float. Waiting time between layers should be observed.

CONSUMPTION

(The following values are suggestive and may include additional material consumption depending on surface quality, leveling differences and the structure of the surface.)

As impregnation primer: 350-600 gr/m² (Depending on the concrete surface)

As bonding bridge: 250-500 gr/m²

Level Stabilization Mortar: 1.7 / 1.9 kg/m²/mm

Applied by mixing 1 unit of ACS EPOXY PRIMER-N®, (0.5 mm) and 1 unit of quartz sand (0.1 to 0.3 mm).

As undercoat: 1.9 kg/m²/mm Applied by mixing 1 unit of ACS EPOXY PRIMER-N®, (0.5 mm) and 1 unit of quartz sand (0,1 to 0,3 mm, Optionally, the surface, while it is still wet, is broadcast with 0,4 to 0.7 mm of quartz sand by a consumption rate of 4 kg/m² approximately.

Epoxy Mortar: 2.2 kg/m²/mm 1 unit of ACS EPOXY PRIMER-N® is mixed with 8 units of quartz sand which is mixed as mentioned below.

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 +8°C or above +35°C.
- Surface temperature should be 3°C above the then dew point. (Please call our company 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 completion of the coating, the coating should not fall below + 8 ° C at an air temperature of at least 36-48 hours, and no direct water contact, snow on the newly applied product. Within this period, a contact with water may cause a surface carbonation and/or tackiness both of which will make the coating lose its characteristics.

CLEANING OF TOOLS

Used tools and equipment should be cleaned with cellulosic thinner after application. Once cured ACS EPOXY PRIMER-N® can only be removed by mechanical means.

PACKAGING

Component A: 12 kg pail Component B: 4.0 kg gallon

STORAGE

In unopened original package, it should be stored in a cool and dry environment at + 10 °C + 25 °C temperature protected from the freezing. In short-term storing, maximum 3 palletes can be stowed on top of each other and delivery has to be according to first in first out system. In long-term storing, the palletes must not be stowed on top of each other.

SHELF LIFE

The shelf life is 12 months from the date of production under suitable storage conditions.

SAFETY

It is dangerous to approach the application sites with fire. Fresh air should be circulated in the storage and the application sites. During the application, a protective apparel, protective gloves, goggles and masks which comply with the Occupational Health and Safety Precautions Rules should be used. Due to the irritation effect of the uncured materials, the mixture should not come into contact with skin and eyes; in case of a contact, the affected area should be washed with plenty of water and soap; in case of swallowing, a physician should be consulted immediately. No food or beverages should be brought to the application area. The product should be stored and kept 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)