PRIMER W-AS N

Two-component epoxy water-based primer for antistatic conductive and dissipative systems





Primer W-AS N is used to form a conductive layer for MAPEI antistatic conductive and dissipative resin flooring systems (Mapefloor I 360 AS and Mapefloor I 390 EDF) so that any static electricity is discharged to earth.

Primer W-AS N is used in various sectors of the industry in systems used to provide antistatic conductive and dissipative flooring systems in environments used for the production of medical devices, electronics components and equipment, inflammable or explosive products, hospitals, transport systems, especially in the aeronautics and aerospace sectors.

Some application examples

· Electronics industry.

PRIMER W-AS N

KG (A+B) @ MAPE

- · Pharmaceuticals industry.
- · Hospitals and operating theatres.
- · Handling and storage of flammable or explosive goods.
- · Sterile rooms.

TECHNICAL CHARACTERISTICS

Primer W-AS N is a black, two-component, epoxy water-based resin formulate with special electrically conductive fillers according to a formulation developed in the MAPEI R&D laboratories.

Primer W-AS N must only be applied on substrates that have been adequately prepared and primed, and only after connecting the surface of the substrate to be treated to earth with the special strips **Copper Band**.

RECOMMENDATIONS

- **Primer W-AS N** must always be used within the application time indicated on the Technical Data Sheet and calculate the time starting from the moment mixing of the two components commences.
- · Only apply Primer W-AS N if the temperature of the substrate is at least 3°C higher than the dew-point temperature.
- · Do not apply **Primer W-AS N** on uncured or damp substrates having water content higher than 4% or in presence of rising damp.
- \cdot Protect the film of **Primer W-AS N** from moisture for at least 24 hours after application.
- · The consumption of **Primer W-AS N** must never be higher than 100 g/m², otherwise its adhesion to the substrate and electrical conductivity could be compromised.
- · Do not sprinkle the film of Primer W-AS N with quartz sand or any similar aggregate.

APPLICATION PROCEDURE

Substrate preparation

Only apply **Primer W-AS N** on substrates after carrying out the preliminary preparation and priming operations. Surfaces to be treated must be sound, compact and dry with no rising damp (maximum moisture content 4%) and must be perfectly clean with no oil or grease stains, cement laitance or any other substance or material that could affect its adhesion. All dust must be removed from surface with a vacuum cleaner.



Any cracks, holes and uneven areas in the surface must be repaired and levelled off with **Eporip** castable epoxy resin, **Mapefloor EP19** epoxy mortar or **Mapefloor JA** or **Mapefloor JA** fast thixotropic epoxy resin.

Priming the substrate with Primer SN and connecting to earth

Apply the **Primer SN** mixed with **Quartz 0.5** on the substrate with a straight trowel or rake after it has been prepared as specified. Do not broadcast the surface of the primer with quartz sand. Make sure there are no open pores in the surface of the substrate, otherwise air could escape and form small craters or pinholes in the self-levelling finishing coat. If there are holes or open pores in the substrate fill them with **Eporip** or **Primer SN** made thixotropic with **Additix PE**. When the **Primer SN** is hardened, sanding the surface and apply by roller a second coat of neat **Primer SN**. The special, self-adhesive, electrically-conductive **Copper Band** strips must be placed on the surface of the hardened **Primer SN**. The number and position of the strips depends on the size and shape of the surface to be coated and the position of any joints, channels, pillars, etc. and, in any case, they must be positioned every 80 m² of surface minimum (a circular area around 5 metres in radius). Once the resin coating has been applied, the free ends of the strips must be connected to earth by a qualified electrician.

Preparation of the product

Shake the component A and stir the component B, then pour component A into the container of component B and mix them together with a low speed electric mixer, to minimize entrapping air, for 3 minutes until they are thoroughly blended. During mixing, scrape the side and bottom of the pail with a flat trowel at least once to ensure thorough mixing.

Application of the product

Apply a single coat of **Primer W-AS N** over all the surface to be treated and over the copper strips **Copper Band** on the surface by short-pile roller in two directions at right angles to each other. It is extremely important the consumption of product is 80-100g/m² to achieve an even aspect and a uniform electrical conductivity. Once hardened, **Primer W-AS N** forms a homogeneous matt black film.

After 24 hours curing and obtained a uniformly matt black finish, the electrical resistance measurement will need to be conducted. The resistance to earth R_F value must be <3 x $10^3 \Omega$ using 10V.

The number of checks and measurements of the conductivity of the coating must be proportional to the area to be tested as indicated below:

Size of the area	Number of tests	
< 10 m ²	1 test per m²	
10 < m ² < 100	from 10 to 20 tests	
>100 m²	10 tests per 100 m²	

CLEANING

Clean tools used to prepare and apply **Primer W-AS N** with water immediately after use. Once hardened, the product may only be removed using mechanical means.

CONSUMPTION

 $80-100 \text{ g/m}^2$.

PACKAGING

5 kg units. Component A: 1 kg. Component B: 4 kg.

STORAGE

Primer W-AS N may be stored for 12 months in its original sealed packaging in a dry area at a temperature of between +5°C and +30°C. Protect from frost.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Instructions for the safe use of our products can be found on the latest version of the Safety Data Sheet, available from our website www.mapei.com.

PRODUCT FOR PROFESSIONAL USE.



TECHNICAL DATA (typical values)			
PRODUCT IDENTITY			
	component A	component B	
Colour:	white	black	
Appearance:	liquid	viscous	
Density (g/cm³):	1.10	1.08	
Viscosity at +23°C (mPa·s):	1700 ± 200 (#6 - rpm 5)	67 000 ± 3 000 (#2 - rpm 10)	
APPLICATION DATA (at +23°C - 50% U.R.)			
Mixing ratio:	component A : component B = 20 : 80		
Colour of mix:	black		
Consistency of mix:	fluid		
Density of mix (kg/m³):	1,070		
Viscosity of mix (mPa·s):	2 100 ± 200 (#3 - rpm 10)		
Workability time: - at +10°C: - at +20°C: - at +30°C:	approx. 90 min. approx. 60 min. approx. 30 min.		
Application temperature range:	from +10°C to +30°C		
FINAL PERFORMANCE			
Electrical resistance (EN 1081) (Ohm):	10 ³ < R _E < 10 ⁴ (typical resistance at earth points). These values may vary according to surrounding conditions (temperature and humidity) and the equipment used to take the readings		
Waiting time before applying Primer W-AS N on Primer SN			
Substrate temperature:	min.	max.	
- at +10°C:	36 h	6 days	
- at +20°C:	24 h	4 days	
- at +30°C:	12 h	2 days	
Waiting time before applying Mapefloor I 360 AS or Mapefloor I 390 EDF on Primer W-AS N Substrate temperature: – at +10°C: – at +20°C: – at +30°C:	min. 48 h 24 h 12 h	max. 7 days 5 days 4 days	
Set to foot traffic: - at +10°C: - at +20°C: - at +30°C:	approx. 48 h approx. 24 h approx. 12 h		

WARNING



Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in force at the time of the MAPEI product installation.

The most up-to-date TDS can be downloaded from our website www.mapei.com.

ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.

8930-11-2020-gb

