

Two-component epoxy primer in water dispersion for electrically conductive floorings

WHERE TO USE

Primer W-AS is used to form a conductive layer for MAPEI conductive and static floorings (**Mapefloor I 360 AS** and **Mapefloor I 390 EDF**) so that any static electricity is discharged to earth.

Primer W-AS is used in various sectors of the industry in systems used to provide conductive and static dissipative floorings.

It is used particularly as a primer for conductive and dissipative floorings in environments used for the production of medical instruments, high technology electronics components and equipment, inflammable products, combustible powders, gas and transport systems, especially in the aeronautics and aerospace sectors.

Some application examples

- Electronics industry.
- Pharmaceuticals industry.
- Laboratories and operating theatres.
- Distribution networks for gases used for medical purposes.
- Warehouses used for storing explosive materials.
- Sterile environments.

TECHNICAL CHARACTERISTICS

Primer W-AS is a black, two-component, epoxy resin-based formulate in water dispersion with special electrically conductive fillers according to a formulation

developed in the MAPEI R&D laboratories. **Primer W-AS** 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 special strips of copper **Copper Band**.

RECOMMENDATIONS

- **Primer W-AS** must always be used within the times indicated on the Technical Data Sheet. Calculate the times starting from the moment mixing of the two components commences.
- Only apply **Primer W-AS** if the temperature of the substrate is at least +3°C higher than the dew-point temperature.
- Do not apply **Primer W-AS** on damp substrates (if the level of humidity in the substrate is higher than 4%), on substrates subject to rising moisture, or on substrates which are not completely cured.
- Protect the film of **Primer W-AS** from moisture for at least 24 hours after application.
- The consumption of **Primer W-AS** 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** with quartz sand.



APPLICATION PROCEDURE Substrate preparation

Only apply **Primer W-AS** on substrates after carrying out the preliminary preparation and priming operations.

The surfaces to be treated must be flat, clean and dry and must not be subject to capillary rising damp.

Also, the substrate screed must be strong enough for the loads to which it will be subjected when in service.

Any surface laitance must be removed through mechanical abrasion.

Any cracks must be repaired by filling them with **Eporip**, while any deteriorated areas of the concrete must be repaired with **Mapefloor EP19** or cementitious mortars from the **Mapegrout** range.

Remove all traces of dust from the surface with an industrial vacuum cleaner.

Priming the substrate with Primer SN and connecting to earth

Apply an even coat of either neat **Primer SN** or **Primer SN** mixed with **Quartz 0.5** on the prepared substrate using a flat trowel or smooth spreader.

Do not sprinkle the surface of **Primer SN**. Connect the substrate to earth by positioning the special copper strips **Copper Band** on the surface to be treated. This operation must be carried out by teams of qualified electricians.

Preparation of the product

Mix each of the two components of **Primer W-AS** separately with an electric mixer at low speed, then pour component A into the container of component B and mix them together with a drill at low speed until they are thoroughly blended.

Application of the product

Apply a single coat of **Primer W-AS** over all the surface to be treated and over the copper strips **Copper Band** on the surface with a short-haired roller. When hardened, **Primer W-AS** forms a black film. When the film of **Primer W-AS** has hardened, test a reference area of the system to check its conductivity.

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 m ²	
10 < m ² < 100	from 10 to 20 tests	
>100 m ²	10 tests per 100 m ²	

Cleaning

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

CONSUMPTION

80-100 g/m².

PACKAGING

8 kg kits. Component A: 2 kg. Component B: 6 kg.

STORAGE

Primer W-AS may be stored for up to 12 months in its original packaging in a dry area at a temperature of between $+5^{\circ}C$ and $+30^{\circ}C$.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Primer W-AS components A and B may irritate the skin and eyes, and may cause sensitisation in those subjects sensitive to such substances. When applying the product, we recommend the use of protective gloves and goggles and to take the usual precautions for handling chemical products. If the product comes into contact with the eyes or skin, wash immediately with plenty of clean water and seek medical attention.

Primer W-AS components A and B are also hazardous for aquatic life. Do not dispose of these products in the environment.

For further and complete information about a safety use of our product please refer to our latest version of the Material Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

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

All relevant references for the product are available upon request and from www.mapei.com

TECHNICAL DATA (typical values)

PRODUCT IDENTITY			
	component A	component B	
Colour:	white	black	
Appearance:	liquid	liquid	
Density (g/cm³):	1.10	1.23	
Viscosity at +23°C (mPa·s):	9,000 (# 5 - 10 rpm)	15,000 (# 4 - 5 rpm)	
APPLICATION DATA (at +23°C - 50% U.R.)			
Rapporto di miscelazione:	component A : component B = 25 : 75		
Colour of mix:	black		
Consistency of mix:	fluid		
Density of mix (kg/m³):	1,220		
Viscosity of mix (mPa·s):	950 (# 4 - 50 rpm)		
Workability time: – at +10°C: – at +20°C: – at +30°C:	approx. 120 min. approx. 90 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 on Primer SN Substrate temperature: - at +10°C: - at +20°C: - at +30°C:	min. 36 h 1 day 12 h	max. 6 days 4 days 2 days	
Waiting time before applying Mapefloor I 360 AS on Primer W-AS Substrate temperature: - at +10°C: - at +20°C: - at +30°C:	min. 26 h 17 h 12 h	max. 7 days 5 days 4 days	
Set to foot traffic: - at +10°C: - at +20°C: - at +30°C:	approx. 26 h approx. 13 h approx. 8 h		



