



MAXEPOX[®]

FLOOR -AC

HIGH CONDUCTIVE SELF-LEVELLING EPOXY FLOORING SYSTEM



DESCRIPTION

MAXEPOX[®] FLOOR -AC is a solvent-free, two-component self-leveling epoxy coating, suitable for smooth conductive pavements after application of the **MAXEPOX[®] PRIMER -AC** conductive primer based on graphite, and the placement of copper bands connected to earth electrode.

APPLICATION FIELDS

- Continuous self-leveling flooring system with high mechanical and chemical requirements on concrete with high conductivity performance such as electronics industry, operating theaters, clean rooms, warehouses, car parks, etc.

ADVANTAGES

- Conductive flooring system with high resistance to abrasion.
- Self-levelling flooring system suitable for large planimetry finishes, which results no differences in the conductivity of the same.
- Excellent adhesion on concrete or mortar substrates.
- High mechanical and chemical resistance.
- Bright finish, and easy to clean.
- Non-toxic, solvent-free and non-flammable. Suitable for applications with bad ventilation.
- Low viscosity

APPLICATION INSTRUCTION

Surface preparation

The conductive flooring system of which **MAXEPOX[®] FLOOR -AC** is part is composed, firstly, by a priming of **MAXEPOX[®] FLOOR -M** or **MAXEPOX[®] PRIMER-W** applied with a recommended consumption of 0,25 kg/m² by roller or brush, taking care to avoid excess build or puddling. Once primer is dry (12 to 24 hours depending on the ambient temperature and humidity), the self-adhesive copper bands are

placed following a pattern ensuring that the maximum distance between conductors is not more than 3 meters (3x3 m). Finally, the copper bands are connected to an already installed earth electrode.

Next, the **MAXEPOX[®] PRIMER -AC** graphite-based conductive epoxy primer is applied with a consumption of 0,10-0,12 kg/m², taking care to avoid excess build or puddling, on the previously and properly primed concrete surface with the copper bands connected to the earth electrodes. Allow the drying time for the **MAXEPOX[®] PRIMER -AC** conductive primer, then proceed with the **MAXEPOX[®] FLOOR -AC** high conductive epoxy-based coating.

Mixing

MAXEPOX[®] FLOOR -AC is supplied as a pre-weighed two-component set. Premix the components separately, and then make sure to pour all the hardener, Component B, into the resin, Component A. To ensure the correct reaction of both components, make sure to pour the entirety of component B

Mix manually or preferably using a low-speed drill (200-400 rpm), fitted with a mixer suitable for liquids, for about 2-3 minutes until achieving a homogeneous product in colour and appearance. Do not mix for prolonged period nor use high-speed mixer, which may heat the mixture or introduce air bubbles.

Check the Technical Data table for product Pot Life. This value is greatly reduced with hot temperatures

Application

Apply **MAXEPOX[®] FLOOR -AC** with a consumption of 2,5 kg/m² by a notched trowel giving the appropriate consumption per square meter. After about 10 minutes of application, an operator equipped with nail shoes must be introduced into the pavement so as not to damage the structure of the cladding and a spiked roller must be used to remove all the bubbles in the self-levelling system.

Note that depending on the temperature, the workability time is about 30 minutes at 25°C.

Application conditions

Optimum temperature range is from 15°C to 30°C. Do not apply when rain, water contact, condensation or dew is expected within 24 h after application. Do not apply with substrate and/or ambient temperature is at or below 8°C, or when are expected to fall below 8°C within 24 h after application. Applications above 30°C can have problems of excess reactivity and heat release, as well as a great reduction in the pot life of the mixture.

Ambient and surface temperature must be at least 3°C higher than dew point. Do not apply with R.H. lower than 30 %, and higher than 75 %. Check relative humidity and dew point before applying in proximities of marine environment. With low temperatures, higher humidity levels or both, use dry and warm air to get the suitable conditions, such as with an electric powered air blower system. Consequently, if hot air is used, it must come from a dry source (electricity). The hot air from the combustion of gas or oil produces a large amount of moisture that makes it difficult to drying of the coating.

Curing

Allow **MAXEPOX® FLOOR -AC** to cure for at least 4 days at 20°C and 50% R.H. for total curing. Applications at lower temperatures and/or high humidity require longer drying and curing times.

Cleaning

All mixing and application tools must be cleaned immediately with **MAXEPOX® SOLVENT**, after use. Once product cures, this can only be removed by mechanical means.

CONSUMPTION

The estimated consumption of **MAXEPOX® FLOOR -AC** is 2,5 kg/m² with a thickness from 1,3 to 1,5 mm. These figures are for guidance only and may vary depending on porosity, texture, substrate conditions and application method. Perform a preliminary test on-site to ascertain the total consumption exactly.

IMPORTANT INDICATIONS

- Surface moisture content must not exceed 4%. Do not apply on substrates subject to rising damp or negative water pressure.
- Allow new concrete and mortar to cure a minimum of 28 days before applying.

- Avoid applications if it is expected to be in contact with water, moisture, condensation, dew, etc., within 72 hours of application.
- Do not apply with relative humidity greater than 75 %. In such a case, it may result in poor curing and/or loss of colour intensity.
- Do not add to **MAXEPOX® FLOOR -AC** solvents or other unspecified compounds, as this may cause alterations in the curing or even the inhibition of curing. Do not add aggregates, additives or compounds other than those specified.
- Observe the expansion joints for substrate, and seal properly with a suitable sealant from the **MAXFLEX®** range.
- For other uses not specified on this Technical Bulletin or further information, consult the Technical Department.

PACKAGING

MAXEPOX® FLOOR -AC is supplied in pre-weighed two-component set of 16,3 kg (13,0 kg for Component A and 3,3 kg for Component B). It is available in dark grey colour. Other colours by request.

STORAGE

Six months for both components, in its unopened original packaging. Store in a cool, dry and covered place, protected from moisture, frost and direct sunlight, with temperatures between 5°C and 35°C. Temperatures below 5°C may lead the crystallisation of product components. Should this happen, it must be heated slowly at moderate temperature while it is regularly stirred until achieving its homogeneous and original lump-free appearance.

SAFETY AND HEALTH

MAXEPOX® FLOOR -AC is not a toxic product but direct contact with skin and eyes must be avoided. Use rubber gloves and safety goggles during application. In case of skin contact, wash affected area with soap and water. In case of eye contact, rinse immediately thoroughly with clean water but do not rub. If the irritation persists, seek medical assistance. Not inhale vapors produced during heating or combustion. Observe the usual precautions necessary for the application of this type of products.

Consult the Material Safety Data Sheet for **MAXEPOX® FLOOR -AC**. Disposal of the product and its packaging should be carried out according to the current official regulations and it is the responsibility of the final user of the product.

TECHNICAL DATA

Product characteristics	
CE Marking, UNE-EN 13813	
Description: Synthetic resin screed. EN 13813 SR-B2,0-AR0,5-IR24,5	
Uses: Wearing surface for indoor applications in construction	
General appearance and colour for Component A	Pigmented homogeneous paste
General appearance and colour for Component B	Yellowish liquid
General appearance and colour for A+B mixture	Grey liquid
A:B mixing ratio, (w:w)	4:1
Solids content for A+B mixture, (%)	> 90
Density for A+B at 20 ±2°C, (g/cm ³)	1,40 ± 0,1
Flashing point	Non flammable
Application and curing conditions	
Pot life at 20°C and 50% R.H., (min)	45
Curing time at 20°C and 50% R.H., (days)	
- Pedestrian traffic	1
- Wheeled traffic	4
- Total curing	7
Cured product characteristics	
Electrical resistance to ground, DIN IEC 61340-4-1 / 5/1/2, (Ohm)	≤ 10 ⁵ Ω
Compressive strength to 28 days, EN 13892-2 (N/mm ²)	40,7 – C40
Flexural strength to 28 days, EN 13892-2 (N/mm ²)	39,7 – F30
Wear resistance BCA, EN 13892-4 (µm)	20
Impact resistance; height of first cracks, EN ISO 6272 (N·m - mm)	IR 24,5 - 2500
Adhesion on concrete at 28 days, EN 13892-8 (N/mm ²)	4,0
Thickness/Consumption*	
Epoxy primer: MAXEPOX® FLOOR -M / MAXEPOX® PRIMER -W	
- Consumption, (kg/m ²)	0,25
Pattern for copper bands	3 x 3 m
Graphite-based conductivity primer: MAXEPOX® PRIMER -AC	
- Consumption, (kg/m ²)	0,10-0,12
Conductivity self-levelling flooring system: MAXEPOX® FLOOR -AC	
- Recommended thickness per application, (mm)	1,3-1,5
- Consumption per coat/total application, (kg/m ²)	2,5

* These figures are for guidance only and may vary depending on porosity, texture, substrate conditions and application method. Perform a preliminary test on-site to ascertain the total consumption exactly.

GUARANTEE

The information contained in this leaflet is based on our experience and technical knowledge, obtained through laboratory testing and from bibliographic material. **DRIZORO® S.A.U.** reserves the right to introduce changes without prior notice. Any use of this data beyond the purposes expressly specified in the leaflet will not be the Company's responsibility unless authorised by us. We shall not accept responsibility exceeding the value of the purchased product. The data shown on consumptions, measurement and yields are for guidance only and based on our experience. These data are subject to variation due to the specific atmospheric and jobsite conditions so reasonable variations from the data may be experienced. In order to know the real data, a test on the jobsite must be done, and it will be carried out under the client responsibility. We shall not accept responsibility exceeding the value of the purchased product. For any other doubt, consult our Technical Department. This version of bulletin replaces the previous one.



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