



MAXEPOX[®]

CONDUCTIVE

CONDUCTIVE EPOXY COATING FOR SEALING MAXEPOX[®] FLOOR-AC SYSTEM AND VERTICAL SURFACES

DESCRIPTION

MAXEPOX[®] CONDUCTIVE is a two-component water-based epoxy coating with conductive properties, specially designed for sealing **MAXEPOX[®] FLOOR-AC** system and vertical surfaces.

APPLICATION FIELDS

- Continuous coatings with high mechanical and chemical requirements on concrete with high conductivity requirements such as in the electronics industry, operating theatres, clean rooms, warehouses, car parks, etc.
- Sealing over the **MAXEPOX[®] FLOOR-AC** self-levelling epoxy coating for protection against abrasion and scratching.
- Conductive coating for application on vertical surfaces and walls.

ADVANTAGES

- Excellent adhesion to concrete and steel.
- Elastic module compatible with the thermal movements of the substrate.
- Provides a coating with excellent abrasion resistance.
- Solvent-free and virtually odourless. Suitable for use in places with poor ventilation.
- Easy to clean.

APPLICATION METHOD

Surface preparation

The substrate to be coated must be solid, firm, and rough, without poorly adhered parts, superficial grouts and as uniform as possible. Likewise, it must be clean, free of paints, efflorescence, loose particles, greases, release oils, dust, plaster, etc., or

other substances that could affect the adhesion of the product. There must be no rising humidity due to capillarity.

Concrete or ceramic substrates may have moisture but should not be applied on water pounded surfaces or surfaces with water flow.

Expansion joints and cracks subjected to movement, once opened and cleaned, must be treated with a suitable sealant from the **MAXFLEX[®]** range.

Concrete and cement mortars:

For cleaning and preparing the substrate, preferably in case of the smooth and/or poorly absorbent concrete and cement mortars, provide a mechanical texturing by abrasive disc, dry sandblasting, scarification or other abrasive method to achieve at least a slightly textured surface, not being desirable aggressive mechanical or chemical means. Finally, vacuum the dust and loose particles.

Sealing over MAXEPOX[®] FLOOR-AC:

No more than 24 hours after the application of **MAXEPOX[®] FLOOR-AC**, the substrate must be clean, free of dust or loose particles.

Mixing

MAXEPOX[®] CONDUCTIVE 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 (300-400 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 the "Pot Life" or time it takes for the product to harden inside the container. The "pot life" of 10 kg at a temperature of 20°C is 2 hours. This value is greatly reduced with hot temperatures.

Application

MAXEPOX[®] CONDUCTIVE can be applied with a short hair roller or solvent-resistant roller, pressing it lightly on the substrate to facilitate its penetration into pores and cavities. In application using air-less projection equipment, the viscosity is adjusted by diluting it with the minimum amount of water that allows it to be sprayed, up to 5 %, once the components have been well mixed.

Smooth finish:

Apply a first coat of **MAXEPOX[®] CONDUCTIVE** by brush, short hair roller or air-less gun, with a consumption of 0,20 to 0,30 kg/m². Once dry, i.e. after 6 to 12 hours, depending on the environmental conditions and ventilation, apply the second coat with the same consumption as the first. Do not allow more than 24 hours to elapse between coats. If much more time has elapsed or the surface has been in contact with water or other substances, it should be sanded gently.

Non-slip finish:

Apply a first coat of **MAXEPOX[®] CONDUCTIVE**, with a consumption of 0,30-0,35 kg/m² and, while it remains fresh, sprinkle clean and dry conductive aggregate **DRIZORO[®] SILICA CONDUCTIVE** of 0,4-0,8 mm diameter with a consumption of 1,5 kg/m² until the surface is completely covered. Once this layer is dry, i.e. from 6 to 12 hours, depending on environmental conditions and ventilation, the loose aggregate that is not perfectly adhered to will be swept and vacuumed, and a final coat of **MAXEPOX[®] CONDUCTIVE**, with a consumption of 0,35-0,40 kg/m² in the colour selected as the sealing will be applied.

Vertical surfaces:

For application on vertical surfaces, it is recommended to add to the mixture the **MAXEPOX[®] THIX -V** thixotropizing agent, in a maximum dosage of 2 % by weight of resin.

Application conditions

Do not apply in rain or when rain, contact with water, condensation, dampness and dew is expected within the first 24 h after the application.

Optimum application temperature range is from 10°C to 30°C. Do not apply with substrate and/or ambient temperature is at or below 10°C, or when are expected to fall below 10°C within 24 hours after application. Do not apply to frozen or frost-covered surfaces.

Ambient and surface temperature must be at least 3°C higher than dew point. Do not apply with R.H. higher than 80 %. Measure the relative humidity and dew point before applying the product. With low temperatures, high humidity levels or both, use dry

and warm air to get the suitable conditions, such as with an electric powered air blower system. Temperatures above 30°C lead a quick setting between components and heat production, so the pot life is greatly reduced.

Curing

Allow **MAXEPOX[®] CONDUCTIVE** to cure for at least 5 days at 20°C and 50 % R.H. before putting into service to heavy traffic. Applications at lower temperatures, high humidity and/or poor ventilation conditions require longer drying and curing times. At temperatures above 30°C, protect the application from direct sun exposure.

Cleaning

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

CONSUMPTION

Estimated consumption for **MAXEPOX[®] CONDUCTIVE** varies from 0,20 to 0,30 kg/m² per coat, i.e., a total consumption from 0,40 to 0,60 kg/m², applied in two coats.

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

IMPORTANT INDICATIONS

- For interior use only. Under sun light exposure, some colour variations or discolouration can take place.
- Do not apply on substrates subject to rising humidity or negative water pressure.
- Avoid contact with water, damp, dew, condensation, etc for at least 72 hours after application. Relative humidity must not exceed 80 %. If so, an improper curing or loss of colour intensity may happen.
- Allow new concrete and mortar to cure a minimum of 28 days before application.
- Available in a gloss and a matt finish, each with its own specific ratio of components A and B.
- Do not modify the recommended mixing ratio as it may cause alterations in curing or even inhibition of curing. Do not add solvents, aggregates or any compound other than those specified.
- Conductive aggregate must be thoroughly dry before using.

- For other uses not specified in this Technical Bulletin, further information or questions regarding the application of the product, consult the Technical Department.

PACKAGING

MAXEPOX[®] CONDUCTIVE It is supplied in pre-weighed sets of 20 kg: 16 kg component A and 4 kg component B for gloss finish, and 16,7 kg component A and 3,3 kg component B for matt finish. It is available in grey, red, green and white. Other colours consult.

STORAGE

Twelve months in its unopened and undamaged original sealed packaging. Store in a cool, dry and covered place, protected from moisture, frost and away from direct exposure to sunlight, with temperatures between 5°C and 30°C. Storage for long period and/or at 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[®] CONDUCTIVE is not a toxic product but direct contact with skin and eyes must be avoided. Use rubber gloves and safety goggles when handling, mixing and applying the product. In case of contact with skin, wash affected area with soap and water. In case of contact with eyes, rinse immediately thoroughly with clean water but do not rub. If the irritation persists, seek medical assistance. Do not inhale vapours from heating and combustions process. If ingested, seek immediate medical assistance. Do not induce vomiting.

Consult the Material Safety Data Sheet for **MAXEPOX[®] CONDUCTIVE**.

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	
General appearance and colour for component A	Coloured, homogeneous liquid
General appearance and colour for component B	Translucent-yellowish liquid
A:B mixing ratio, matt finish (by weight)	5:1
A:B mixing ratio, gloss finish (by weight)	4:1
Application and curing conditions	
Application conditions, T (°C) / R.H. (%)	> 10 / < 80
Pot life at 20°C, (min)	60-80
Tack-free drying-time at 20°C, (hours)	2-4
Waiting time between coats at 20°C, (hours)	6-12 (min) to 24 (max.)
Total curing time at 10°C/ 20°C/ 30°C, (days)	8 / 5 / 3
Cured product characteristics	
Permeability to CO ₂ , EN 1062-6. S _D (m)	> 50
Permeability to water vapour, EN ISO 7783-1/-2. Classification. S _D (m)	Class II: 5 < S _D < 50
Permeability to water and capillary absorption, EN 1062-3. w (kg/m ² ·h ^{0,5})	< 0,1
Adhesion by pull-off, EN 1542 (N/mm ²)	≥ 1,0
Consumptions*	
Smooth finish: Consumption per coat / total application, (kg/m ²)	0,20-0,30 / 0,40-0,60
Non-slip finish:	
- Consumption first coat, (kg/m ²)	0,30-0,35
- Consumption sealing coat, (kg/m ²)	0,35-0,40
- Consumption total application, (kg/m ²)	0,65-0,75

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

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. 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.



DRIZORO, S.A.U.

C/ Primavera 50-52 Parque Industrial Las Monjas
 28850 TORREJON DE ARDOZ – MADRID (SPAIN)
 Phone: +34 91 676 66 76 - +34 91 677 61 75
 e-mail: info@drizoro.com Web site: drizoro.com