



MAXEPOX[®] AC

ANTI-CORROSION EPOXY-BASED PRIMER FOR METAL SURFACES



DESCRIPTION

MAXEPOX[®] AC is a two-component, water-based epoxy primer with non-toxic corrosion inhibitors, and specially designed to provide a high performance protective coating for metal surfaces against any corrosion process.

APPLICATION FIELDS

- Protective and anti-corrosion coating for metal surfaces such as steel, aluminium and other metals in pipelines, tanks, bridges, metal structures, tunnels, etc.
- Priming over metal surfaces, prior to application of an UV resistant polyurethane-based coating such as **MAXURETHANE[®] 2C**.
- Priming over metal surfaces, prior to application of solvent-free, epoxy-based coating such as **MAXEPOX[®] 800** or **MAXEPOX[®] FLEX**.

ADVANTAGES

- Provides a protective barrier against water, chloride ions and gases.
- Excellent corrosion inhibitor properties.
- Excellent adhesion to steel and other metal surfaces.
- Very good abrasion resistance.
- Non-affected by humidity.
- Long-lasting.
- Easy to apply and clean.
- Environmentally friendly: non-toxic, epoxy-based, non-flammable and solvent-free product. Suitable for poor ventilated working areas.

APPLICATION INSTRUCTIONS

Surface preparation

Surface to be coated must be structurally sound, clean and free of dust, coatings, oil, grease or any other contaminant that may affect to adhesion of the product.

Metal surfaces should be cleaned to remove all traces of corrosion, and must be degreased, dry and free of dust. Use sand or shot blasting to grade Sa 2½ of Swedish Standard (SIS 055900) or equivalent.

On metal surfaces pay attention to drying conditions, because oxidation could arise when drying process is not very fast.

Mixing

MAXEPOX[®] FLOOR is supplied as a pre-weighed two-component set. Premix the components separately, and then the hardener, component B, is poured into the resin, component A. In order to ensure the proper reaction of the two components make sure all of component B is added. Mixing manually or preferably using a low-speed drill (300-400 rpm maximum), 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 Technical Data Table for product pot life (2 hours at 20°C). This value increases with lower temperatures or small quantities of mixture, and reduces with higher temperatures.

Application

Protective coating:

Apply a continuous and uniform coat of **MAXEPOX[®] AC** by brush, roller or air-less spray equipment. For surfaces exposed to very aggressive environments or permanent immersion, the use of two coats is highly recommended. Second coat should be applied as soon as the first one is completely dry to touch, i.e., about 6-8 hours at 20°C. This product can be repainted at any time after the curing process, no matter how much time has elapsed.

Priming for solvent-free epoxy or polyurethane-based coatings:

Apply one coat of **MAXEPOX[®] AC** for standard uses or two coats for aggressive environment

applications. The epoxy or polyurethane finish coating application can be carried out once the primer has completely dried and water released, that is 24 hours as long as there is good air renovation, low relative humidity and a temperature above 10°C. Then, apply two coats of **MAXURETHANE® 2C** as UV resistant polyurethane-based coating (Technical Bulletin No. 35) or **MAXEPOX® 800** or **MAXEPOX® FLEX** solvent-free epoxy-based coatings (Technical Bulletins Nos. 35 and 165, respectively).

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 h 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 in order 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® AC** 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 require longer drying and curing times.

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® AC** is 0,25 kg/m² per coat, i.e. a total consumption of 0,5 kg/m², applied in two coats.

This figure is 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

- Do not add solvents, thinners, aggregates, admixtures, water or other compounds.
- Avoid direct contact with water, damp, dew, condensation, etc., for at least 72 hours after application.
- 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® AC is supplied in pre-weighed two-component sets of 10 kg and 20 kg. It is available in standard red colour.

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 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® AC 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.

Consult the Material Safety Data Sheet for **MAXEPOX® 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, EN 1504-7 Description. Epoxy active coating with zinc and corrosion inhibitors for metal surfaces. Principles / Methods. Control of anodic areas by painting reinforcement with coatings containing active pigments (Principle 11-CA / 11.1), Control of anodic areas by painting reinforcement with barrier coatings (Principle 11-CA / 11.2)	
Base	Epoxy resin with zinc and corrosion inhibitors
A:B mixing ratio, (by weight)	5:1
General appearance and colour for mixed product	Red liquid
Application and curing conditions	
Application temperature / Relative humidity for ambient and substrate, (°C / %)	> 10 / < 80
Pot life at 10°C/ 20°C/ 30°C, (min)	Approx. 180 / 120 / 60
Drying time to touch at 20°C, (hours)	6 – 8
Curing time at 10°C/ 20°C/ 30°C, (days)	8 / 5 / 3
Cured product characteristics	
Corrosion protection, EN 1504-7 and EN 15183	Coated zones of steel are free of corrosion and rust creep at the ground plate edge < 1 mm
Shear adhesion, EN 15184	The bond stress determined with the coated bars is > 80 % than the reference bond stress determined for the uncoated bars
Adhesion on metal, ASTM D-4541 (MPa)	5,4
Thickness / Consumption*	
Consumption per coat / total application, (kg/m ²)	0,25 / 0,50
Dry film thickness per coat / total application, (µm)	100 / 200

* 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. 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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