DRIZORO® Construction Products

MAXREST® PASSIVE

EPD® CE
ENVIRONMENTAL PRODUCT DECLARATION

OXIDE CONVERTER AND ANTI-CORROSION PROTECTION FOR REINFORCING BARS AND OTHER IRON OR STEEL SURFACES

DESCRIPTION

MAXREST® PASSIVE is a one-component liquid product, ready to use as an oxide converter and protective coating of steel reinforcements, and other steel and iron surfaces against corrosion.

MAXREST® PASSIVE once applied, neutralizes the corrosion process, reacting quickly with the rust and transforms the iron oxide into a stable passive coating, providing a full protection against corrosion, salts, acid and alkali attack.

APPLICATION FIELDS

- Oxide converter and protection of steel reinforcement in structural concrete repair exposed to aggressive conditions such as in coastal areas, industrial environments, etc.
- Anti-corrosion protection against the attack from strong chemical agents such as diluted alkali and acid solutions.
- Adhesion promoter or priming on metal surfaces for subsequent coating systems.

MAXREST® PASSIVE

ADVANTAGES

- Excellent adhesion on metal substrates. Product reacts even with steel which has been sandblasted to white metal or over only partially rusted surfaces.
- Environmentally friendly: Water-based, solvent-free and non-flammable product.
- Quick drying, allows a fast repair job.
- Easy and ready to use: One-component product, and apply by brush, roller or spray equipments.

APPLICATION INSTRUCTIONS

Surface preparation

Metal surface to be coated must be clean and free of paints, coatings, efflorescence, loose particles, grease, oils, curing agents, form release agents, dust, gypsum plasters, organic growth or any other contaminants that may affect to adhesion of the product. Remove loose and unsound concrete around rusting reinforcement. Enough concrete must be removed on the backside of the reinforcing bars to allow space for cleaning treatment.
Treat metal surface to remove rust by wire brush, needle gun, etc., until getting a St-2 surface preparation grade. Then clean the prepared surface with clean water and a damp cloth.

Application

MAXREST® PASSIVE is supplied ready to use; it does not require dilution or addition of other materials. Apply two coats by brush, air-less spray equipment, or immersing the element to be protected. Second coat should be applied when first coat is dry to touch, i.e. between 2-3 hours at 20°C. Avoid staining the concrete around the reinforcement. Successive coats can be applied if required.

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.

The optimum temperature range for application is from 10°C to 30°C. Do not apply with substrate and/or ambient temperature is at or below 5°C, or when temperatures are expected to fall below 5°C within 24 h after application. Do not apply to frozen or frost-covered surfaces.

For applications at hot temperatures (> 35°C), low relative humidity and/or windy conditions, i.e. summertime, avoid direct exposure to sunlight.

Curing

MAXREST® PASSIVE can be covered with structural repair mortars after 3-4 hours after application or coated with other epoxy or polyurethane coatings 24 hours after application. Lower temperatures and/or higher R.H. values increase the curing time.

Cleaning

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

CONSUMPTION

Estimated consumption for ***MAXREST® PASSIVE*** is 0,15 kg/m^2 per coat, for a dry film thickness of 50 µm, i.e., a total consumption of 0,3 kg/m^2 applied in two coats. These figures are for guidance 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 water, cements, solvents, additives, aggregates or other compounds.
- Observe the recommended consumptions per coat.
- Drying times are measured at 20°C. Higher temperatures shorten these times and lower temperatures increase them.
- For other uses not specified in this Technical Bulletin, further information or questions regarding the application of the product, consult the Technical Department.

PACKAGING

MAXREST® PASSIVE is supplied in 1, 5 and 25 litre plastic jerry cans.

STORAGE

Twelve months in its unopened and undamaged original sealed packaging. Store in a cool, dry and covered place, protected from moisture, freezing and away from direct exposure to sunlight at temperatures from 5°C to 30°C.

SAFETY AND HEALTH

MAXREST® PASSIVE is not a toxic product but direct contact with skin and eyes must be avoided. Use rubber gloves and safety goggles when handling 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 rib. If the irritation persists, seek medical assistance.

Consult the Material Safety Data Sheet for ***MAXREST® PASSIVE***.

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. Active coating with corrosion inhibitors for corrosion protection of steel reinforcement in concrete structures in building and civil engineering works. 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)	
General appearance and colour	White liquid
Density, (g/cm^3)	1,18 ± 0,10
Volatile organic compound, (g/l)	None
Application and curing conditions	
Application temperature for substrate and ambient, (°C)	> 5 to < 35
Waiting time between coats at 20°C & 50 % R.H., (h)	2-3
Curing time at 20°C & 50 % R.H., (h) - Covering with repair mortars - Covering with epoxy or polyurethane coatings	 3-4 24
Cured product characteristics	
Adhesion to steel, (MPa)	4,9 ± 0,5
Corrosion protection, UNE-EN 1504-7 and EN 15183	Coated zones of steel are free of corrosion and rust creep at the ground plate edge < 1 mm
Fireproofing, BS 473-7	Suitable
Thickness / Consumption*	
Dry film thickness per coat / total application, (µm)	50 / 100
Consumption per coat / total application, (kg/m^2)	0,15 / 0,30

* 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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