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Kansai Paint Iranian

A570-3019

POLYAMINE CURED EPOXY SOLVENT FREE COATING

GENERIC TYPE

Epoxy

DESCRIPTION

A570-3019 is a two-component, polyamine cured, It is specially designed for drinking water tanks. Can be used as a primer and finish coat in atmospheric and immersed environments. Suitable for properly prepared carbon steel, stainless steel, composites, and concrete substrates.
Approved to BS 6920-1:2014 for contact with potable water
Approved to AWWA-C210:2015 for contact with potable water

RECOMMENDED USE

As a solvent-free epoxy coating with excellent chemical & mechanical properties, suitable for coating chemical products containers & industrial or marine structures & potable water.

FEATURES

- Excellent mechanical strength
- High chemical resistance against weak acids and alkalis
- High oil resistance
- Applicable in high film thickness
- Good resistance to splash, spillage & fumes of acids, alkalis, fresh solvents & sea water

PHYSICAL PROPERTIES

Finish	Semi-gloss - Gloss
Color	Upon request
Solid by volume	99±1%
Specific Gravity	1.35 ±0.1 gr/cm^3
Flash point	65 °C
Recommended D.F.T.	200-400 microns
Theoretical coverage	1.7-5 m^2/Lit Practical coverage depends on the loss factor
Touch Dry	12 hrs. at 25°C
Hard Dry	24 hrs. at 25°C
Full Cured	7 days. at 25°C
Thermal resistance	Max. 140°C (dry exposure)

APPLICATION

Application method	Air/Airless spray, Brush, Roller
Surface temperature	10-40 °C
Mixing ratio(by weight)	5:1
Packaging(A+B)	20KG+4KG
Hardener(B)	A275-2004
Thinner/Cleaner	Don't need
Recoat interval	Min 24 hrs.at 20°C, Max 7 days. at 20°C
Pot Life	1.5 hrs. at 25°C
Application condition	Apply only on a dry and clean surface with a temperature at least 3°c above the dew point to avoid condensation Environment Temperature should be 10 °C min and 40 °C max and Relative humidity: 80% maximum.
Nozzle orifice	0.019"-0.023"
Nozzle pressure	200 bar/2900 psi Airless spray is indicative and subject to adjustment

SURFACE PREPARATION

The required quality of surface preparation can vary depending on the area of use, expected durability and if applicable, project specification.
When preparing new surfaces, maintaining already coated surfaces or aged coatings it is necessary to remove all contamination that can interfere with coating adhesion, and prepare a sound substrate for the subsequent product.
Inspect the surface for hydrocarbon and other contamination and if present, remove with an alkaline detergent.
Agitate the surface to activate the cleaner and before it dries, wash the treated area using fresh water.

Paint solvents (thinners) shall not be used for general degreasing or preparation of the surface for painting due to the risk of spreading dissolved hydrocarbon contamination. Paint thinners can be used to treat small localized areas of contamination such as marks from marker pens. Use clean, white cotton cloths that are turned and replaced often. Place used cloths into water.

Process sequence

Surface preparation and coating should normally be commenced only after all welding, degreasing, removal of sharp edges, weld spatter and treatment of welds is complete. It is important that all hot work is completed before coating commences.

Soluble salts removal

Soluble salts have a negative impact on the coating systems performance, especially when immersed. KPI's general recommendations for maximum soluble salts (sampled and measured as per ISO 8502-6 and -9) content on a surface are:
For areas exposed to (ISO 12944-2):
C1-C4: 200 mg/m²
C5M or C5I: 100 mg/m²
Im1-Im3: 80 mg/m²

Carbon steel

Initial rust grade

The steel shall preferably be Rust Grade A or B (ISO 8501-1). It is technically possible to apply the coating to rust grades C and D, but it is practically challenging to ensure specified film thickness on such a rough surface, hence risk of reduced lifetime of the coating system. When steel of Rust Grade C or D is coated, the frequency of inspection and testing should be increased. For steel with Rust Grades C or D, contact your nearest KPI office for advice.

Metal finishing

For areas in corrosivity category C1 to C4 (ISO 12944-2) all irregularities, burrs, slag and spatter on welds, sharp edges and corners shall conform to minimum grade P2 (ISO 8501-3) Table 1, or as specified. All edges shall have a rounded radius of minimum 2 mm subjected to equally effective method.

For areas in corrosivity category C5 the requirement is conformance to grade P3 (ISO 8501-3) Table 1. Defective welds shall be replaced and treated to an acceptable finish before painting. Temporary welds and brackets shall be ground to a flat finish after removal from the parent metal.

Abrasive blast cleaning

Cleanliness

After pre-treatment is complete, the surface shall be dry abrasive blast cleaned to Sa 2 (ISO 8501-1) using abrasive media suitable to achieve a sharp and angular surface profile.

Surface profile

Recommended surface profile 40-70 µm, grade Fine to Medium G (ISO 8503-2).

Abrasive media quality

The selected abrasive must be compatible with both the surface to be blast cleaned and the specified coating system. The abrasive shall meet specifications as per relevant parts of ISO 11124 (Specification for metallic blast-cleaning abrasives), or ISO 11126 (Specification for non-metallic blast-cleaning abrasives). It should be sampled and tested as per relevant parts of ISO 11125 (metallic abrasives) or ISO 11127 (non-metallic abrasives).

All abrasive blast media used should be new and not recirculated, with the exception of Steel Grit. If this is utilized the circulation process must include a cleaning process.

Compressed air quality

The supply of clean air to blasting pots must be secured to avoid contamination of abrasive and thereby of blast cleaned surfaces. Compressors must be fitted with sufficient traps for oil and water. It is also recommended to fit two water separators at the blasting machine to ensure a supply of moisture-free air to the abrasive chamber.

	Dust contamination At the completion of abrasive blasting the prepared surface shall be cleaned to remove residues of corrosion products and abrasive media, and inspected for surface particulate contamination. Maximum contamination level is rating 2 (ISO 8502-3) .
SAFETY PRECAUTIONS	Detail information is given on the Material Safety Data Sheet (MSDS). Avoid inhalation of spray mist or vapor. Avoid skin and eye contact. Paint contacted with skin should be immediately removed with water and/or suitable cleanser. Eyes should be flushed with water and seek immediate medical attention. Since this product contains flammable solvents, keep away from sparks and open flames. The application and handling of this product should be in compliance with relevant national regulations.
STORAGE	Store in dry, cool condition and away from sources of heat and ignition. Containers must be kept tightly closed. Store conditions shall be in accordance with national regulations.
SHELF LIFE	18 months from date of production.