



SIA Kinematics Go LTD

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Multifunctional Polyether-Urethane two-component coating

Technical description

Urethane pre-polymer varnish. The composition of varnish: a polyether, synthesized by vinyl monomers. The composition is prepared by simply mixing varnish with a hardener in a ratio of 5:1. Function: protection of metal surfaces against corrosion, waterproofing surfaces of concrete and wood.

Specification

Type: multifunctional Polyether-Urethane two-component coating. Does not require a solvent.
Purpose: protection of metallic surfaces from corrosion, waterproofing surfaces made of concrete or wood.

Application: petrochemical and natural gas industries, shipbuilding, repair and construction.

Properties :

Specific Gravity: 0,9–1g/sm³.

Moisture absorption: 0,001 %.

High adhesion: 1 point.

Resistant to seawater.

Resistant to hydrogen sulfide and parafines-resinous compounds.

Range of use: from -80°C to +150°C by direct contact.

Tensile strength: 29 MPa.

Weight: 962 kg/m³

Consumption in the three-layer coating composition:

Metal – 80–100 g/m²

Concrete – 100–120 g/m²

Wood – 100–140 g/m²

A three-layer coating thickness: 19–25mkm.

The polymerization temperature: from -15 °C to +30 °C.

The polymerization time of one layer: 10–12 hours.

Occupational safety and health: work in protective clothing and shoes; apply personal protection equipment (rubber gloves, goggles, masks or respirators when spraying).

Work in the open air or in a ventilated area.

Transport and storage in sealed metal containers from -60 to +40 °C.

Instructions for use

Surface preparation:

For metal: mechanical removal of loose rust, remnants of the old coating. Remove scale, clean up the edges. Degrease P4 or toluene, xylene.

For concrete: if necessary, degrease, paint over cracks, remove dust.

For wood, cleaning the surface to remove old paint, if necessary, degrease.

Method:

By brush, roller or spray.

When priming the surface with subsequent painting, fuel and urethane enamel paint is reduced by 2.5–3 times.

Guaranteed shelf life 24 months.

Certificate of conformity № ПОСС. RU.XII. HO 01255.

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The distinctive properties and applications

Multifunctional coating has a wide range of application.

The composition can be used successfully to seal soldered and welded joints.

Due to the properties of the coating, its high abrasion resistance and absolute resistance to the various corrosive media, including corrosive, alkaline and acidic medium and organic solvents, the composition can be applied to metal materials of heat exchangers and pipeline equipment.

High quality of the coverage is provided at low varnish consumption. For example, three-layer coating of metal requires 80–100 g/m² only, with the cost of the coating about 3\$/m², which provides a competitive compared with counterparts used in industry.

Composition for isolating metal surfaces can be used as a protection tube cavity in oil and gas exploration and exploitation of oil and gas processing equipment. Coating prevents the deposition of wax and resin in the cavity pipe tubing. Coating reduces the hydraulic resistance of the tube at 2–3 times. It is used to cover the marine and river vessels, and in construction, as a good waterproofing. It possesses high hydrolytic stability and low moisture permeability. Coating is resistant to sea water. Algae and other organisms do not stick to the surface of the coating thanks to its glossy shiny surface.

Options

The composition can be used to replace expensive materials (such as Ni-Cu alloys and stainless steel) by mean material coated with the multifunctional Polyether-Urethane two-component coating, regardless of the medium. Composition has dielectric properties. It may be used to protect electrical equipment.