DisboCOR 871
2K-EP Phosphat

High built 2-component epoxy primer with zinc phosphate, also suitable for galvanized surfaces.

Product Description

Field of Application

Anticorrosive primer for steel constructions, mainly for structural steelwork, industrial plants and sea water constructions with mechanical exposure (e. g. bridges, pipes, industrial and harbour areas).

Material Properties

- high stability under load
- zinc phosphate as active corrosion protection pigments
- alternative to zinc rich primer for lower stress conditions
- especially for manually prepared surfaces
- also suitable for galvanized surfaces
- approved and monitored acc. to TL/TP-KOR-Stahlbauten, Blatt 87

Material Base / Vehicle

2-component epoxy resin containing zinc phosphate

Packaging/Package Size

- 4 kg
- 15 kg
- 32 kg

Colours

- light grey
- red-brown, Stoff-Nr. 687.06

Storage

Cool, dry and frost-protected
Originally sealed containers are 2 years storage-stable.
If material is stored at low temperatures, please allow the material to warm to 20 °C before application.

Technical Data

Approved and monitored acc. to TL/TP-KOR-Stahlbauten, Blatt 87

Density:	1,6 kg/l
Flash point:	Component A: 23 °C Component B: 25 °C Mixed material: 24 °C
Solids content:	Solids content by volume: approx. 59 % (DIN EN ISO 3233-2)(depending on colour shade)
Temperature resistance:	Dry: up to 100 °C, for a short time up to 150 °C. Wet: up to approx. 60 °C

Chemical resistance

As part of a system, resistant against industrial atmosphere, exhaust fumes, diluted inorganic acids, diluted alkaline solutions and salt solutions and many solvents.
Not for permanent exposure underwater or to condensation water.

Application

Suitable Substrates

- steel
- galvanized steel
- suitable coatings with adequate adhesion

Substrate Preparation

The surface has to be dry and free of fat, oil, dirt and dust.

- **Steel**: For high corrosive environment grid blasting Sa 2½ (DIN EN ISO 8501-1), surface profile medium (G) (ISO 8501-1). For lower corrosivity (i. g. indoor without condensing water and low corrosive impact) surface must at least be very thoroughly hand and powertool cleaned St3 (DIN EN ISO 8501-1).

- **Galvanized steel**: Remove white rust and other contamination via grinding (abrasive paper or pad), ammonia-water solution containing wetting agent or sweep blasting (DIN EN ISO 12944-4). Corroded spots must be very thoroughly hand and powertool cleaned PSt3 (DIN EN ISO 8501-1).

- **Old coatings**: Compatible old coatings can be overcoated after suitable surface preparation and adequate adhesion. When in doubt, a coating test area is recommended. Good adhering coatings must be cleaned and roughened. Corroded spots must be very thoroughly hand and powertool cleaned PSt3 (DIN EN ISO 8501-1).
  Alternatively old coatings can be prepared by water jetting down to a compatibel, well adhearing coat or rough steel surface to Wa 2½ (ISO 8501-4), flash rust grade M.

  Badly adhearing coatings must be removed completely by grid blasting Sa 2½, hand and powertool cleaning St3 (both DIN EN ISO 8501-1) or water jetting Wa 2½ (ISO 8501-4), flash rust grade M.

Preparation of Material

Stir component A until homogeneous. Then mix component A and B at specified mixing ratio, stir thoroughly (aprox. 3 min.) with a slow rotating stirrer (max. 400 r/min). Repot the mixture in a clean pot and stir again thoroughly.

Mix only the quantity, which can be applicated within the pot life.

Mixing Ratio

90 parts by weight comp. A
10 parts by weight comp. B

Method of Application

- Brush
- Roller
- Airless spray application (spray nozzle pressure 160 - 200 bar, nozzle size 0,38 - 0,48 mm respectively 0,015 - 0,019 inch)
  For airless spray application it is allowed to add up to 5 % DisboADD 419, depending on the dry film thickness and application conditions.

Layer Thickness

Dry film thickness 80 µm, equal to 135 µm wet film thickness

Surface Coating System

- **Steel:**
  Prime coat: 1 - 2 x DisboCOR 871 2K-EP Phosphate
  Intermadiate coat: 1 - 2 x DisboCOR 873 2K-EP Zwischenschicht EG
  Top coat: 1 - 2 x DisboCOR 875 2K-PU Finish EG or DisboCOR 876 2K-PU Finish

- **Galvanized steel**:
  Prime coat: 1 - 2 x DisboCOR 871 2K-EP Phosphat
  Intermediate coat: 1 - 2 x DisboCOR 873 2K-EP Zwischenschicht EG
  Top coat: 1 - 2 x DisboCOR 875 2K-PU Finish EG or DisboCOR 876 2K-PU Finish

- **Old coatings**:
  Prime coat: 1 - 2 x DisboCOR 871 2K-EP Phosphat
  Intermediate coat: 1 - 2 x DisboCOR 873 2K-EP Zwischenschicht EG
  Top coat: 1 - 2 x DisboCOR 875 2K-PU Finish EG or DisboCOR 876 2K-PU Finish

Consumption

- Theoretical: 0,22 kg/m² at 80 µm DFT
- Practical: approx. 0,26 - 0,33 kg/m² at 80 µm DFT

Consumptions are indicative values depending on surface conditions and application method. Exact values can be determined by testing areas.

Workability

Pot Life:

- At 10 °C: approx. 12 hours
- At 20 °C: approx. 8 hours
- At 30 °C: approx. 5 hours

Application Conditions

Do not apply below 5 °C an above 80% rel. Humidity. Substrate temperature shall be continuously 3 K above the dew point. Inside buildings good ventilation is required during application.

Waiting Time

- **Between DisboCOR 871 2K-EP Phosphat**: at least 12 hours (at 23 °C)
- **Between DisboCOR 871 2K-EP Phosphat and DisboCOR 873 2K-EP Zwischenschicht EG**: 1 - 3 days (at 23 °C)

  Drying time depends on temperature and drying-conditions. Before overcoating, any inherent or foreign impurities must be removed. After longer time periods or after outdoor UV-exposure a suitable surface preparation is mandatory.

Drying/Drying Time	At 80 µm DFT and 23 °C: ■ Drying grade 1 (dust dry): 60 min ■ Drying grade 4 (dry to handle): 6,5 hours ■ Drying grade 6 (stackable): 12 hours
Tool Cleaning	Equipment and tools are to be cleaned with DisboADD 419. If not in continuous use, clean tools within the pot life.

Advice

Only for professional use.

Special Risks (Hazard Note) / Safety Advice (Status as at Date of Publication)

- **Comp. A, light grey**: Flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapours/ spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/ eye protection. **Contains**: reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700), xylene, oxirane, mono derivs.. Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
- **Comp. A, red brown**: Flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapours/ spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/ eye protection. **Contains**: reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700), xylene, oxirane, mono derivs.
- **Comp. B**: Flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Harmful if inhaled. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure. Harmful to aquatic life with long lasting effects. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapours/ spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area. Wear protective gloves/ eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. **Contains**: xylene, Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine, Formaldehyde, polymer with benzeneamine, hydrogenated, 3-aminomethyl-3,5,5-trimethylcyclohexylamine, m-phenylenebis(methylamine), 3,6-diazaoctanethylenediamin.

Disposal	Materials and all related packaging must be disposed of in a safe way in accordance with the full requirements of the local, regional, national and international authorities. Uncured product residues and unpurified packaging should be disposed of as hazardous waste. Material residues: Allow the basic substance to harden with hardener and dispose of as paint waste. Waste should not be disposed of via wastewater.
EU limit value for the VOC content	EU limit value for the VOC content of this product (category A/j): 500 g/l (2010). This product contains max. 500 g/l (2010).
Giscode	RE70
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