

CORROPIPE® grey

Corrosion protection for steel and all mineral surfaces

Product description

2-component solvent-free mineral based coating which hardens hydraulically.

The combination of selected natural minerals plus a high-grade reactive fluid component produces the ready-to-use mixture CORROPIPE® grey.

The outstanding product properties include:

- very good application on stable, rusty steel and all mineral surfaces
- no rust infiltration of the coating
- high-alkaline medium ensures active long-term corrosion protection
- temperature stability of -40°C to +180°C in the humid environment
- high resistance to acids and bases from pH 3,5 to pH 14
- high adhesion force to steel that does not diminish even with multiple load changes
- the expansion coefficient of the material is the same as that of steel
- vapour permeability
- resistance against demineralised water
- neutral regarding drinking water
- extremely low shrinkage of the material
- fire protection level A2
- environmentally-friendly, solvent-free, low-pollution – not a hazardous material!

Ground preparation

When viewing the steel surface without magnification, it must be free of oil, grease, paint, coatings and any loose separating substances. Rolling skin and mill scale on new steel surfaces and pipelines must be removed by sandblasting. Stable rust can remain on the steel. Degree of purity according to ISO 8501-1 Sa1. A small amount of residual humidity (no free water) can be tolerated.

Cleaning

Ultrahigh water pressure or sandblasting

Mixing process

Shake the fluid component included in the delivered package (in plastic container) well, add it to the powder component and mix the two components, using a hand mixer, so that no lumps are formed. Let the mixture rest for at least 30 minutes, then mix well again and apply only after this step. The mixing location should be protected against direct solar radiation.

Finished mixture

Viscous consistency. Application related or in case of deep pitting corrosion in the pipe the processor can add to the mixture up to 50% fire-dried quartz sand (grain size 0.1-0.6 mm). Attention! The required amount of quartz sand must be determined by individual tests.

Processing period

The processing period of the ready-to-use mixture is around 2 hours at an ambient temperature of 20°C. Lower temperatures will prolong the processing period, higher temperatures will reduce it.

Processing

Painting, centrifuging, spraying. Attention: Pipelines have to be closed after coating against draught.

1. Brush or roll
2. Centrifuging by means of a pneumatic motor with a lamellar head
3. Airless spraying pressure ≥ 100 bar
(prior to spraying, the finished mixture must be fed through a shaking screen of < 0.5 mm mesh size.)

Consumption figures

To ensure long-time corrosion protection the material layer thickness has to be > 1 mm.

Practical experience consumption Airless spraying: Layer thickness 1 mm – 1,8 kg/m² material consumption.

In the airless spraying process, up to around 25% more material may be consumed. The material quantity to be used must be applied in two or more spraying steps. The next spraying step can follow when the surface of the previous spraying step is surface-dry.

Practical experience consumption internal pipe coating: Layer thickness > 2 mm

If the layer thickness is more than 1 mm in one spraying step, the CORROPIPE mixture has to be mixed up with fire-dried quartz sand.

Example: Layer thickness 2 mm

CORROPIPE 2,5 kg + 1,75 kg quartz sand = 4,25 kg ready-to-use mixture (70 % quartz sand proportion). The grain size of the fire-dried quartz sand should be 0,1 – 0,6 mm. Due to object-related and operational features, the consumption quantities can differ from the figures indicated.

Putting into operation

Putting into operation no sooner than after 10 days at an ambient temperature of +20°C. At lower temperatures the putting into operation is extending.

By treatment with superheated steam of > 100 ° C on containers, chambers and pipelines immediate use is allowed.

Layer thickness:

Only on steel: The layer thicknesses must be checked using suitable measuring equipment and respected.

Delivery component

Powder component: Component A, high-quality mineral component

Fluid component: Component B, aqueous reactive polymer dispersion with additives

Processing temperature

not below + 5°C

Color

grey

Surface quality

Smooth to orange skin-like appearance (when spraying)

Equipment cleaning

with water

Material density

wet 1.8 kg = 1 litre of finished mixture

Storage

12 months, dry, not below 0 °C and not above +30 °C

Material safety measures

As with cement products. Store under lock and key and inaccessible for children. Flush thoroughly with water in case of eye contact. Irritates the eyes and the skin. Remove any soiled or soaked clothing from the body. Wear suitable protective gloves/face protection during work. Non-hazardous materials for transport.

Environment

The material can be disposed of on a household waste dump after hardening.

Note: The information in the list above is provided on the basis of our experience and according to the best of our knowledge, but without obligation. The information must be adapted to the building objects in question and the particular requirements. On condition of the above, we are liable for the correctness of our Terms of sale and delivery. Recommendations made by our employees and deviating from our codes of practice shall be binding for us only if confirmed in writing.