

# Technical data SteelShield

## Product description

SteelShield is a two component powder/ liquid mixture to be used as anti-corrosive coating with high adhesion to steel.

## Properties

- *Acid resistant and low permeability to chloride*
- *High adhesion strength to steel (>5 MPa)*
- *Anti-corrosion*
- *100% recyclable*
- *Temperature resistant ( up to 1200°C)*
- *Applicable by brush, roller and spray*
- *Touch dry within 2 – 4 hrs depending on layer thickness (at 20°C)*

## Application areas

To be used for steel surfaces (anti-corrosion, heat exposed/ wear resistant) in the process industry.

## Material handling

The liquid component A is to be mixed with powder component B in a weight ratio of 1,06 : 1 with preferably high speed mixer or double screw mixer. Mix to lump free material, at least 3 minutes at high shear. After mixing a maturing period of 15 minutes is to be respected, then mix again at high shear for 1 minute. Filter mixed coating over 500 - 300 micron sieve to remove residuals. Dilution with water at a maximum of 5% in weight is possible.

Potlife is 1 – 2 hours before the material starts to thicken. Potlife can be extended up to 4 - 6 hours by continuous mixing.

Touch dry at 100 – 200 microns layer thickness after 2 hrs at 20°C, at 200 – 500 microns layer thickness touch dry after 4 hrs at 20°C. Full cure is achieved after 72 hrs at 20°C.

Overcoatable with conventional polymer based coatings possible after 8 – 24 hrs.

## Application method

Steel surface to be coated must be clean, free of coating (non – adhesive to coating), surface prepared by blasting to SA 2 ½ . Steel surface may be prepared with water jetting, application is possible on moist surface.

The material can be applied by brush, roller or (air)spray. Application by (air)spray requires some dilution with water (not exceeding 5% by weight) and a large tip (air gun 2 – 2.5 mm, airless 0.067 inch/ 319 - 519 tip).

## Curing conditions

Outdoors: direct sunlight during application is to be avoided, windy situations to be restricted to avoid premature drying. Avoid ambient temperatures lower than 7°C.

Indoors: Avoid too low ambient humidity (>45% RH) during curing conditions.

## **Safety**

As the mixed product is alkaline, use protective wear for body and eyes. On spraying, use respiratory protection equipment. On contact with skin and or eyes, rinse properly with water and seek medical attention.

## **Technical specifications**

Specific weight mixed material:	1.6 – 1.7 kg/ ltr
Usage at 200 micron:	0.5 kg/ m <sup>2</sup>
Usage at 500 micron:	1 – 1.2 kg/ m <sup>2</sup>
Adhesion strength after 48 hrs:	> 5 MPa
Color:	grey or beige
Storage conditions:	dry and non freezing
Shelf life:	12 months
Processing conditions:	7 - 40°C, 45% ≤ RH ≤ 80%
Packaging:	20 kg paper bag with inliner, 10 ltr cannister