

Properties GeoCoat

Date: April 2024

Material properties:

- Density: approx. 1,65 g/ml
- Solid content: 75% (25% water content)
- Maximum layer thickness 1 coat: 500 micron wet, 400 micron dry
- Minimum layer thickness 1 coat : 190 micron wet, 150 micron dry
- Layer thickness per application: for corrosion protection under atmospheric conditions minimum 150 micron (DFT) , maximum 400 micron (DFT). For under water applications 300 - 400 micron (DFT).
- Drying time at 20°C and 50% RH: 2 hrs hand dry, light handling after 4 hrs, full cure after 48 hrs
- Adhesion:

- Steel non-treated	- > 3 Mpa
- Steel sand blasted to SA 2 ½	- 3 – 12 Mpa
- Steel with light fly-rust	- 3 – 12 Mpa
- Concrete	- > 2 Mpa
- Wood	- > 2 MPa
- Abrasion resistance (Taber): to be determined, resistance can be adjusted to need

Application:

GeoCoat is a 2 component system consisting of a powder component (B, binder) and a liquid component (A, activator). The products are to be mixed in the given weight ratio under intense mechanical mixing. The mixed product shall not contain any lumps, when mixed, let the product rest for 1 – 2 minutes and then mix again intensively. Potlife is approx. 1 hr, this can be extended upto 8 hrs when mixed every 15 min. The viscosity increases during the potlife and can be adjusted by adding max. 5% of water by weight.

When using airspray, use a 1.4 mm spray tip or larger (max 2.0). Maximum allowable dilution is then 10% by weight with water. Note that at these high dilution factors the viscosity drops markedly and can lead to run offs when too much coating is applied at once.

Airspray or Air assisted: needle 1.4 – 2.0, max 5% dilution

Airless: 120 – 150 bar, tip size 19 (thousands of an inch) upto 27

Temperature range: > 5°C and < 40°C

Physical properties:

Maximum allowable working temperature: 1200°C, continuous

Chemical resistance:

- 50% Sulfuric acid
- 50% Nitric acid
- 50% Hydro chloric acid
- 50% Phosphorous acid
- 50% sodium hydroxide
- 40% potassium hydroxide
- 20% Sodium sulphate
- 20% Ammonium sulphate
- Acid resistant to pH=0
- Alkali resistant to pH=14