

Eco-Friendly Water Binding Polymer

DESCRIPTION

TamSoil 1000CP is a unique environmentally friendly liquid polymer especially designed for the use on EPB tunnel boring machines tunnelling below groundwater level. This polymer is used in ground conditions where foam alone is not sufficient to handle an increased amount of water. TamSoil 1000CP is especially efficient in soils with low fine particle content.

TamSoil 1000CP has the power to incorporate water up to 800 times its own weight. Normet TamSoil 1000CP also lubricates moving parts, lowers friction and wear - extending tool life and decreasing energy requirements. In addition, TamSoil 1000CP is designed for the environment (DFE) utilizing bio-derived chemistry with non-toxic and biodegradable raw materials.

KEY BENEFITS

- › Extremely high capacity to bind water
- › Very quick reaction of up to 60 seconds
- › Works also under saline water conditions
- › Excellent structuring effect on the soil
- › Lubricates and reduces friction

TYPICAL APPLICATIONS

- › Very liquid excavated muck
- › High water pressure
- › Difficulties to create a plug
- › Soils with low fines content

APPLICATION GUIDELINES

TamSoil 1000 CP will convert soil and water mixtures into a homogeneous and viscous paste. For most practical applications TamSoil 1000CP should be injected into the water/soil mixture at 0.5 -3 % by weight, the water binding capacity should be tested with local site water. Separate injection lines as well as separate dosing pumps should be used, the use of magnetic flowmeters should be avoided.

PACKAGING

TamSoil 1000CP is supplied in 200kg plastic drums or 1000kg IBCs.

STORAGE

TamSoil 1000CP should be stored shaded in unopened, original packaging, preferably at 5-35°C. If these conditions are maintained and the product packaging is unopened, a shelf life of one year can be expected.

TECHNICAL DATA

TamSoil 1000CP	
Appearance	Amber liquid
Odour	none
Density (kg/m ³)	1.03 approx.
pH	Not applicable
Water binding capacity	
- hard water (100ppm or 7°dH)	365 times
- saline water (2% NaCl)	122 times
Biodegradation (OECD 301F)	Readily biodegradable
All at 20°C	

All technical data stated herein is based on tests carried out under laboratory conditions.

ENVIRONMENTAL SUSTAINABILITY



Aquatic Toxicity: extremely low

- Fish NOEC > 1.000 mg/l (OECD 203)
- Daphnia EC₅₀ = 550 mg/l (OECD 202)
- Algae IC₅₀ = 540 mg/l (OECD 201)
- Not hazardous to waters



Biodegradation: excellent

- 85 % after 28 days (OECD 301 F)
- Readily biodegradable



Sustainability: good

- Carrier system based on re-newable raw materials

HEALTH & SAFETY

TamSoil 1000CP should only be used as directed. We always recommend that the Safety Data Sheet is carefully read prior to application of the material. Our recommendations for protective equipment should be strictly adhered to for your personal protection. The Safety data sheet is available upon request from your local Normet representative.