

Polymer Modified Soil Conditioning System

DESCRIPTION

TamSoil 267CF is a polymerised soil conditioning system specifically developed to be used on a tunnel boring machine (TBM). It acts as a soil conditioner for various types of soil conditions, especially below ground water table. TamSoil 267CF gives the excavated soil the necessary plastic properties and reduces wear at the cutterhead. TamSoil 267CF also creates a homogeneous and compressible spoil in order to reduce the cutterhead torque and secure a constant earth pressure in the working chamber during the excavating process.

KEY BENEFITS

- > Efficient mixing with the excavated soil, reducing cutter head torque
- > Works with both acidic and alkaline type soil conditions and salt water
- > Reduces permeability at the tunnel face
- > Especially designed for the use below groundwater
- > Environmentally safe and non-toxic

TYPICAL APPLICATIONS

- > EPB tunnel boring machinery
- > Soil conditioning
- > Change of rheological behaviour

TECHNICAL DATA

TamSoil 267CF	
Appearance	Brown Liquid
pH (5% solution)	7 - 9
Density	1.02 - 1.03
Solubility in water	100%

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

PACKAGING

TamSoil 267CF is supplied in 200 kg drums and 1000 kg IBC and bulk.

ENVIRONMENTAL SUSTAINABILITY



- Aquatic Toxicity: extremely low
- > fish: LC₅₀ = 3.000 mg/l (OECD 203)
 - > daphnia: EC₅₀ = 1.100 mg/l (OECD 202)
 - > algae: IC₅₀ = 550 mg/l (OECD 201)
- not hazardous to waters



- Biodegradation: excellent
- > 78.6 % after 28 days (OECD 301 F)
- readily biodegradable



- Sustainability: excellent
- > based on re-newable raw materials

APPLICATION GUIDELINES

TamSoil 267CF is designed to create a stable foam when used on foam generators in tunnel boring machines. The foam concentration (cF), foam expansion rate (FER) and the foam injection rate (FIR) of TamSoil 267CF depends on the geology encountered during tunnelling and the cutter head design.

However, the TamSoil 267CF requires typically a foam concentration ranging from 1.5% to 4%.

Depending on the geology it might be recommended to add other TamSoil stabilising polymers. These will further enhance the rheological behaviour of the soil.

STORAGE

TamSoil 267CF should be stored at room temperature (min 5°C and max 40°C), kept dry and out of direct sunlight or freezer condition. If these conditions are maintained and the product packaging is unopened, then a shelf life of one year can be expected.

HEALTH & SAFETY

TamSoil 267CF should only be used as directed. We always recommend that the Safety Data Sheet (SDS) 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.