

## Cormix® SCP4

### A NEW GENERATION VISCOSITY ENHANCING AND CLAY STABILIZER POLYMER

#### DESCRIPTION

**Cormix SCP4** is a blend of synthetic lubricating viscosity enhancing clay conditioning polymer additive used with bentonite. It is especially formulated for ground works. It may be used in fine sand, silt or clay with high water contents.

#### USES & ADVANTAGES

**Cormix SCP4** is used in bore pile, barrettes and diaphragm wall construction as well as with TBM excavation as pure polymer drilling fluid system without bentonite slurry.

Other applications include pipe jacking, HDD and drilling wells.

It is recommended for use with high permeability soil.

**Advantages include:** -

- Reduces disposal costs compared to Bentonite.
- Environmentally friendly.
- Stabilizes plastic clay soils.
- Degradable no bacteria growth.
- Reduces clay sticking.
- Good stabilization of excavations.
- Suitable for all types of soil.
- Pile open time extended.
- Smaller site footprint.
- Shorter mobilizations.
- Creates thin filter cake at the sand layer.
- Reduces filtrate loss.
- Low dosage
- Builds sands, encapsulates clay, prevents shale slaking.

#### PROPERTIES

**Appearance:** Light brown Powder  
**Bulk Density:** 0.70 - 0.90 kg/litre  
**pH(0.1% Solution) :** 7.0 - 8.0  
**Flash Point:** Not applicable  
**Chloride Content:** Nil

#### MIXING

**Cormix SCP4** powder is mixed with water in a mixing tank by paddle mixer for uniform dispersion before introducing into the clay or soil.

##### Tank Mixing

Add **Cormix SCP4** slowly into a rapid, turbulent stream of water as filling the tank. Start mixing with paddles for 5 - 15 minutes depending on dosage used.

Avoid use of shear mixers or centrifugal pumps.

Over shearing may entrain air. Pour polymer fluid directly into the bore hole at the most unstable or high permeability zone where pressure differences in the soil is expected due to the movement of water at the time of drilling process. The auger should be raised up and down slowly into the slurry column. Slow rotation may enhance distribution.

In general 0.5 kg of **Cormix SCP4** per cubic meter of water is used as a starting point for soil conditioning. This dosage may be changed to suit local ground conditions.

#### APPLICATION & TESTING

**Cormix SCP4** can be used with various systems including bore pile construction, auger drilling and with TBMs.

**Cormix SCP4** provides a better polymer free slurry suitable for bore hole stabilization with less interface contamination ie the slurry to metal and slurry to soil.

**Cormix SCP4** also provides high cohesion for binding sand and gravels together to allow easy excavation and bore stabilization.

Testing of the slurry should be carried out before use. Test pH, marsh funnel viscosity, density, filtrate loss and sand content. Consult Cormix for advise.

#### TESTING EQUIPMENT

Marsh Funnel Viscometer  
 Weighing Balance  
 pH Paper  
 Mud Balance  
 Fluid Sampler  
 Filter Press

#### DOSAGE

Dosages vary from 0.5 -2 kg/m<sup>3</sup> of water.

Type of sub-soil condition	Concentration (kg/m <sup>3</sup> )
Clay / Silty / Fine & Medium sands	0.5-0.7
Coarse sand & Gravel	0.8-1.5
Cobbles & Rocks	1.6-2.0

#### PACKAGING

25 Kg Bags .

#### STORAGE & SHELF LIFE

Store **Cormix SCP4** between above 5°C and below 40°C. The shelf life when stored in unopened original containers is 12 months.

#### HEALTH & SAFETY

**Cormix SCP4** is formulated from chemicals which present no fire or health hazards. However, if it is spilt, the floor will be made slippery and should be washed down immediately with cold water.

For further information contact Cormix.

#### TECHNICAL SERVICE

The Cormix International Technical Service Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

#### QUALITY ASSURANCE

ISO 9001 : 2015 verified by TUV Nord.  
 ISO 14001 : 2015 verified by Lloyd's Register International.

#### CONTACT DETAILS

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