

Colloidal Silica for Soil and Rock Injection

## DESCRIPTION

TamCrete 400CS is an environmentally friendly, highly stable, single component, ultra-low viscosity colloidal silica primarily used for injection into sands, silts, and fine joints and fissures in rock strata. TamCrete 400CS is available in three grades with varying SiO<sub>2</sub> content.

By adjusting the accelerator dosage, TamCrete 400CS can be used where very slow migration and penetration capabilities are required. The chemical properties and hydrophilic nature of TamCrete 400CS, ensures excellent adhesion to wet / saturated surfaces.

## KEY BENEFITS

- > Single component, low viscosity
- > Good adhesion to wet surfaces
- > Solvent-free and environment friendly
- > Adjustable gel time
- > Standard grouting equipment can be used
- > Can clean with water

## TYPICAL APPLICATIONS

- > Pre-injection of rock, sand and silt strata
- > Consolidation of soil
- > Tunnel waterproofing and leak sealing
- > Passive ground stabilisation

## TECHNICAL DATA

TamCrete 400CS				
	TamCrete CS15	TamCrete CS30	TamCrete CS40	TamCrete Accelerator
Form	Liquid	Liquid	Liquid	Liquid
Density (g/cm <sup>3</sup> )	1.1	1.2	1.3	1.07
Viscosity (cP)	13	5	16	2
SiO <sub>2</sub> (%)	15	30	40	-
pH Value	9 - 10	9 - 10	9 - 10	6 - 7
All at 25°C				

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

## APPLICATION GUIDELINES

Pre-determine the required gel time of TamCrete 400CS. Results based on TamCrete 400CS 30 with accelerator solution fixed at 10% and ambient temperature of 26°C.

Accelerator Volume by weight of Part A	15%	20%	25%	30%
Gel time achieved	260 min	100 min	60 min	30 min

Add the required dosage of accelerator to the TamCrete 400CS whilst agitating and ensure it is well mixed prior to commencement of injection.

Avoid over mixing (2 minutes is sufficient). Pump the TamCrete 400CS uniformly through an injection packer using any kind of grout pump, such as a mono type, diaphragm type or piston type pump.

Note: A series of Grout Packers are available for selection. Contact your local Normet representative for technical installation advice.

### Yield

1 kg = 0.83 litres

## PACKAGING

TamCrete 400CS and TamCrete 400CS Accelerator are available in 20 litre pails, 200 litre drums and 1000 litre IBC tanks. Packaging size may vary subject to local regulations and requirements.

## STORAGE

TamCrete 400CS should be stored at room temperature above 5°C, kept dry and out of direct sunlight. If these conditions are maintained and the product packaging is unopened, then a shelf life of one year can be expected.

## HEALTH & SAFETY

TamCrete 400CS 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.

Whilst any information and/or specification contained herein is to the best of our knowledge, true and accurate, we always recommend that a trial be carried out to confirm suitability of the product. Please note regional climatic conditions may cause a variation in the performance of the product. No warranty is given or implied in connection with any recommendations or suggestions made by us or our representatives, agents or distributors. The information in this data sheet is effective from the date shown and supersedes all previous data. Please check with your local Normet office to confirm that this is current issue.