

## Technical Data Sheet

# Construction Technologies Civil Engineering, Drilling & Tunnelling

### **VINILMUD P40 S**

VINILMUD P40 S is a vinylic synthetic totally water-soluble polymer and it is mainly used for the preparation of stabilizing and lubricating muds in drilling and civil engineering application. The VINILMUD P40 S drilling fluid is easy to prepare and easy to dispose after usage. Its main characteristics are its stabilizing and lubricating properties and the possibility to be recycled many times. The rheologic and stabilizing properties of the drilling fluids prepared with VINILMUD P40 S are easily to detect during the usage and through easy tests which can also be performed directly on job site.

Appearance	Opaque to White granular solids	
Specific Gravity:	0.90-1.01	
Density	0,6 - 0,7 g/cm3	
Filtration properties	medium – low	
In water solutions		

Marsh Viscosity: 60 – 70 sec (sol.0,075%		
Density:	1,00 - 1,01 (sol.0,075%)	
pH	7,5 – 9 (sol.0,075%)	

#### **CONTAMINATION RESISTANCE**

The molecular chain of the polymer is designed in order to guarantee high performance also in case of contact with contaminated water:

% OF POLYMER IN WATER	CONTAMINATED WATER ADD	FINAL CONCENTRATION OF THE SLURRY (%)	MARSH VISCOSITY (sec)
0,075	1	0,07	60 - 70
0,094	20% Sea-water	0,07	60 - 70
0,094	20% Ca-water	0,07	60 - 70

#### **PREPARATION**

In order to prepare VINILMUD P40 S based fluids, it is not necessary to have special equipments such as it is needed for the preparation of bentonite fluids. The complete hydration of the polymer is realized in approximately half an hour. The long chain of vinyl polymers such as VINILMUD P40 S case, requires to the operators a strict care on the agitation speed and in particular on the kind of pump to be used for the mud injection. A volumetric pump is preferable to a centrifuge.

#### **DOSAGE**

The VINILMUD P40 S dosage generally varies according to the lubricating and stabilizing characteristics needed by the operators, but above all varies according to the soil condition on which the job is performed. The dosage of polymer suitable for low permeability and clayey soils is around 0,3 Kg\m3 of fresh water up to a dosage of 1,5 Kg/m3 for jobs on high permeability soils..

#### **DISPOSAL**

After usage VINILMUD P40 S fluids, before disposal, can be treated with oxidizing agents in order to be sure that any trace of active material has been eliminated. The most popular products used for treatment of the vinyl polymer muds, are sodium hypoclorite (bleaching agent) and oxygen peroxide

Information given in this bulletin is based on the state of our knowledge at the date of publication and are believed to be accurate, but do not constitute any engagement or warranty from our part. Buyers and users should make their own assessments under their own conditions and for their own requirements. Information may be changed without any notice. For mandatory characteristics and performance please refer to our Sale Specifications.

