

GYPSUM

Calcium Sulphate

REDUCE TORQUE AND DRAG

Gypsum ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$) is a naturally hydrated Calcium Sulphate and is only slightly soluble in water.

Gypsum is used as the source of calcium in clear-water drilling and in other inhibitive mud systems.

In floc-water drilling normal concentrations of calcium fall in the range of 400-800 mg/L. "Gyp based muds" are used for specific applications (i.e. drilling thick sections of anhydrite or cement).

In a Gyp-Gel system maintain the Ca^{++} at 400-600 mg/L to ensure the system maintains its "gypped-over" nature.

FEATURES & BENEFITS

- Economical source of calcium ions for inhibition.
- Economical treatment to remove carbonate contamination.
- Widely available.
- Reduces soluble carbonates.

PHYSICAL PROPERTIES:

Appearance: Light grey powder
 Specific Gravity: 2.9 (rock)
 Bulk Density: 1120-1424 kg/m³

CHEMICAL PROPERTIES:

Type: Inorganic salt
 Solubility: Slight (water)
 pH: 6.5

MIXING & HANDLING

Gypsum can be added to the mud system through the mud hopper. In lightly treated bentonite based systems the mud will flocculate with consequent thickening and an increase in fluid loss.

Gypsum is hygroscopic; therefore it should be stored in a dry environment to avoid lumping and hardening. It is advisable to use a dust mask and eye protection while mixing all powdered products. A dust hazard is present while gypsum is being mixed.

WHMIS: Not controlled

TDG: Not regulated

Packaging: 50lb sack

