

CALCIUM CHLORIDE

Versatile clay & shale inhibitor, weighting agent and cement accelerant

DESCRIPTION

CALCIUM CHLORIDE (CaCl_2) is a highly soluble calcium salt used to make drilling and workover fluids or brines.

APPLICATIONS

CALCIUM CHLORIDE can be used to prepare weighted drilling fluids where formation pressures required densities ranging from SG 1.02 – 1.40 (8.5 – 11.7lb/bbl). **CALCIUM CHLORIDE** can also added as a source of calcium for clay & shale inhibition.

When added to cement slurries, **CALCIUM CHLORIDE** decreases thickening time, increases early strength and shortens the time taken for cement properties to take hold.

ADVANTAGES

- Inexpensive and readily available
- Stabilises problematic clay and shales
- Easy to mix
- Compatible with most drilling fluids
- Provides inhibition and additional weight
- Compatible with other calcium, bromide and zinc based brines.

TYPICAL PROPERTIES

Physical Appearance	White crystals
Specific Gravity	1.8 – 2

USAGE

Drilling Application / Desired Result	Kilograms per 1000
Clay & Shale inhibition	2.5% (25 kg) - 7.5% (75 kg)
Cement accelerant	3% of total grout volume

WEIGHTING TABLE

CONCENTRATION (% WEIGHT)	DENSITY (SPECIFIC GRAVITY)	CHLORIDE (mg / ltr)
1	1.009	6,454
5	1.043	33,360
10	1.085	69,440
15	1.132	108,624
20	1.030	151,040
25	1.037	196,880
30	1.043	246,528
35	1.050	300,048
40 (saturation)	1.057	357,888