



# Oilfield Fluids

Tiger Calcium offers a variety of chemicals used in the oilfield as components of well drilling, completion and workover fluids. To meet the need for these important products, Tiger Calcium Services works to develop and supply high-quality, filtered well kill fluids throughout North America. With an experienced engineering team and state-of-the-art facility, Tiger Calcium modifies calcium chloride, sodium chloride, potassium chloride, calcium bromide, zinc bromide and calcium nitrate to create customized oilfield fluids to meet the demands of customers. The densities of our products range from 1000kg/m<sup>3</sup> to 2300kg/m<sup>3</sup>, making them ideal for use in the oilfield.

## Product Information

	<b>Application</b>	<b>Composition</b>
<b>Coal Guard</b>	Dust suppressant for mining and industrial	Calcium Chloride natural liquid with 3% corrosion inhibitors
<b>Calcium Chloride (Liquid)</b>	Calcium chloride liquid is used as a component of drilling, completion, and workover fluids. Also used for weight and/or inhibition.	25% Ca/MgCl <sub>2</sub> , 1.295 specific gravity or 32% Ca/MgCl <sub>2</sub> , 1.325 S.G. or 35% Ca/MgCl <sub>2</sub> , 1.360 specific gravity
<b>Calcium Chloride (Flake and Pellets)</b>	Calcium chloride flake and pellets are used as a component of drilling, completion, and workover fluids. Also used for weight and/or inhibition.	Flake: 77-80% of CaCl <sub>2</sub> Pellets: 94-97% CaCl <sub>2</sub>
<b>Calcium Chloride / Calcium Nitrate Heavy Brine</b>	Heavy density calcium chloride liquid comprising CaCl <sub>2</sub> and Ca(NO <sub>3</sub> ) <sub>2</sub> for use as drilling, workover, and completion fluids	Specific density up to 1.60 with crystallization point below -25°C
<b>Calcium Chloride / Calcium Nitrate / Calcium Bromide/ Zinc Bromide Heavy Brines</b>	High density clear well fluids comprising CaCl <sub>2</sub> , Ca(NO <sub>3</sub> ) <sub>2</sub> , CaBr <sub>2</sub> , ZnBr <sub>2</sub> for use as drilling, workover, and completion fluids	Specific density up to 2.30 with crystallization point below -55°C
<b>Calcium Nitrate (Envirofloc)</b>	Envirofloc calcium nitrate is used in drilling fluids	Refined, granular material, high soluble

<b>Potash (KCL) (Potassium Chloride)</b>	Provides potassium ions to inhibit shale swelling and dispersion	2% to 20% solutions for drill-in and completion activities, also available in white crystals.
<b>Salt Brine (Sodium Chloride)</b>	Controls active shale dispersion and retards the dissolution of massive salt sections and salt stringers	20% NaCl & 2% CaCl <sub>2</sub> with specific gravity 1.20

**Properties of Tiger's Heavy Brines**

DENSITY	KG./M3	LBS./US GALLON	LBS./ BBL.	CRYSTALLIZATION TEMPERATURE	
				°C	°F
1.3	1300	10.85	455.65	-40	-40
1.32	1320	11.02	462.66	-48	-54
1.35	1350	11.27	473.175	-46	-51
1.36	1360	11.35	476.68	-45	-49
1.37	1370	11.43	480.185	-45	-49
1.38	1380	11.52	483.69	-44	-47
1.39	1390	11.60	487.195	-48	-54
1.4	1400	11.68	490.7	-48	-54
1.42	1420	11.85	497.71	-45	-49
1.45	1450	12.10	508.225	-43	-45
1.48	1480	12.35	518.74	-43	-45
1.5	1500	12.52	525.75	-42	-44
1.55	1550	12.94	543.275	-42	-44
1.6	1600	13.35	560.8	-40	-40
1.65	1650	13.77	578.325	-35	-31
1.7	1700	14.19	595.85	-21	-6
1.75	1750	14.60	613.375	-16	3
1.8	1800	15.02	630.9	-21	-6
1.85	1850	15.44	648.425	-20	-4
1.9	1900	15.86	665.95	-52	-62
1.95	1950	16.27	683.475	-48	-54
2	2000	16.69	701	-40	-40
2.1	2100	17.53	736.05	-30	-22
2.3	2300	19.19	806.15	-15	5