

Salt

Weighting Agent

Description

SALT is the common name for sodium chloride (NaCl). This widely available commercial chemical is an economical product for formulating drilling, workover, completion fluids up to 1.2 g/cm³.

Applications/functions

- Allows to increase density of water-base fluids to 1.20 g/cm³
 - Helps to control active shale dispersion
 - Improves shale inhibition by decreasing water activity in OBM
 - Reduces salt dissolution when drilling halite intervals
 - Reduces the freezing point of water-base fluids
 - Reduces the potential of forming gas hydrates
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Advantages

- Widely available economical product for density and inhibition.
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Typical properties

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|----------------------|--|
| • Appearance | White crystals |
| • Specific gravity | 2.16 g/cm ³ |
| • Solubility at 20°C | 360 kg/m ³ (26 % by weight) |
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Recommended treatment

Refer to page 2 for the salt table.

Package

Salt is packaged in 1000 kg big bags.

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NaCl Salt Table

% Salt	Density, kg/m ³	Salt Content, kg/m ³	Salt (NaCl), mg/l	Chlorides (Cl ⁻), mg/l	Water Volume, m ³	Freezing point, °C
1	1006	8.56	10050	6100	0.998	-0.6
3	1018	25.68	30660	18600	0.996	-1.8
4	1030	45.65	41070	24920	0.993	-2.4
6	1042	62.77	62480	37910	0.981	-3.7
7	1054	79.89	73500	44600	0.976	-4.4
9	1066	99.86	95760	57500	0.969	-5.8
11	1078	116.98	118700	71950	0.952	-7.4
12	1090	134.10	130300	79070	0.952	-8.2
14	1102	154.07	153100	92900	0.948	-9.9
15	1114	174.04	165800	100500	0.940	-10.9
17	1126	194.02	190600	115500	0.933	-12.9
18	1138	211.14	202700	123000	0.926	-14.0
20	1150	231.11	229600	139320	0.919	-16.5
21	1162	251.08	242800	147200	0.909	-18.6
23	1174	271.05	269700	163500	0.902	-20.7
24	1186	291.03	283300	171900	0.895	-15.0
26	1198	311.00	311300	188900	0.888	-3.9