

Salt Brine Statistics and Rock Salt

Salt brine eutectic 23.3% @ 59° F

Salt brine specific gravity at 23.3% 59°F 1.179

Pounds of salt per gallon of brine 2.28 lbs @ 23.3% 59°F

Salt weight per cubic foot ASTM spec D 632 approx 80 lbs

Salt weight per Cubic Yard ASTM spec D 632 approx 2160 lbs

Freezing Point of Salt Brine by Percent of Weight

% of NaCl By Weight	Spec. Grov. 15°C - 59° F	Freeze Point °C	Freeze Point °F
0	1.000	0.00	32.0
1	1.007	-0.58	31.0
2	1.014	-1.13	30.0
3	1.021	-1.72	28.90
4	1.028	-2.35	27.80
5	1.035	-2.97	26.7
6	1.043	-3.63	25.5
7	1.051	-4.32	24.2
8	1.069	-5.03	22.9
9	1.027	-5.77	21.6
10	1.074	-6.54	20.2
11	1.082	-7.34	18.8
12	1.089	-8.17	17.3
13	1.097	-9.03	15.7
14	1.104	-9.94	14.1
15	1.112	-10.88	12.4
16	1.119	-11.90	10.6
17	1.127	-12.93	8.7
18	1.135	-14.03	6.7
19	1.143	-15.21	4.6
20	1.152	-16.46	2.4
21	1.159	-17.78	0.0
22	1.168	-19.19	-2.5
23	1.176	-20.69	-5.2
23.3 (E)	1.179	-21.13	-6.0
24	1.184	-17.00	-1.4
25	1.193	-10.40	13.3
26	1.201	-2.30	27.9
26.3 (S)	1.203	-0.00	32.00

Pounds of Ice Melt Per Pound of Salt

Temperature Degrees F.	One Pound of Sodium Chloride (salt)
30	46.3 lbs of ice
25	14.4 lbs of ice
20	8.6 lbs of salt
15	6.3 lbs of salt
10	4.9 lbs of salt
5	4.1 lbs of salt
0	3.7 lbs of salt
-6	3.2 lbs of salt

E = Eutectic point

S = Saturation point

Eutectic Point: is the percent of weight, which a chemical solution has the lowest freeze point.

Saturation Point: is the point which water will receive no more of another substance in a solution