



Brine Make-up & Storage Systems

Sodium Chloride Table for 60°F (15.5°C)

Salometer Degree	Brine Strength			Pound/Gallon Brine		Gram/Liter Brine		Freezing Point*	
	Specific Gravity	Baume Degree	NaCl % Weight	NaCl	Water	NaCl	Water	°F	°C
0	1.000	0.0	0.00	.000	8.328	.0	998	+ 32.0	0
2	1.004	0.6	0.53	.044	8.318	5.3	996	+ 31.5	- 0.2
4	1.007	1.1	1.06	.089	8.297	10.6	995	+ 31.1	- 0.5
6	1.011	1.6	1.58	.133	8.287	16.0	993	+ 30.5	- 0.8
8	1.015	2.1	2.11	.178	8.275	21.4	991	+ 30.0	- 1.1
10	1.019	2.7	2.64	.224	8.262	26.8	990	+ 29.3	- 1.5
12	1.023	3.3	3.17	.270	8.250	32.3	988	+ 28.8	- 1.8
14	1.026	3.7	3.70	.316	8.229	37.9	986	+ 28.2	- 2.1
16	1.030	4.2	4.22	.362	8.216	43.4	985	+ 27.6	- 2.4
18	1.034	4.8	4.75	.409	8.202	49.0	983	+ 27.0	- 2.8
20	1.038	5.3	5.28	.456	8.188	54.6	981	+ 26.4	- 3.1
22	1.042	5.8	5.81	.503	8.175	60.3	979	+ 25.7	- 3.5
24	1.046	6.4	6.34	.552	8.159	66.1	977	+ 25.1	- 3.8
26	1.050	6.9	6.86	.600	8.144	71.9	976	+ 24.4	- 4.2
28	1.054	7.4	7.39	.649	8.129	77.7	974	+ 23.7	- 4.6
30	1.058	7.9	7.92	.698	8.113	83.6	972	+ 23.0	- 5.0
32	1.062	8.5	8.45	.747	8.097	89.5	970	+ 22.3	- 5.4
34	1.066	9.0	8.97	.797	8.081	95.4	968	+ 21.6	- 5.8
36	1.070	9.5	9.50	.847	8.064	101.4	966	+ 20.9	- 6.2
38	1.074	10.0	10.03	.897	8.047	107.5	964	+ 20.2	- 6.5
40	1.078	10.5	10.56	.948	8.030	113.5	962	+ 19.4	- 7.0
42	1.082	11.0	11.09	.999	8.012	119.6	960	+ 18.7	- 7.4
44	1.086	11.5	11.61	1.050	7.994	125.8	957	+ 17.9	- 7.8
46	1.090	12.0	12.14	1.102	7.976	132.0	955	+ 17.1	- 8.3
48	1.094	12.5	12.67	1.154	7.957	138.2	953	+ 16.2	- 8.8
50	1.098	12.9	13.20	1.207	7.937	144.5	951	+ 15.4	- 9.2
52	1.102	13.4	13.73	1.260	7.918	150.9	949	+ 14.5	- 9.7
54	1.106	13.9	14.25	1.313	7.898	157.2	946	+ 13.7	- 10.2
56	1.110	14.4	14.78	1.366	7.878	163.7	944	+ 12.8	- 10.7
58	1.114	14.8	15.31	1.420	7.858	170.1	941	+ 11.8	- 11.2
60	1.118	15.3	15.84	1.475	7.836	176.7	939	+ 10.9	- 11.7
62	1.122	15.8	16.37	1.529	7.815	183.2	936	+ 9.9	- 12.3
64	1.126	16.2	16.89	1.584	7.794	189.8	934	+ 8.9	- 12.8
66	1.130	16.7	17.42	1.639	7.772	196.5	932	+ 7.9	- 13.4
68	1.135	17.2	17.95	1.697	7.755	203.7	929	+ 6.8	- 14.0
70	1.139	17.7	18.48	1.753	7.733	210.0	926	+ 5.7	- 14.6
72	1.143	18.1	19.00	1.809	7.710	216.7	924	+ 4.6	- 15.2
74	1.147	18.6	19.53	1.866	7.686	223.5	921	+ 3.4	- 15.9
76	1.152	19.1	20.06	1.925	7.669	230.6	918	+ 2.2	- 16.5
78	1.156	19.6	20.59	1.982	7.645	237.4	916	+ 1.0	- 17.2
80	1.160	20.0	21.12	2.040	7.620	244.4	913	- 0.4	- 18.0
82	1.164	20.4	21.64	2.098	7.596	251.5	911	- 1.6	- 18.6
84	1.169	21.0	22.17	2.158	7.577	258.5	908	- 3.0	- 19.4
86	1.173	21.4	22.70	2.218	7.551	265.7	905	- 4.4	- 20.2
88	1.178	21.9	23.23	2.279	7.531	272.9	902	- 5.8	- 21.0
88.3	1.179	22.0	23.31	2.288	7.528	274.1	901	- 6.0	- 21.0**
90	1.182	22.3	23.75	2.338	7.506	280.1	899	- 1.1	- 18.5
92	1.186	22.7	24.28	2.398	7.479	287.4	896	+ 4.8	- 15.0
94	1.191	23.3	24.81	2.459	7.460	294.7	893	+ 11.1	- 11.6
95	1.193	23.5	25.08	2.491	7.444	298.4	892	+ 14.4	- 9.8
96	1.195	23.7	25.34	2.522	7.430	302.1	890	+ 18.0	- 7.8
97	1.197	23.9	25.60	2.552	7.417	305.08	888	+ 21.6	- 5.8
98	1.200	24.2	25.87	2.585	7.409	309.6	887	+ 25.5	- 3.6
99	1.202	24.4	26.13	2.616	7.394	313.4	886	+ 29.8	- 1.2
99.6	1.203	24.5	26.29	2.634	7.386	315.6	885	+ 32.3†	+ 0.2†
100	1.204	24.6	26.40	2.647	7.380	317.2	884	+ 60.0‡	+ 15.5‡

The above table applies to brine tested at the temperature of 60°F

For brine tested at a warmer or colder temperature than 60°F see Table of Salometer Corrections

* Temperature at which freezing begins, ice forms, brine concentrates, and the freezing point lowers to eutectic

** Eutectic point, for brines stronger than eutectic, the temperatures shown are the saturation temperatures for sodium chloride dihydrate

Brines stronger than eutectic deposit excess sodium chloride as dihydrate when cooled, and freeze at eutectic

† Transition temperature from anhydrous salt to dihydrate

‡ Saturated brine at 60°F

Above data courtesy of Morton Salt