

Approximate Properties of Solutions of Calcium Chloride

% CaCl ₂	Approx. Specific Gravity @ 77°F (25°C)	Weight lb/gal @ 77°F (kg/liter @ 25°C)	Gallons per Ton of Sol. @ 77°F (liters/dry metric ton @ 25°C)	Gallons per Dry Ton @ 77°F (liters/dry metric ton @ 25°C)	DOWFLAKE 77–80% CaCl ₂ Equivalent lb/gal of Sol. @ 77°F (kg/liter @ 25°C)	PELADOW 90%–92% CaCl ₂ Equivalent lb/gal of Sol. @ 77°F (kg/liter @ 25°C)	Anhydrous Calcium Chloride 94–97% Mini-pellets CaCl ₂ Equivalent lb/gal of Sol. @ 77°F (kg/liter @ 25°C)	Approx. Freezing Point in °F (°C)
0	1.000	8.31 (0.997)						+32 (0)
10	1.090	9.06 (1.087)	221 (920)	2,208 (9,200)	1.16 (0.139)	1.00 (0.119)	0.96 (0.114)	+20 (–7)
11	1.100	9.14 (1.097)	219 (912)	1,989 (8,287)	1.29 (0.155)	1.10 (0.133)	1.06 (0.127)	+18 (–8)
12	1.110	9.22 (1.107)	217 (903)	1,808 (7,528)	1.42 (0.170)	1.22 (0.146)	1.16 (0.140)	+16 (–9)
13	1.120	9.31 (1.117)	215 (895)	1,653 (6,887)	1.55 (0.186)	1.33 (0.160)	1.27 (0.153)	+14 (–10)
14	1.129	9.38 (1.126)	213 (888)	1,523 (6,334)	1.68 (0.202)	1.44 (0.173)	1.38 (0.166)	+12 (–11)
15	1.139	9.47 (1.136)	211 (880)	1,408 (5,869)	1.82 (0.218)	1.56 (0.187)	1.50 (0.179)	+10 (–12)
16	1.149	9.55 (1.146)	209 (873)	1,309 (5,454)	1.96 (0.235)	1.68 (0.201)	1.61 (0.193)	+8 (–13)
17	1.159	9.63 (1.156)	208 (865)	1,222 (5,089)	2.10 (0.252)	1.80 (0.216)	1.72 (0.207)	+5 (–15)
18	1.169	9.71 (1.165)	206 (858)	1,144 (4,769)	2.24 (0.269)	1.92 (0.231)	1.84 (0.221)	+2 (–17)
19	1.179	9.80 (1.175)	204 (851)	1,074 (4,479)	2.39 (0.286)	2.05 (0.245)	1.96 (0.235)	–1 (–18)
20	1.189	9.88 (1.185)	202 (844)	1,012 (4,219)	2.53 (0.304)	2.17 (0.261)	2.08 (0.250)	–4 (–20)
21	1.199	9.96 (1.195)	201 (837)	956 (3,985)	2.68 (0.322)	2.30 (0.276)	2.20 (0.264)	–8 (–22)
22	1.209	10.05 (1.205)	199 (830)	905 (3,772)	2.83 (0.340)	2.43 (0.291)	2.33 (0.279)	–12 (–24)
23	1.219	10.13 (1.215)	197 (823)	858 (3,578)	2.99 (0.358)	2.56 (0.307)	2.45 (0.294)	–16 (–27)
24	1.228	10.20 (1.224)	196 (817)	817 (3,404)	3.14 (0.377)	2.69 (0.323)	2.58 (0.309)	–20 (–29)
25	1.240	10.30 (1.236)	194 (809)	777 (3,236)	3.30 (0.396)	2.83 (0.340)	2.71 (0.325)	–25 (–32)
26	1.251	10.40 (1.247)	192 (802)	740 (3,084)	3.47 (0.416)	2.97 (0.356)	2.85 (0.341)	–31 (–35)
27	1.263	10.50 (1.259)	190 (794)	706 (2,942)	3.63 (0.436)	3.12 (0.374)	2.98 (0.358)	–38 (–39)
28	1.275	10.60 (1.271)	189 (787)	674 (2,810)	3.81 (0.456)	3.26 (0.391)	3.12 (0.375)	–46 (–43)
29	1.287	10.69 (1.283)	187 (779)	654 (2,688)	3.97 (0.477)	3.41 (0.409)	3.26 (0.392)	–53 (–47)
29.6	1.294	10.75 (1.290)	186 (775)	629 (2,619)	4.08 (0.490)	3.50 (0.420)	3.35 (0.402)	–60 (–51)
30	1.298	10.79 (1.294)	185 (773)	618 (2,578)	4.15 (0.498)	3.56 (0.427)	3.41 (0.409)	–52 (–47)
31	1.310	10.89 (1.306)	184 (766)	592 (2,470)	4.33 (0.519)	3.71 (0.445)	3.55 (0.426)	–34 (–37)
32	1.322	10.99 (1.318)	182 (759)	569 (2,371)	4.51 (0.541)	3.86 (0.463)	3.70 (0.444)	–17 (–27)
33	1.334	11.09 (1.330)	180 (752)	547 (2,278)	4.69 (0.563)	4.02 (0.482)	3.85 (0.462)	–4 (–20)
34	1.345	11.18 (1.341)	179 (746)	526 (2,193)	4.87 (0.585)	4.18 (0.501)	4.00 (0.480)	+10 (–12)
35	1.357	11.28 (1.353)	177 (739)	507 (2,112)	5.06 (0.607)	4.34 (0.520)	4.16 (0.498)	+20 (–7)
36	1.369	11.38 (1.365)	176 (733)	488 (2,035)	5.25 (0.630)	4.50 (0.540)	4.31 (0.517)	+30 (–1)
37	1.381	11.48 (1.377)	174 (726)	471 (1,963)	5.45 (0.653)	4.67 (0.560)	4.47 (0.536)	+39 (+4)
38	1.392	11.57 (1.388)	173 (720)	455 (1,891)	5.64 (0.676)	4.83 (0.580)	4.63 (0.555)	+48 (+9)
39	1.404	11.67 (1.400)	171 (714)	439 (1,832)	5.84 (0.700)	5.00 (0.600)	4.79 (0.575)	+55 (+13)
40	1.416	11.77 (1.412)	170 (708)	425 (1,771)	6.04 (0.724)	5.17 (0.621)	4.96 (0.594)	+61 (+16)
41	1.428	11.87 (1.424)	168 (702)	411 (1,713)	6.24 (0.748)	5.35 (0.631)	5.12 (0.614)	+65 (+18)
42	1.439	11.96 (1.435)	167 (697)	398 (1,659)	6.44 (0.773)	5.52 (0.662)	5.29 (0.634)	+69 (+21)
45	1.474	12.25 (1.470)	163 (680)	363 (1,512)	7.07 (0.848)	6.06 (0.727)	5.80 (0.696)	+78 (+26)