

# SPECIFIC GRAVITY CONVERSION TABLES

**NOTE:** To convert degrees API to specific gravity (liquids lighter than water)

$$\text{Sp. Gr.} = \frac{141.5}{131.5 + \text{Degrees API}}$$

To convert degrees Baumé to specific gravity (liquids heavier than water)

$$\text{Sp. Gr.} = \frac{145}{145 - \text{Degrees Baumé}}$$

## CONVERSION TABLE BAUME

**Specific Gravity — Weight per Gallon for liquids HEAVIER than water**

Baumé	Specific Gravity	Wght. per Gal.	Baumé	Specific Gravity	Wght. per Gal.	Baumé	Specific Gravity	Wght. per Gal.	Baumé	Specific Gravity	Wght. per Gal.	Baumé	Specific Gravity	Wght. per Gall
0	1.000	8.33	10	1.074	8.95	20	1.160	9.67	30	1.260	10.50	40	1.381	11.51
1	1.006	8.38	11	1.082	9.02	21	1.169	9.74	31	1.271	10.59	45	1.450	12.08
2	1.014	8.45	12	1.090	9.08	22	1.178	9.82	32	1.283	10.69	50	1.526	12.72
3	1.021	8.51	13	1.098	9.15	23	1.188	9.90	33	1.294	10.78	55	1.611	13.42
4	1.028	8.57	14	1.106	9.22	24	1.198	9.98	34	1.306	10.88	60	1.705	14.21
5	1.035	8.62	15	1.115	9.29	25	1.208	10.07	35	1.318	10.98	65	1.812	15.10
6	1.043	8.69	16	1.125	9.37	26	1.218	10.15	36	1.330	11.08	70	1.933	16.11
7	1.050	8.75	17	1.132	9.43	27	1.228	10.23	37	1.342	11.18	.....	.....	.....
8	1.058	8.82	18	1.141	9.51	28	1.239	10.32	38	1.355	11.29	.....	.....	.....
9	1.066	8.88	19	1.150	9.58	29	1.250	10.42	39	1.367	11.39	.....	.....	.....

## CONVERSION TABLE API

**Specific Gravity — Weight per Gallon for liquids LIGHTER than water**

A.P.I.	Specific Gravity	Wght. per Gal.	A.P.I.	Specific Gravity	Wght. per Gal.	A.P.I.	Specific Gravity	Wght. per Gal.	A.P.I.	Specific Gravity	Wght. per Gal.	A.P.I.	Specific Gravity	Wght. per Gall
10	1.000	8.33	31	0.871	7.25	52	0.7712	6.42	73	0.6926	5.76	91	.636	5.29
11	0.993	8.27	32	0.865	7.21	53	0.7670	6.39	74	0.6893	5.73	92	.633	5.27
12	0.986	8.21	33	0.860	7.16	54	0.7637	6.35	75	0.6859	5.70	93	.630	5.25
13	0.979	8.16	34	0.855	7.12	55	0.7597	6.32	76	0.6826	5.68	94	.628	5.22
14	0.973	8.10	35	0.850	7.08	56	0.7556	6.28	77	0.6793	5.65	95	.625	5.20
15	0.966	8.04	36	0.845	7.03	57	0.7516	6.28	78	0.6750	5.62	96	.622	5.18
16	0.959	7.99	37	0.840	6.99	58	0.7476	6.22	79	0.6728	5.60	97	.619	5.15
17	0.953	7.94	38	0.835	6.95	59	0.7437	6.18	80	0.6696	5.57	98	.617	5.13
18	0.946	7.88	39	0.830	6.91	60	0.7398	6.15	81	0.6665	5.54	99	.614	5.11
19	0.940	7.83	40	0.825	6.87	61	0.7359	6.12	82	0.6634	5.52	100	.611	5.09
20	0.934	7.78	41	0.820	6.83	62	0.7310	6.09	83	0.6603	5.49	.....	.....	.....
21	0.928	7.73	42	0.816	6.79	63	0.7283	6.06	84	0.6572	5.47	.....	.....	.....
22	0.921	7.68	43	0.811	6.75	64	0.7246	6.03	85	0.6541	5.44	.....	.....	.....
23	0.916	7.63	44	0.806	6.71	65	0.7209	5.99	86	0.6511	5.42	.....	.....	.....
24	0.910	7.58	45	0.802	6.68	66	0.7172	5.96	87	0.6481	5.39	.....	.....	.....
25	0.904	7.53	46	0.797	6.64	67	0.7136	5.93	88	0.6452	5.37	.....	.....	.....
26	0.898	7.48	47	0.793	6.60	68	0.7090	5.90	89	0.6422	5.34	.....	.....	.....
27	0.893	7.43	48	0.788	6.56	69	0.7065	5.87	90	0.6393	5.32	.....	.....	.....
28	0.887	7.39	49	0.784	6.53	70	0.7020	5.85	.....	.....	.....	.....	.....	.....
29	0.882	7.34	50	0.780	6.49	71	0.6995	5.82	.....	.....	.....	.....	.....	.....
30	0.876	7.30	51	0.775	6.46	72	0.6950	5.79	.....	.....	.....	.....	.....	.....

## ATMOSPHERIC PRESSURE CONDITIONS — ELEVATIONS ABOVE SEA LEVEL

Altitude Above Sea Level	Atmospheric Pressure Pounds/sq. in.	Barometer Reading Inches of Mercury	Equivalent Head or Water Feet	Reduction to Max. Practical Dyn. Suction Lift
0	14.7	29.929	33.95	0 Ft.
1000	14.2	28.8	32.7	1.2 "
2000	13.6	27.7	31.6	2.3 "
3000	13.1	26.7	30.2	3.7 "
4000	12.6	25.7	29.1	4.8 "
5000	12.1	24.7	27.9	6 "
6000	11.7	23.8	27.	6.9 "
7000	11.2	22.9	25.9	8 "
8000	10.8	22.1	24.9	9 "