

BRIX MEASUREMENT

The term "Brix" technically means the percent by weight of sugar solids in a pure sucrose solution. In canned fruits, fruit juice, and similar products it is commonly used as a convenient term to express the percent by weight of all soluble solids in solutions. The solutions are generally not pure sucrose, but contain sweeteners or mixtures of two or more types of sweeteners, and small amounts of other substances.

The instruments generally used for Brix measurement are Brix hydrometers and refractometers. These instruments are affected not only by the sugars present in a product but also by such substances as fruit acids, pectins, and minerals. Regardless of the composition of the solution, the Brix reading expresses the soluble solids content of the solution in terms of a Brix value corresponding to a pure sucrose solution of the same specific gravity.

The final Brix measurement of liquid packing media in canned fruit and similar products depends largely on four factors:

1. The soluble solids of the in-going fresh products.
2. The Brix of the in-going liquid medium.
3. The proportion of fresh product to packing medium, and
4. The extent to which the finished product (fresh product and liquid medium) has equalized.

See Brix Table (Sucrose Conversion Table) on following pages

SUCROSE CONVERSION TABLE

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at@ 20/20 Degrees C	Pounds Solids per Gallon
1.3330	0.0	1.00000	8.322	0.000
1.3331	0.1	1.00039	8.325	0.008
1.3333	0.2	1.00078	8.328	0.017
1.3334	0.3	1.00117	8.331	0.025
1.3336	0.4	1.00156	8.335	0.033
1.3337	0.5	1.00194	8.338	0.042
1.3339	0.6	1.00233	8.341	0.050
1.3340	0.7	1.00272	8.344	0.059
1.3341	0.8	1.00312	8.348	0.067
1.3343	0.9	1.00351	8.351	0.075
1.3344	1.0	1.00390	8.354	0.084
1.3346	1.1	1.00429	8.357	0.092
1.3347	1.2	1.00468	8.361	0.100
1.3349	1.3	1.00507	8.364	0.109
1.3350	1.4	1.00546	8.367	0.117
1.3352	1.5	1.00585	8.370	0.126
1.3353	1.6	1.00624	8.374	0.134
1.3354	1.7	1.00663	8.377	0.142
1.3356	1.8	1.00702	8.380	0.151
1.3357	1.9	1.00741	8.383	0.159
1.3359	2.0	1.00780	8.387	0.168
1.3360	2.1	1.00819	8.390	0.176
1.3362	2.2	1.00859	8.393	0.185
1.3363	2.3	1.00898	8.396	0.193
1.3365	2.4	1.00937	8.400	0.202
1.3366	2.5	1.00977	8.403	0.210
1.3368	2.6	1.01016	8.406	0.219
1.3369	2.7	1.01055	8.409	0.227
1.3370	2.8	1.01094	8.413	0.236
1.3372	2.9	1.01134	8.416	0.244
1.3373	3.0	1.01173	8.419	0.252
1.3375	3.1	1.01213	8.423	0.261

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at 20/20 Degrees C	Pounds Solids per Gallon
1.3376	3.2	1.01252	8.426	0.270
1.3377	3.3	1.01292	8.429	0.278
1.3379	3.4	1.01331	8.432	0.287
1.3380	3.5	1.01371	8.436	0.295
1.3382	3.6	1.01410	8.439	0.304
1.3383	3.7	1.01450	8.442	0.312
1.3385	3.8	1.01490	8.446	0.321
1.3386	3.9	1.01529	8.449	0.329
1.3388	4.0	1.01569	8.452	0.338
1.3389	4.1	1.01609	8.456	0.347
1.3391	4.2	1.01649	8.459	0.355
1.3392	4.3	1.01688	8.462	0.364
1.3394	4.4	1.01728	8.465	0.372
1.3395	4.5	1.01768	8.469	0.381
1.3397	4.6	1.01808	8.472	0.390
1.3398	4.7	1.01848	8.475	0.398
1.3400	4.8	1.01888	8.479	0.407
1.3401	4.9	1.01928	8.482	0.416
1.3402	5.0	1.01968	8.485	0.424
1.3404	5.1	1.02008	8.489	0.433
1.3405	5.2	1.02048	8.492	0.441
1.3407	5.3	1.02088	8.495	0.450
1.3408	5.4	1.02128	8.499	0.459
1.3410	5.5	1.02168	8.502	0.468
1.3411	5.6	1.02208	8.505	0.476
1.3413	5.7	1.02248	8.509	0.485
1.3414	5.8	1.02289	8.512	0.494
1.3416	5.9	1.02329	8.515	0.502
1.3417	6.0	1.02369	8.519	0.511
1.3419	6.1	1.02409	8.522	0.520
1.3420	6.2	1.02450	8.526	0.529
1.3422	6.3	1.02490	8.529	0.537

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at@ 20/20 Degrees C	Pounds Solids per Gallon
1.3423	6.4	1.02530	8.532	0.546
1.3425	6.5	1.02571	8.536	0.555
1.3426	6.6	1.02611	8.539	0.564
1.3428	6.7	1.02652	8.542	0.572
1.3429	6.8	1.02692	8.546	0.581
1.3431	6.9	1.02733	8.549	0.590
1.3432	7.0	1.02773	8.552	0.599
1.3434	7.1	1.02814	8.556	0.607
1.3435	7.2	1.02854	8.559	0.616
1.3437	7.3	1.02895	8.563	0.625
1.3438	7.4	1.02936	8.566	0.634
1.3440	7.5	1.02976	8.569	0.643
1.3441	7.6	1.03017	8.573	0.652
1.3443	7.7	1.03058	8.576	0.660
1.3444	7.8	1.03098	8.580	0.669
1.3446	7.9	1.03139	8.583	0.678
1.3447	8.0	1.03180	8.586	0.687
1.3449	8.1	1.03221	8.590	0.696
1.3450	8.2	1.03262	8.593	0.705
1.3452	8.3	1.03303	8.597	0.714
1.3454	8.4	1.03344	8.600	0.722
1.3455	8.5	1.03385	8.603	0.731
1.3457	8.6	1.03426	8.607	0.740
1.3459	8.7	1.03467	8.610	0.749
1.3460	8.8	1.03508	8.614	0.758
1.3461	8.9	1.03549	8.617	0.767
1.3463	9.0	1.03590	8.620	0.776
1.3464	9.1	1.03631	8.624	0.785
1.3466	9.2	1.03672	8.627	0.794
1.3467	9.3	1.03713	8.631	0.803
1.3469	9.4	1.03755	8.634	0.812
1.3470	9.5	1.03796	8.638	0.821

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at@ 20/20 Degrees C	Pounds Solids per Gallon
1.3472	9.6	1.03837	8.641	0.830
1.3473	9.7	1.03879	8.644	0.838
1.3475	9.8	1.03920	8.648	0.848
1.3476	9.9	1.03961	8.651	0.856
1.3478	10.0	1.04003	8.655	0.866
1.3480	10.1	1.04044	8.658	0.874
1.3481	10.2	1.04086	8.662	0.884
1.3483	10.3	1.04127	8.665	0.892
1.3484	10.4	1.04169	8.669	0.902
1.3486	10.5	1.04210	8.672	0.911
1.3487	10.6	1.04252	8.675	0.920
1.3489	10.7	1.04293	8.679	0.929
1.3490	10.8	1.04335	8.682	0.938
1.3492	10.9	1.04377	8.686	0.947
1.3493	11.0	1.04418	8.689	0.956
1.3495	11.1	1.04460	8.693	0.965
1.3497	11.2	1.04502	8.696	0.974
1.3498	11.3	1.04544	8.700	0.983
1.3500	11.4	1.04585	8.703	0.992
1.3501	11.5	1.04627	8.707	1.001
1.3503	11.6	1.04669	8.710	1.010
1.3504	11.7	1.04711	8.714	1.020
1.3506	11.8	1.04753	8.717	1.029
1.3507	11.9	1.04795	8.721	1.038
1.3509	12.0	1.04837	8.724	1.047
1.3511	12.1	1.04879	8.728	1.056
1.3512	12.2	1.04921	8.731	1.065
1.3514	12.3	1.04963	8.735	1.074
1.3515	12.4	1.05005	8.738	1.084
1.3517	12.5	1.05047	8.742	1.093
1.3518	12.6	1.05090	8.745	1.102
1.3520	12.7	1.05132	8.749	1.111

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at 20/20 Degrees C	Pounds Solids per Gallon
1.3522	12.8	1.05174	8.752	1.120
1.3523	12.9	1.05216	8.756	1.130
1.3525	13.0	1.05259	8.759	1.139
1.3626	13.1	1.05301	8.763	1.148
1.3528	13.2	1.05343	8.766	1.157
1.3529	13.3	1.05386	8.770	1.166
1.3531	13.4	1.05428	8.773	1.176
1.3533	13.5	1.05470	8.777	1.185
1.3534	13.6	1.05513	8.781	1.194
1.3536	13.7	1.05556	8.784	1.203
1.3537	13.8	1.05598	8.788	1.213
1.3539	13.9	1.05641	8.791	1.222
1.3541	14.0	1.05683	8.795	1.231
1.3542	14.1	1.05726	8.798	1.241
1.3544	14.2	1.05769	8.802	1.250
1.3545	14.3	1.05811	8.805	1.259
1.3547	14.4	1.05854	8.809	1.268
1.3548	14.5	1.05897	8.812	1.278
1.3550	14.6	1.05940	8.816	1.287
1.3552	14.7	1.05982	8.820	1.297
1.3553	14.8	1.06025	8.823	1.306
1.3555	14.9	1.06068	8.827	1.315
1.3556	15.0	1.06111	8.830	1.325
1.3558	15.1	1.06154	8.834	1.334
1.3560	15.2	1.06197	8.837	1.343
1.3561	15.3	1.06240	8.841	1.353
1.3563	15.4	1.06283	8.845	1.362
1.3564	15.5	1.06326	8.848	1.371
1.3566	15.6	1.06369	8.852	1.381
1.3567	15.7	1.06412	8.855	1.390
1.3569	15.8	1.06455	8.859	1.400
1.3571	15.9	1.06499	8.863	1.409

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at@ 20/20 Degrees C	Pounds Solids per Gallon
1.3573	16.0	1.06542	8.866	1.419
1.3574	16.1	1.06585	8.870	1.428
1.3576	16.2	1.06629	8.873	1.437
1.3577	16.3	1.06672	8.877	1.447
1.3579	16.4	1.06715	8.881	1.456
1.3581	16.5	1.06759	8.884	1.466
1.3582	16.6	1.06802	8.888	1.475
1.3584	16.7	1.06845	8.891	1.485
1.3586	16.8	1.06889	8.895	1.494
1.3587	16.9	1.06933	8.899	1.504
1.3589	17.0	1.06976	8.902	1.513
1.3591	17.1	1.07020	8.906	1.523
1.3592	17.2	1.07063	8.909	1.532
1.3594	17.3	1.07107	8.913	1.542
1.3595	17.4	1.07151	8.917	1.552
1.3597	17.5	1.07194	8.920	1.561
1.3598	17.6	1.07238	8.924	1.571
1.3600	17.7	1.07282	8.928	1.580
1.3602	17.8	1.07325	8.931	1.590
1.3603	17.9	1.07369	8.935	1.599
1.3605	18.0	1.07413	8.939	1.609
1.3607	18.1	1.07457	8.942	1.619
1.3608	18.2	1.07501	8.946	1.628
1.3610	18.3	1.07545	8.950	1.638
1.3612	18.4	1.07589	8.953	1.647
1.3613	18.5	1.07633	8.957	1.657
1.3615	18.6	1.07677	8.961	1.667
1.3617	18.7	1.07721	8.964	1.676
1.3618	18.8	1.07765	8.968	1.686
1.3620	18.9	1.07809	8.972	1.696
1.3621	19.0	1.07853	8.975	1.705
1.3623	19.1	1.07898	8.979	1.715

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at 20/20 Degrees C	Pounds Solids per Gallon
1.3625	19.2	1.07942	8.983	1.725
1.3626	19.3	1.07986	8.986	1.734
1.3628	19.4	1.08030	8.990	1.744
1.3630	19.5	1.08075	8.994	1.754
1.3631	19.6	1.08119	8.997	1.763
1.3633	19.7	1.08164	9.001	1.773
1.3635	19.8	1.08208	9.005	1.783
1.3636	19.9	1.08252	9.008	1.792
1.3638	20.0	1.08297	9.012	1.802
1.3640	20.1	1.08342	9.016	1.812
1.3641	20.2	1.08386	9.020	1.822
1.3643	20.3	1.08431	9.023	1.832
1.3645	20.4	1.08475	9.027	1.842
1.3646	20.5	1.08520	9.031	1.851
1.3648	20.6	1.08565	9.034	1.861
1.3650	20.7	1.08609	9.038	1.871
1.3651	20.8	1.08654	9.042	1.881
1.3653	20.9	1.08699	9.046	1.891
1.3655	21.0	1.08744	9.049	1.900
1.3656	21.1	1.08789	9.053	1.910
1.3658	21.2	1.08834	9.057	1.920
1.3660	21.3	1.08879	9.061	1.930
1.3661	21.4	1.08923	9.064	1.940
1.3663	21.5	1.08968	9.068	1.950
1.3665	21.6	1.09013	9.072	1.960
1.3667	21.7	1.09058	9.076	1.969
1.3668	21.8	1.09103	9.079	1.979
1.3670	21.9	1.09149	9.083	1.989
1.3672	22.0	1.09194	9.087	1.999
1.3673	21.1	1.09239	9.091	2.009
1.3675	21.2	1.09284	9.094	2.019
1.3677	21.3	1.09329	9.098	2.029

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at@ 20/20 Degrees C	Pounds Solids per Gallon
1.3678	22.4	1.09375	9.102	2.039
1.3680	22.5	1.09420	9.106	2.049
1.3682	22.6	1.09465	9.109	2.059
1.3683	22.7	1.09511	9.113	2.069
1.3685	22.8	1.09556	9.117	2.079
1.3687	22.9	1.09602	9.121	2.089
1.3688	23.0	1.09647	9.125	2.099
1.3690	23.1	1.09693	9.128	2.109
1.3692	23.2	1.09738	9.132	2.119
1.3694	23.3	1.09784	9.136	2.129
1.3695	23.4	1.09829	9.140	2.139
1.3697	23.5	1.09875	9.143	2.149
1.3699	23.6	1.09921	9.147	2.159
1.3700	23.7	1.09966	9.151	2.169
1.3702	23.8	1.10012	9.155	2.179
1.3704	23.9	1.10058	9.159	2.189
1.3706	24.0	1.10104	9.163	2.199
1.3707	24.1	1.10149	9.166	2.209
1.3709	24.2	1.10195	9.170	2.219
1.3711	24.3	1.10241	9.174	2.229
1.3712	24.4	1.10287	9.178	2.239
1.3714	24.5	1.10333	9.182	2.250
1.3716	24.6	1.10370	9.185	2.260
1.3718	24.7	1.10425	9.189	2.270
1.3719	24.8	1.10471	9.193	2.280
1.3721	24.9	1.10517	9.197	2.290
1.3723	25.0	1.10564	9.201	2.300
1.3724	25.1	1.10610	9.205	2.310
1.3726	25.2	1.01656	9.208	2.320
1.3728	25.3	1.10702	9.212	2.331
1.3729	25.4	1.10748	9.216	2.341
1.3731	25.5	1.10795	9.220	2.351

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at@ 20/20 Degrees C	Pounds Solids per Gallon
1.3733	25.6	1.10841	9.224	2.361
1.3735	25.7	1.10887	9.228	2.372
1.3736	25.8	1.10934	9.232	2.382
1.3738	25.9	1.10980	9.235	2.392
1.3740	26.0	1.11027	9.239	2.402
1.3741	26.1	1.11073	9.243	2.412
1.3743	26.2	1.11120	9.247	2.423
1.3745	26.3	1.11166	9.251	2.433
1.3747	26.4	1.11213	9.255	2.443
1.3748	26.5	1.11260	9.259	2.454
1.3750	26.6	1.11306	9.263	2.464
1.3752	26.7	1.11353	9.266	2.474
1.3753	26.8	1.11400	9.270	2.484
1.3755	26.9	1.11447	9.274	2.495
1.3757	27.0	1.11493	9.278	2.505
1.3759	27.1	1.11540	9.282	2.515
1.3761	27.2	1.11587	9.286	2.526
1.3762	27.3	1.11634	9.290	2.536
1.3764	27.4	1.11681	9.294	2.547
1.3766	27.5	1.11728	9.298	2.557
1.3768	27.6	1.11775	9.302	2.567
1.3769	27.7	1.11822	9.305	2.578
1.3771	27.8	1.11869	9.309	2.588
1.3773	27.9	1.11916	9.313	2.598
1.3775	28.0	1.11963	9.317	2.609
1.3777	28.1	1.12010	9.321	2.619
1.3778	28.2	1.12058	9.325	2.630
1.3780	28.3	1.12105	9.329	2.640
1.3782	28.4	1.12152	9.333	2.651
1.3784	28.5	1.12199	9.337	2.661
1.3785	28.6	1.12247	9.341	2.672
1.3787	28.7	1.12294	9.345	2.682

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at @ 20/20 Degrees C	Pounds Solids per Gallon
1.3789	28.8	1.12342	9.349	2.693
1.3791	28.9	1.12389	9.353	2.702
1.3792	29.0	1.12436	9.357	2.714
1.3794	29.1	1.12484	9.361	2.724
1.3796	29.2	1.12532	9.365	2.735
1.3798	29.3	1.12579	9.369	2.745
1.3800	29.4	1.12627	9.372	2.755
1.3801	29.5	1.12674	9.376	2.766
1.3803	29.6	1.12722	9.380	2.776
1.3805	29.7	1.12770	9.384	2.787
1.3807	29.8	1.12817	9.388	2.798
1.3809	29.9	1.12865	9.392	2.808
1.3810	30.0	1.12913	9.396	2.819
1.3812	30.1	1.12961	9.400	2.829
1.3814	30.2	1.13009	9.404	2.840
1.3816	30.3	1.13057	9.408	2.851
1.3818	30.4	1.13105	9.412	2.861
1.3820	30.5	1.13153	9.416	2.872
1.3821	30.6	1.13201	9.420	2.883
1.3823	30.7	1.13249	9.424	2.893
1.3825	30.8	1.13297	9.428	2.904
1.3827	30.9	1.13345	9.432	2.914
1.3829	31.0	1.13394	9.436	2.925
1.3830	31.1	1.13442	9.440	2.936
1.3832	31.2	1.13490	9.444	2.947
1.3834	31.3	1.13538	9.448	2.957
1.3836	31.4	1.13587	9.452	2.968
1.3838	31.5	1.13635	9.456	2.979
1.3839	31.6	1.13683	9.460	2.990
1.3841	31.7	1.13732	9.464	3.000
1.3843	31.8	1.13780	9.468	3.011
1.3845	31.9	1.13829	9.472	3.022

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at 20/20 Degrees C	Pounds Solids per Gallon
1.3847	32.0	1.13877	9.477	3.033
1.3848	32.1	1.13926	9.481	3.043
1.3850	32.2	1.13974	9.485	3.054
1.3852	32.3	1.14023	9.489	3.065
1.3854	32.4	1.14072	9.493	3.076
1.3856	32.5	1.14120	9.497	3.087
1.3858	32.6	1.14169	9.501	3.097
1.3860	32.7	1.14218	9.505	3.108
1.3861	32.8	1.14267	9.509	3.119
1.3863	32.9	1.14316	9.513	3.130
1.3865	33.0	1.14364	9.517	3.141
1.3867	33.1	1.14413	9.521	3.151
1.3869	33.2	1.14462	9.525	3.162
1.3871	33.3	1.14511	9.529	3.173
1.3872	33.4	1.14560	9.533	3.184
1.3874	33.5	1.14609	9.537	3.195
1.3876	33.6	1.14658	9.541	3.206
1.3878	33.7	1.14708	9.546	3.217
1.3879	33.8	1.14757	9.550	3.228
1.3881	33.9	1.14806	9.554	3.239
1.3883	34.0	1.14855	9.558	3.250
1.3885	34.1	1.14904	9.562	3.261
1.3887	34.2	1.14954	9.566	3.272
1.3889	34.3	1.15003	9.570	3.283
1.3891	34.4	1.15052	9.574	3.293
1.3893	34.5	1.15102	9.578	3.304
1.3894	34.6	1.15151	9.583	3.316
1.3896	34.7	1.15201	9.587	3.327
1.3898	34.8	1.15250	9.591	3.338
1.3900	34.9	1.15300	9.595	3.349
1.3902	35.0	1.15350	9.599	3.360
1.3904	35.1	1.15399	9.603	3.371

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at 20/20 Degrees C	Pounds Solids per Gallon
1.3906	35.2	1.15449	9.607	3.382
1.3908	35.3	1.15498	9.611	3.393
1.3909	35.4	1.15548	9.616	3.404
1.3911	35.5	1.15598	9.620	3.415
1.3913	35.6	1.15648	9.624	3.426
1.3915	35.7	1.15698	9.628	3.437
1.3916	35.8	1.15747	9.632	3.448
1.3918	35.9	1.15797	9.636	3.459
1.3920	36.0	1.15847	9.640	3.470
1.3922	36.1	1.15897	9.645	3.482
1.3924	36.2	1.15947	9.649	3.493
1.3926	36.3	1.15997	9.653	3.504
1.3928	36.4	1.16047	9.657	3.515
1.3930	36.5	1.16098	9.661	3.526
1.3931	36.6	1.16148	9.665	3.537
1.3933	36.7	1.16198	9.670	3.549
1.3935	36.8	1.16248	9.674	3.560
1.3937	36.9	1.16298	9.678	3.571
1.3939	37.0	1.16349	9.682	3.582
1.3941	37.1	1.16399	9.686	3.594
1.3943	37.2	1.16449	9.691	3.605
1.3945	37.3	1.16500	9.695	3.616
1.3947	37.4	1.16550	9.699	3.627
1.3949	37.5	1.16601	9.703	3.639
1.3950	37.6	1.16652	9.707	3.650
1.3952	37.7	1.16702	9.712	3.661
1.3954	37.8	1.16752	9.716	3.673
1.3956	37.9	1.16803	9.720	3.684
1.3958	38.0	1.16853	9.724	3.695
1.3960	38.1	1.16904	9.728	3.706
1.3962	38.2	1.16955	9.733	3.718
1.3964	38.3	1.17006	9.737	3.729

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at@ 20/20 Degrees C	Pounds Solids per Gallon
1.3966	38.4	1.17056	9.741	3.741
1.3968	38.5	1.17107	9.745	3.752
1.3970	38.6	1.17158	9.749	3.763
1.3972	38.7	1.17209	9.754	3.775
1.3794	38.8	1.17260	9.758	3.786
1.3976	38.9	1.17311	9.762	3.797
1.3978	39.0	1.17362	9.766	3.809
1.3980	39.1	1.17413	9.771	3.820
1.3982	39.2	1.17464	9.775	3.832
1.3984	39.3	1.17515	9.779	3.843
1.3986	39.4	1.17566	9.783	3.855
1.3988	39.5	1.17618	9.788	3.866
1.3989	39.6	1.17669	9.792	3.878
1.3991	39.7	1.17720	9.796	3.889
1.3993	39.8	1.17772	9.801	3.901
1.3995	39.9	1.17823	9.805	3.912
1.3997	40.0	1.17874	9.809	3.924
1.3999	40.1	1.17926	9.813	3.935
1.4001	40.2	1.17977	9.818	3.947
1.4003	40.3	1.18029	9.822	3.958
1.4005	40.4	1.18080	9.826	3.970
1.4007	40.5	1.18132	9.831	3.982
1.4008	40.6	1.18183	9.835	3.993
1.4010	40.7	1.18235	9.839	4.004
1.4012	40.8	1.18287	9.843	4.016
1.4014	40.9	1.18339	9.848	4.028
1.4016	41.0	1.18390	9.852	4.039
1.4018	41.1	1.18442	9.856	4.051
1.4020	41.2	1.18494	9.861	4.063
1.4022	41.3	1.18546	9.865	4.074
1.4024	41.4	1.18598	9.869	4.086
1.4026	41.5	1.18650	9.874	4.098

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at@ 20/20 Degrees C	Pounds Solids per Gallon
1.4028	41.6	1.18702	9.878	4.109
1.4030	41.7	1.18754	9.882	4.121
1.4032	41.8	1.18806	9.887	4.133
1.4034	41.9	1.18858	9.891	4.144
1.4036	42.0	1.18910	9.895	4.156
1.4038	42.1	1.18962	9.900	4.167
1.4040	42.2	1.19014	9.904	4.179
1.4042	42.3	1.19062	9.908	4.191
1.4044	42.4	1.19119	9.913	4.203
1.4046	42.5	1.19171	9.917	4.215
1.4048	42.6	1.19224	9.921	4.226
1.4050	42.7	1.19276	9.926	4.238
1.4052	42.8	1.19329	9.930	4.250
1.4054	42.9	1.19381	9.935	4.262
1.4056	43.0	1.19434	9.939	4.274
1.4058	43.1	1.19486	9.943	4.285
1.4060	43.2	1.19539	9.948	4.298
1.4062	43.3	1.19591	9.952	4.309
1.4064	43.4	1.19644	9.956	4.321
1.4066	43.5	1.19697	9.961	4.333
1.4068	43.6	1.19749	9.965	4.345
1.4070	43.7	1.19802	9.970	4.357
1.4072	43.8	1.19855	9.974	4.369
1.4074	43.9	1.19908	9.978	4.380
1.4076	44.0	1.19961	9.983	4.393
1.4078	44.1	1.20013	9.987	4.404
1.4080	44.2	1.20066	9.992	4.416
1.4082	44.3	1.20119	9.996	4.428
1.4084	44.4	1.20172	10.000	4.440
1.4086	44.5	1.20226	10.005	4.452
1.4088	44.6	1.20279	10.009	4.464
1.4090	44.7	1.20332	10.014	4.476

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at@ 20/20 Degrees C	Pounds Solids per Gallon
1.4092	44.8	1.20385	10.018	4.488
1.4094	44.9	1.20438	10.022	4.500
1.4096	45.0	1.20491	10.027	4.512
1.4098	45.1	1.20545	10.031	4.524
1.4100	45.2	1.20598	10.036	4.536
1.4102	45.3	1.20651	10.040	4.548
1.4104	45.4	1.20705	10.045	4.560
1.4107	45.5	1.20758	10.049	4.572
1.4109	45.6	1.20812	10.054	4.585
1.4111	45.7	1.20865	10.058	4.597
1.4113	45.8	1.20919	10.063	4.609
1.4115	45.9	1.20972	10.067	4.621
1.4117	46.0	1.21026	10.071	4.633
1.4119	46.1	1.21080	10.076	4.645
1.4121	46.2	1.21133	10.080	4.657
1.4123	46.3	1.21187	10.085	4.669
1.4125	46.4	1.21241	10.089	4.681
1.4127	46.5	1.21295	10.094	4.694
1.4129	46.6	1.21349	10.098	4.706
1.4131	46.7	1.21402	10.103	4.718
1.4133	46.8	1.21456	10.107	4.730
1.4135	46.9	1.21510	10.112	4.743
1.4137	47.0	1.21564	10.116	4.755
1.4139	47.1	1.21618	10.121	4.767
1.4141	47.2	1.21673	10.125	4.779
1.4143	47.3	1.21727	10.130	4.791
1.4145	47.4	1.21781	10.134	4.804
1.4148	47.5	1.21835	10.139	4.816
1.4150	47.6	1.21889	10.143	4.828
1.4152	47.7	1.21943	10.148	4.841
1.4154	47.8	1.21998	10.152	4.853
1.4156	47.9	1.22052	10.157	4.865

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at @ 20/20 Degrees C	Pounds Solids per Gallon
1.4158	48.0	1.22106	10.161	4.877
1.4160	48.1	1.22161	10.166	4.890
1.4162	48.2	1.22215	10.170	4.902
1.4164	48.3	1.22270	10.175	4.915
1.4166	48.4	1.22324	10.179	4.927
1.4169	48.5	1.22379	10.184	4.939
1.4171	48.6	1.22434	10.189	4.952
1.4173	48.7	1.22488	10.193	4.964
1.4175	48.8	1.22543	10.198	4.977
1.4177	48.9	1.22598	10.202	4.989
1.4179	49.0	1.22652	10.207	5.001
1.4181	49.1	1.22707	10.211	5.014
1.4183	49.2	1.22762	10.216	5.026
1.4185	49.3	1.22817	10.220	5.039
1.4187	49.4	1.22872	10.225	5.051
1.4190	49.5	1.22927	10.230	5.064
1.4192	49.6	1.22982	10.234	5.076
1.4194	49.7	1.23037	10.239	5.089
1.4196	49.8	1.23092	10.243	5.101
1.4199	49.9	1.23147	10.248	5.114
1.4201	50.0	1.23202	10.252	5.126
1.4203	50.1	1.23257	10.257	5.139
1.4205	50.2	1.23313	10.262	5.152
1.4207	50.3	1.23368	10.266	5.164
1.4209	50.4	1.23423	10.271	5.177
1.4212	50.5	1.23478	10.275	5.189
1.4214	50.6	1.23534	10.280	5.202
1.4216	50.7	1.23589	10.285	5.214
1.4218	50.8	1.23645	10.289	5.227
1.4220	50.9	1.23700	10.294	5.240
1.4222	51.0	1.23756	10.299	5.252
1.4224	51.1	1.23811	10.303	5.265

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at@ 20/20 Degrees C	Pounds Solids per Gallon
1.4226	51.2	1.23867	10.308	5.278
1.4228	51.3	1.23922	10.312	5.290
1.4230	51.4	1.23978	10.317	5.303
1.4233	51.5	1.24034	10.322	5.316
1.4235	51.6	1.24089	10.326	5.328
1.4237	51.7	1.24145	10.331	5.341
1.4239	51.8	1.24201	10.336	5.354
1.4241	51.9	1.24257	10.340	5.366
1.4243	52.0	1.24313	10.345	5.379
1.4245	52.1	1.24369	10.350	5.392
1.4248	52.2	1.24425	10.354	5.405
1.4250	52.3	1.24481	10.359	5.418
1.4252	52.4	1.24537	10.364	5.431
1.4254	52.5	1.24593	10.368	5.443
1.4256	52.6	1.24649	10.373	5.456
1.4258	52.7	1.24705	10.378	5.469
1.4260	52.8	1.24761	10.382	5.482
1.4262	52.9	1.24818	10.387	5.495
1.4265	53.0	1.24874	10.392	5.508
1.4267	53.1	1.24930	10.396	5.520
1.4269	53.2	1.24987	10.401	5.533
1.4271	53.3	1.25043	10.406	5.546
1.4273	53.4	1.25099	10.410	5.559
1.4275	53.5	1.25156	10.415	5.572
1.4278	53.6	1.25212	10.420	5.585
1.4280	53.7	1.25269	10.425	5.598
1.4282	53.8	1.25325	10.429	5.611
1.4284	53.9	1.25382	10.434	5.624
1.4286	54.0	1.25439	10.439	5.637
1.4288	54.1	1.25495	10.443	5.650
1.4291	54.2	1.25552	10.448	5.663
1.4293	54.3	1.25609	10.453	5.676

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at 20/20 Degrees C	Pounds Solids per Gallon
1.4295	54.4	1.25666	10.458	5.689
1.4297	54.5	1.25723	10.462	5.702
1.4299	54.6	1.25780	10.467	5.715
1.4301	54.7	1.25836	10.472	5.728
1.4304	54.8	1.25893	10.476	5.741
1.4306	54.9	1.25950	10.481	5.754
1.4308	55.0	1.26007	10.486	5.767
1.4310	55.1	1.26064	10.491	5.781
1.4312	55.2	1.26122	10.495	5.793
1.4315	55.3	1.26179	10.500	5.807
1.4317	55.4	1.26236	10.505	5.820
1.4319	55.5	1.26293	10.510	5.833
1.4321	55.6	1.26350	10.515	5.846
1.4323	55.7	1.26408	10.519	5.859
1.4326	55.8	1.26465	10.524	5.872
1.4328	55.9	1.26522	10.529	5.886
1.4330	56.0	1.26580	10.534	5.899
1.4332	56.1	1.26637	10.538	5.912
1.4334	56.2	1.26695	10.543	5.925
1.4337	56.3	1.26752	10.548	5.939
1.4339	56.4	1.26810	10.553	5.952
1.4341	56.5	1.26868	10.558	5.965
1.4343	56.6	1.26925	10.562	5.978
1.4345	56.7	1.26983	10.567	5.991
1.4348	56.8	1.27041	10.572	6.005
1.4350	56.9	1.27098	10.577	6.018
1.4352	57.0	1.27156	10.581	6.031
1.4354	57.1	1.27214	10.586	6.045
1.4356	57.2	1.27272	10.591	6.058
1.4359	57.3	1.27330	10.596	6.072
1.4361	57.4	1.27388	10.601	6.085
1.4363	57.5	1.27446	10.606	6.098

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at@ 20/20 Degrees C	Pounds Solids per Gallon
1.4365	57.6	1.27504	10.610	6.111
1.4368	57.7	1.27562	10.615	6.125
1.4370	57.8	1.27620	10.620	6.138
1.4372	57.9	1.27678	10.625	6.152
1.4374	58.0	1.27736	10.630	6.165
1.4376	58.1	1.27794	10.635	6.179
1.4379	58.2	1.27853	10.640	6.192
1.4381	58.3	1.27911	10.644	6.205
1.4383	58.4	1.27969	10.649	6.219
1.4385	58.5	1.28028	10.654	6.233
1.4388	58.6	1.28086	10.659	6.246
1.4390	58.7	1.28145	10.664	6.260
1.4392	58.8	1.28203	10.669	6.273
1.4394	58.9	1.28262	10.674	6.287
1.4397	59.0	1.28320	10.678	6.300
1.4399	59.1	1.28379	10.683	6.314
1.4401	59.2	1.28437	10.688	6.327
1.4403	59.3	1.28497	10.693	6.341
1.4406	59.4	1.28555	10.698	6.355
1.4408	59.5	1.28614	10.703	6.368
1.4410	59.6	1.28672	10.708	6.382
1.4412	59.7	1.28731	10.713	6.396
1.4415	59.8	1.28789	10.718	6.409
1.4417	59.9	1.28849	10.722	6.422
1.4419	60.0	1.28908	10.727	6.436
1.4422	60.1	1.28966	10.732	6.450
1.4424	60.2	1.29025	10.737	6.464
1.4426	60.3	1.29084	10.742	6.477
1.4428	60.4	1.29143	10.747	6.491
1.4431	60.5	1.29203	10.752	6.505
1.4433	60.6	1.29262	10.757	6.519
1.4435	60.7	1.29321	10.762	6.533

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at@ 20/20 Degrees C	Pounds Solids per Gallon
1.4437	60.8	1.29380	10.767	6.546
1.4440	60.9	1.29439	10.772	6.560
1.4442	61.0	1.29498	10.777	6.574
1.4444	61.1	1.29559	10.781	6.587
1.4447	61.2	1.29618	10.786	6.601
1.4449	61.3	1.29677	10.791	6.615
1.4451	61.4	1.29736	10.796	6.629
1.4453	61.5	1.29796	10.801	6.643
1.4456	61.6	1.29855	10.806	6.656
1.4458	61.7	1.29915	10.811	6.670
1.4460	61.8	1.29975	10.816	6.684
1.4463	61.9	1.30034	10.821	6.698
1.4465	62.0	1.30093	10.826	6.712
1.4467	62.1	1.30153	10.831	6.726
1.4470	62.2	1.30212	10.836	6.740
1.4472	62.3	1.30273	10.841	6.754
1.4474	62.4	1.30334	10.846	6.768
1.4476	62.5	1.30393	10.851	6.782
1.4479	62.6	1.30453	10.856	6.796
1.4481	62.7	1.30513	10.861	6.810
1.4483	62.8	1.30573	10.866	6.824
1.4486	62.9	1.30633	10.871	6.838
1.4488	63.0	1.30694	10.876	6.852
1.4490	63.1	1.30754	10.881	6.866
1.4493	63.2	1.30815	10.886	6.880
1.4495	63.3	1.30875	10.891	6.894
1.4497	63.4	1.30936	10.896	6.908
1.4500	63.5	1.30994	10.901	6.922
1.4502	63.6	1.31055	10.906	6.936
1.4504	63.7	1.31117	10.911	6.950
1.4507	63.8	1.31177	10.916	6.964
1.4509	63.9	1.31237	10.921	6.978

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at 20/20 Degrees C	Pounds Solids per Gallon
1.4511	64.0	1.31297	10.926	6.993
1.4514	64.1	1.31359	10.931	7.007
1.4516	64.2	1.31418	10.936	7.021
1.4518	64.3	1.31479	10.941	7.035
1.4521	64.4	1.31540	10.946	7.049
1.4523	64.5	1.31600	10.951	7.063
1.4525	64.6	1.31661	10.956	7.078
1.4528	64.7	1.31723	10.961	7.092
1.4530	64.8	1.31784	10.967	7.107
1.4532	64.9	1.31845	10.972	7.121
1.4535	65.0	1.31905	10.977	7.135
1.4537	65.1	1.31966	10.982	7.149
1.4539	65.2	1.32028	10.987	7.164
1.4542	65.3	1.32089	10.992	7.178
1.4544	65.4	1.32150	10.997	7.192
1.4546	65.5	1.32210	11.002	7.206
1.4549	65.6	1.32271	11.007	7.221
1.4551	65.7	1.32332	11.012	7.235
1.4553	65.8	1.32393	11.017	7.249
1.4556	65.9	1.32455	11.022	7.263
1.4558	66.0	1.32516	11.027	7.278
1.4561	66.1	1.32577	11.033	7.293
1.4563	66.2	1.32638	11.038	7.307
1.4565	66.3	1.32699	11.043	7.322
1.4568	66.4	1.32759	11.048	7.336
1.4570	66.5	1.32820	11.053	7.350
1.4572	66.6	1.32884	11.058	7.365
1.4575	66.7	1.32945	11.063	7.379
1.4577	66.8	1.33007	11.068	7.393
1.4580	66.9	1.33068	11.073	7.408
1.4582	67.0	1.33129	11.079	7.423
1.4584	67.1	1.33192	11.084	7.437

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at 20/20 Degrees C	Pounds Solids per Gallon
1.4587	67.2	1.33254	11.089	7.452
1.4589	67.3	1.33315	11.094	7.466
1.4591	67.4	1.33377	11.099	7.481
1.4594	67.5	1.33438	11.104	7.495
1.4596	67.6	1.33500	11.110	7.510
1.4599	67.7	1.33562	11.115	7.525
1.4601	67.8	1.33625	11.120	7.539
1.4603	67.9	1.33686	11.125	7.554
1.4606	68.0	1.33748	11.130	7.568
1.4608	68.1	1.33810	11.135	7.583
1.4611	68.2	1.33872	11.140	7.597
1.4613	68.3	1.33935	11.146	7.613
1.4615	68.4	1.33997	11.151	7.627
1.4618	68.5	1.34059	11.156	7.642
1.4620	68.6	1.34121	11.161	7.656
1.4623	68.7	1.34183	11.166	7.671
1.4625	68.8	1.34245	11.172	7.686
1.4628	68.9	1.34309	11.177	7.701
1.4630	69.0	1.34371	11.182	7.716
1.4632	69.1	1.34433	11.187	7.730
1.4635	69.2	1.34495	11.192	7.745
1.4637	69.3	1.34558	11.198	7.760
1.4640	69.4	1.34621	11.203	7.775
1.4642	69.5	1.34684	11.208	7.790
1.4644	69.6	1.34746	11.213	7.804
1.4647	69.7	1.34809	11.218	7.819
1.4649	69.8	1.34871	11.224	7.834
1.4652	69.9	1.34934	11.229	7.849
1.4654	70.0	1.34997	11.234	7.864
1.4657	70.1	1.35060	11.239	7.879
1.4659	70.2	1.35123	11.245	7.894
1.4661	70.3	1.35186	11.250	7.909

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at @ 20/20 Degrees C	Pounds Solids per Gallon
1.4664	70.4	1.35248	11.255	7.924
1.4666	70.5	1.35311	11.260	7.938
1.4669	70.6	1.35375	11.265	7.953
1.4671	70.7	1.35438	11.271	7.969
1.4674	70.8	1.35501	11.276	7.983
1.4676	70.9	1.35564	11.281	7.998
1.4679	71.0	1.35627	11.286	8.013
1.4681	71.1	1.35691	11.292	8.029
1.4684	71.2	1.35754	11.297	8.043
1.4686	71.3	1.35817	11.302	8.058
1.4688	71.4	1.35881	11.308	8.074
1.4691	71.5	1.35944	11.313	8.089
1.4693	71.6	1.36008	11.318	8.104
1.4696	71.7	1.36072	11.323	8.119
1.4698	71.8	1.36135	11.329	8.134
1.4701	71.9	1.36198	11.334	8.149
1.4703	72.0	1.36261	11.339	8.164
1.4706	72.1	1.36324	11.345	8.180
1.4708	72.2	1.36389	11.350	8.195
1.4711	72.3	1.36452	11.355	8.210
1.4713	72.4	1.36516	11.360	8.225
1.4716	72.5	1.36579	11.366	8.240
1.4718	72.6	1.36643	11.371	8.255
1.4721	72.7	1.36707	11.376	8.270
1.4723	72.8	1.36771	11.382	8.286
1.4725	72.9	1.36836	11.387	8.301
1.4728	73.0	1.36900	11.392	8.316
1.4730	73.1	1.36964	11.398	8.332
1.4733	73.2	1.37028	11.403	8.347
1.4735	73.3	1.37092	11.408	8.362
1.4738	73.4	1.37156	11.414	8.378
1.4740	73.5	1.37220	11.419	8.393

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at @ 20/20 Degrees C	Pounds Solids per Gallon
1.4743	73.6	1.37283	11.424	8.408
1.4745	73.7	1.37347	11.430	8.424
1.4748	73.8	1.37411	11.435	8.439
1.4750	73.9	1.37476	11.440	8.454
1.4753	74.0	1.37541	11.446	8.470
1.4756	74.1	1.37605	11.451	8.485
1.4758	74.2	1.37669	11.456	8.500
1.4760	74.3	1.37733	11.462	8.516
1.4763	74.4	1.37798	11.467	8.531
1.4765	74.5	1.37864	11.473	8.547
1.4768	74.6	1.37928	11.478	8.563
1.4770	74.7	1.37993	11.483	8.578
1.4773	74.8	1.38057	11.489	8.594
1.4776	74.9	1.38122	11.494	8.609
1.4778	75.0	1.38187	11.499	8.624
1.4781	75.1	1.38252	11.505	8.640
1.4783	75.2	1.38316	11.510	8.656
1.4786	75.3	1.38381	11.516	8.672
1.4788	75.4	1.38445	11.521	8.687
1.4791	75.5	1.38510	11.526	8.703
1.4793	75.6	1.38575	11.532	8.718
1.4796	75.7	1.38640	11.537	8.734
1.4798	75.8	1.38705	11.543	8.750
1.4801	75.9	1.38770	11.548	8.765
1.4803	76.0	1.38835	11.554	8.781
1.4806	76.1	1.38902	11.559	8.796
1.4808	76.2	1.38967	11.564	8.812
1.4811	76.3	1.39032	11.570	8.828
1.4814	76.4	1.39097	11.575	8.843
1.4816	76.5	1.39162	11.581	8.859
1.4819	76.6	1.39228	11.586	8.875
1.4821	76.7	1.39293	11.592	8.891

Refractive Index at 20 Degrees C	Percent Sucrose or Degrees Brix	Apparent Specific Gravity at 20 Degrees C	Weight/Gal. in air at 20/20 Degrees C	Pounds Solids per Gallon
1.4824	76.8	1.39358	11.597	8.906
1.4826	76.9	1.39423	11.602	8.922
1.4829	77.0	1.39489	11.608	8.938
1.4831	77.1	1.39554	11.613	8.954
1.4834	77.2	1.39619	11.619	8.970
1.4836	77.3	1.39685	11.624	8.985
1.4839	77.4	1.39750	11.630	9.002
1.4841	77.5	1.39816	11.635	9.017
1.4844	77.6	1.39882	11.641	9.033
1.4847	77.7	1.39949	11.646	9.049
1.4849	77.8	1.40014	11.652	9.065
1.4852	77.9	1.40080	11.657	9.081
1.4854	78.0	1.40146	11.663	9.097
1.4857	78.1	1.40211	11.668	9.113
1.4860	78.2	1.40277	11.673	9.128
1.4862	78.3	1.40344	11.679	9.145
1.4865	78.4	1.40409	11.684	9.160
1.4867	78.5	1.40475	11.690	9.177
1.4870	78.6	1.40541	11.695	9.192
1.4873	78.7	1.40607	11.701	9.209
1.4875	78.8	1.40674	11.706	9.224
1.4878	78.9	1.40740	11.712	9.241
1.4880	79.0	1.40806	11.717	9.256
1.4883	79.1	1.40872	11.723	9.273
1.4886	79.2	1.40938	11.728	9.289
1.4888	79.3	1.41005	11.734	9.305
1.4891	79.4	1.41072	11.740	9.322
1.4893	79.5	1.41138	11.745	9.337
1.4896	79.6	1.41204	11.751	9.354
1.4899	79.7	1.41270	11.756	9.370
1.4901	79.8	1.41337	11.762	9.386
1.4904	79.9	1.41404	11.767	9.402
1.4906	80.0	1.41471	11.773	9.418



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