The suppression of boric oxide solubility in the mixed sodium-potassium system tends to disappear with rising temperature, although the pH relationships remain much the same. The solubility depression is still evident at 30° C. (first, third, and fifth experiments in Table II); but at 40° C. the mixed system has a higher boric oxide solubility than either alkali separately. This is due to a widening of the solubility peak for each individual alkali, so that the intermediate pH is no longer a region of particularly low solubility for each individual alkali system.

The effect of mixing all three alkalies is shown in the seventh experiment in Table I. Here excesses of sodium penta- and diborate, ammonium penta- and diborate, and potassium penta- and diborate were shaken with water at 20° C. These results are not easy to explain. The pH is high (9.05) and the potassium ion solubility approaches that of the peak potassium solution at pH 9.17. The ammonium content, however, is higher than in the mixed ammonium-potassium system, although the pH is further removed from the optimum pH for the ammonium system. Similarly, the sodium content is much the same as that of the mixed sodium-potassium system, although the pH is higher.

These anomalies do not appear in the results of experiments with combinations of all three alkalies at 30° and 40° C. At both these temperatures the pH of the combination is intermediate between the pH's of the individual alkalies, and between the pH's of the various pairs of alkalies. Moreover, the amount of each alkali dissolving in the combination appears to be controlled by the pH of the final solution.

The theory here advanced, that the amount of boric oxide dissolving at any one temperature is dependent mainly on the pH of the final solution, offers an explanation for many of the published figures on the solubility of boric acid in solutions of other salts (11). Thus a number of investigators have measured the solubility of boric acid in solutions of such compounds as inorganic acids, sodium chloride, sodium citrate, sodium acetate, and sodium potassium tartrate. A series of such solutions saturated with boric acid at 18° C. was made up following Kolthoff's figures as quoted by Seidell (11, p. 121) and the pH values were measured at 20° C.

Solvent	B_2O_3 Wt. %	pH
1.0M hydrochloric acid	2.07	0.09
Water	2.56	3.76
0.5M sodium sulfate	3.06	3.85
0.25M sodium oxalate	3.20	5.20
1.0M sodium acetate	3.79	5.80
0.5M sodium citrate	5.29	5.89

These figures suggest that the increase in boric oxide solubility is due to the rise in pH. The pentaborate formed by this increase in pH has its solubility suppressed to some extent by the presence of the common sodium ion of the solvent compound. Work is being continued on this effect of other compounds on the solubility of boric acid, to see how many of the known cases can be explained by this pH theory.

As for the formulation of solutions of maximum boric oxide solubility (the purpose of this investigation), the results show that at 20°, 30°, and 40° C. the peak boric oxide solubility of the simple sodium oxide-boric oxide system can be substantially increased by changing to the sodium oxide-ammonium oxide-boric oxide system. Moreover, in this latter system the composition limits of the solubility peak are no longer narrow, and by varying the sodium oxide-ammonium oxide ratio it is possible to vary the pH over more than 1 pH unit without greatly influencing the boric oxide solubility.

ACKNOWLEDGMENT

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Density, Electrical Conductance, and pH of Solutions in the System CaO–P₂O₅–H₂O at 25° C.

ANTHONY J. SMITH AND E. O. HUFFMAN
Division of Chemical Development, Tennessee Valley Authority, Wilson Dam, Ala.

Information concerning the properties of phosphoric acid and calcium phosphate solutions is applicable to many problems in the phosphate industry, agronomy, and biochemistry. The density, electrical conductance, and pH of solutions in the system $CaO-P_2O_5-H_2O$, as measured by standard methods, are reported here. Compositions of the solutions were bounded by the line $P_2O_5-H_2O$ and the solubility isotherms of anhydrous dicalcium phosphate and monocalcium phosphate monohydrate (3, 6).

The electrical conductance of 0.001 to 18.02 molal solutions of phosphoric acid at 25° C. and the limiting conductance of the H_2PO_4 ion have been reported (14).

Precise measurements of the density of solutions of phosphoric acid at 25° C. were reported recently (5).

PREPARATION OF SOLUTIONS

Water for preparing the solutions, purified in a conductance water still, had a maximum specific conductance of 2 x 10⁻⁶ ohm⁻¹ cm.⁻¹. The phosphoric acid was purified by triple crystallization as either the anhydrous (17) or hemihydrate (15) form. The concentration of solutions prepared from these crystals was determined from the densities of the solutions (5). The two sources of acid

yielded solutions that in density, conductance, and pH were indistinguishable.

Monocalcium phosphate monohydrate was thrice crystallized from 50% phosphoric acid solution (12) and the crystals, washed with water-free acetone, had crystallographic and optical properties agreeing with those published (2, 12). A microscopic examination disclosed no extraneous phases, and a spectrographic analysis disclosed no significant amounts of impurities.

Solutions of known composition were prepared by mixing weighed amounts of monocalcium phosphate monohydrate, water, and phosphoric acid of known concentration. A series of such solutions, containing different amounts of the calcium salt, was prepared for each concentration of phosphoric acid, and stored in rubber-stoppered, borosilicate glass flasks. Weights were corrected to vacuum. The 1953 atomic weights (18) were used in calculations of molalities.

METHODS OF MEASUREMENT

Density. Density was measured in pycnometers fitted with ground-glass stoppers. This method has been described (4). The density of the standardizing liquid, conductance water at 25° C., was taken as 0.99707 gram/ml. The solutions were brought to thermal equilibrium in a water bath maintained at 25° ± 0.02° C. The weights were calibrated, and all weighings were corrected to vacuum.

Electrical Conductance. Electrical conductance was measured at 25° ± 0.001° C. with the equipment and methods used by Mason and Culvern (14). The results were corrected for calibration of the electrical bridge and for conductance of the water. The cells were standardized with solutions of potassium chloride (13) that had been thrice crystallized from water and fused.

The Beckmann thermometer for measuring the temperature of the oil bath was calibrated against a platinum resistance thermometer that had been calibrated by the National Bureau of Standards. The resistance thermometer was read with a calibrated Mueller resistance bridge.

pH. Measurements of pH were made at 25° ± 0.02° C. with a modified Hildebrand hydrogen electrode (11) and a Beckman No. 4970 calomel half-cell having a saturated potassium chloride bridge. The pH cell was a borosilicate glass H-cell just large enough to contain the electrodes and 5 ml. of the test solution. The potassium chloride in the salt bridge was purified by three recrystallizations.

The hydrogen electrode was made of a 0.5-mm. platinum wire that extended 2.5 cm. beyond its seal in the end of a 5-mm. borosilicate glass tube. Immediately before each use, the electrode was cleaned (1) and platinized in a chloroplatinic acid solution (7). To obtain the recommended current density, a current of 100 ma. was passed during platinization, and the current was maintained for periods ranging from 0 to 180 seconds, depending upon the test solution whose pH was to be measured. The platinized electrode was washed for 1 minute in a voluminous stream of tap water and then rinsed with the test solution.

Purified hydrogen (7) was washed in bubblers that were immersed in the bath containing the pH cell, once with water and twice with the test solution. The e.m.f. of the pH cell became constant within 0.1 mv. in 10 to 100 minutes. The time required for equilibration generally increased as the concentration of the test solution was increased.

The calomel half-cell was standardized against four National Bureau of Standards buffer solutions: 0.01-molal borax, 0.025-molal potassium dihydrogen phosphate–disodium hydrogen phosphate, 0.05-molal potassium acid phthalate, and 0.01-molal potassium hydrogen tartrate. A 0.1-molal hydrochloric acid solution, prepared from the constant-boiling mixture, was an additional standard. From the mean activity coefficient in water at 25° C. of hydrochloric acid (9) and of potassium chloride (8), and an assumption that the activity of the chloride ion in the re-

spective solutions is the same when the solutions have the same ionic strength, the pH of the 0.1-molal hydrochloric acid solution was calculated to be 1.085.

The E_{pH}^{c} of the calomel half-cell at 25° C. was 0.2442 volt absolute. The pH values were calculated from the equation

$$pH = \frac{E - E_{pH}^{o}}{2.30259\ RT/F} = \frac{E - 0.2442}{0.059156}$$

where the values for R, T, and F are those published in 1952 (16); E is the measured e.m.f. in volts absolute; and E_{pH}^{o} is treated as a constant (10).

RESULTS

To make the results readily usable, the observed values were used to derive a table giving secondary values for the properties at round values in molal concentrations of phosphoric acid and monocalcium phosphate. Interpolations were made on the assumption that, over small ranges of composition, the values of density, specific conductance, and pH are linear functions of composition. The interpolations were calculated by the equation

$$N_j = N + \frac{\partial N}{\partial m_A} \delta m_A + \frac{\partial N}{\partial m_B} \delta m_B$$

where N_j = interpolated value of density, specific conductance, or pH
   N = measured value
   m_A = molality of H_3PO_4
   m_B = molality of $Ca(H_2PO_4)_2$

Most of the adjusted concentrations differed from the primary values by only a few thousandths of a molal unit. The adjustments in values of density, specific conductance, and pH, correspondingly small, were made with sufficient accuracy by taking the slopes, $\partial N/\partial m$, from large plots of the measured values against the molalities of the acid or of the salt. The values at round molalities are shown in Table I.

Tables giving values for the properties at round concentrations in weight per cent of phosphorous pentoxide and calcium oxide were derived from the data in Table I. The interpolated values of density in Table II, of specific conductance in Table III, and of pH in Table IV, were read from large-scale plots of the respective quantities against the per cent of phosphorus pentoxide. Each of these plots contained lines of constant per cent of calcium oxide.

From the deviations between the measured and interpolated quantities it was calculated that the probable error of the interpolated values of density and specific conductance is ±0.0002, with a 99% confidence limit of ±0.0005. The probable error of the interpolated pH values is ±0.01, with a 99% confidence limit of ±0.026.

Within the limits of concentration covered in this study, values for density and either specific conductance or pH are sufficient to define the composition of a solution in the system $CaO-P_2O_5-H_2O$ at 25° C. The interpolated values are expected to be useful in the development and control of processes in which phosphoric acid and calcium phosphate solutions are involved.

The densities and specific conductances are fundamental physicochemical properties of the solutions. The significance and practical utility of pH values are reviewed elsewhere (10).

TABLE I. DENSITY, SPECIFIC CONDUCTANCE, AND pH OF SOLUTIONS IN THE SYSTEM CaO-P₂O₅-H₂O AT 25° C.

Composition of Solution				Density, Grams/Ml.	Specific Conductance, Ohm⁻¹ Cm.⁻¹	pH
Molality		Weight %				
H_3PO_4	$Ca(H_2PO_4)_2$	P_2O_5	CaO			
0.1	0.00	0.70	0.000	1.00243	0.01042	1.58_6
	0.02	0.98	0.111	1.00595	0.00928	1.79_0
	0.04	1.25	0.220	1.00954	0.00967	1.93_0
	0.06	1.53	0.329	1.01303	0.01049	2.05_2
	0.08	1.79	0.436	1.01661	0.01150	2.13_3
	0.10	2.06	0.543	1.02011	0.01255	2.20_6
	0.12	2.33	0.648	1.02356	0.01360	2.25_8
	0.14	2.59	0.753	1.02696	0.01456	2.30_9
	0.16	2.85	0.857	1.03041	0.01562	2.35_0
	0.18	3.10	0.960	1.03379	0.01653	2.38_5
	0.20	3.36	1.062	1.03727	0.01743	2.40_9
	0.22	3.61	1.163	1.04061	0.01834	2.43_8
	0.24	3.86	1.263	1.04400	0.01913	2.46_3
0.5	0.00	3.38	0.000	1.02277	0.03193	1.10_2
	0.02	3.64	0.106	1.02610	0.02954	1.16_6
	0.04	3.89	0.212	1.02934	0.02813	1.23_1
	0.06	4.14	0.317	1.03270	0.02731	1.29_3
	0.08	4.39	0.420	1.03593	0.02692	1.35_1
	0.1	4.63	0.523	1.03939	0.02701	1.40_8
	0.2	5.83	1.024	1.05591	0.02873	1.58_7
	0.3	6.98	1.503	1.07177	0.03134	1.69_7
	0.4	8.08	1.963	1.08742	0.03373	1.77_7
	0.5	9.13	2.405	1.10287	0.03592	1.83_8
	0.6	10.14	2.829	1.11766	0.03762	1.89_7
0.8	0.0	5.27	0.000	1.03704	0.04613	0.94_7
	0.2	7.57	0.997	1.06900	0.03839	1.31_5
	0.4	9.69	1.914	1.09974	0.04145	1.50_3
	0.6	11.65	2.761	1.12690	0.04455	1.61_3
	0.8	13.46	3.545	1.15698	0.04635	1.67_7
1.0	0.0	6.46	0.000	1.04662	0.05535	0.85_1
	0.2	8.68	0.980	1.07786	0.04538	1.15_5
	0.4	10.72	1.883	1.10796	0.04683	1.32_9
	0.6	12.61	2.717	1.13691	0.04913	1.42_3
	0.8	14.36	3.491	1.16446	0.04991	1.49_3
	1.0	15.99	4.210	1.19087	0.05119	1.52_5
1.5	0.0	9.28	0.000	1.06926	0.07966	0.67_3
	0.2	11.30	0.940	1.09914	0.06477	0.91_6
	0.4	13.16	1.808	1.12776	0.06204	1.07_5
	0.6	14.89	2.613	1.15562	0.06202	1.16_8
	0.8	16.49	3.363	1.18185	0.06202	1.22_9
	1.0	17.99	4.061	1.20703	0.06161	1.27_1
	1.2	19.39	4.713	1.23137	0.06056	1.30_0
2.0	0.0	11.87	0.000	1.09069	0.10094	0.50_9
	0.2	13.71	0.903	1.11898	0.08341	0.69_5
	0.4	15.41	1.740	1.14652	0.07874	0.82_5
	0.6	16.99	2.518	1.17304	0.07478	0.91_6
	0.8	18.47	3.243	1.19845	0.07307	0.97_2
	1.0	19.85	3.922	1.22298	0.07124	1.01_4
	1.2	21.15	4.557	1.24654	0.06919	1.04_8
	1.4	22.36	5.153	1.26912	0.06686	1.07_3
2.121	0.0	12.46	0.000	1.09576	0.10669	0.49_9
	0.2	14.26	0.894	1.12371	0.08922	0.68_0
	0.4	15.93	1.724	1.15091	0.08135	0.80_5
	0.6	17.48	2.496	1.17691	0.07818	0.88_7
	0.8	18.93	3.216	1.20222	0.07599	0.94_3
	1.0	20.28	3.889	1.22614	0.07385	0.98_6
	1.2	21.55	4.520	1.24910	0.07138	1.02_1
	1.4	22.75	5.113	1.27138	0.06874	1.04_6
	1.6	23.87	5.670	1.29264	0.06597	1.06_0
4.0	0.0	20.40	0.000	1.16689	0.17372	0.12_3
	0.2	21.71	0.780	1.19097	0.15059	0.19_8
	0.4	22.93	1.510	1.21403	0.13492	0.27_6
	0.6	24.08	2.196	1.23659	0.12312	0.30_8
	0.8	25.17	2.841	1.25805	0.11411	0.35_8
	1.0	26.19	3.449	1.27940	0.10825	0.39_9
	1.2	27.15	4.023	1.29891	0.09960	0.41_2
	1.4	28.07	4.566	1.31893	0.09335	0.45_5
6.0	0.0	26.82	0.000	1.23012	0.21445	-0.15_7
	0.2	27.79	0.686	1.25075	0.19011	-0.12_0
	0.4	28.70	1.334	1.27059	0.17037	-0.07_6
	0.6	29.57	1.947	1.28979	0.15464	-0.04_9
	0.8	30.39	2.527	1.30850	0.14126	-0.01_4
	1.0	31.16	3.078	1.32673	0.12978	0.01_4
	1.2	31.90	3.601	1.34394	0.11990	0.03_5
8.0	0.0	31.83	0.000	1.28366	0.23120	-0.34_5
	0.2	32.56	0.613	1.30158	0.20748	-0.33_5
	0.4	33.27	1.195	1.31930	0.18744	-0.31_8
	0.6	33.93	1.748	1.33724	0.17001	-0.30_6
	0.8	34.57	2.276	1.35164	0.15513	-0.29_4
	1.0	35.17	2.779	1.36740	0.14226	-0.28_6
	1.2	35.75	3.259	1.38275	0.13058	-0.26_9
10.0	0.0	35.85	0.000	1.32918	0.23284	-0.51_6
	0.2	36.42	0.553	1.34528	0.21071	-0.51_7
	0.4	36.97	1.082	1.36067	0.19145	-0.53_8
	0.6	37.49	1.587	1.37477	0.17478	-0.53_6
	0.8	37.99	2.070	1.38908	0.16001	-0.56_8
	1.0	38.47	2.533	1.40342	0.14690	-0.57_1

TABLE II. DENSITY (GRAMS/ML.) OF SOLUTIONS IN THE SYSTEM CaO-P₂O₅-H₂O AT 25° C.
(VALUES INTERPOLATED AT ROUND WEIGHT PERCENTAGES OF P₂O₅ AND CaO)

P_2O_5, %	CaO, %																				
	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
0.0	0.9971																				
0.2	0.9987																				
0.4	1.0002	014																			
0.6	1.0017	031	045																		
0.8	1.0032	046	060	074																	
1.0	1.0048	062	075	089																	
1.2	1.0063	076	090	104	118																
1.4	1.0077	090	105	119	133	147															
1.6	1.0092	105	120	134	148	163															
1.8	1.0107	120	135	149	163	178	192														
2.0	1.0122	135	150	164	178	193	206	221													
2.2	1.0137	151	165	179	193	206	221	236													
2.4	1.0152	166	180	194	208	223	237	250	263												
2.6	1.0167	181	195	209	223	238	252	265	278	291											
2.8	1.0183	196	210	224	238	253	266	280	293	307											
3.0	1.0198	212	225	240	254	268	281	295	308	322	336										

(VALUES INTERPOLATED AT ROUND WEIGHT PERCENTAGES OF P$_2$O$_5$ AND CaO)

P$_2$O$_5$, %	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
3.2	1.0213	226	241	255	269	283	296	310	323	337	351	364									
3.4	1.0229	242	256	270	284	298	311	325	338	352	365	380									
3.6	1.0244	257	272	285	299	314	327	341	354	367	380	395	408								
3.8	1.0259	273	287	300	315	329	342	356	369	383	396	410	423	437							
4.0	1.0274	288	302	316	330	344	358	371	384	398	411	425	438	453							
4.2	1.0289	303	318	332	345	360	373	387	400	413	426	441	454	468							
4.4	1.0304	319	333	347	361	375	388	402	415	429	444	457	470	484	499						
4.6	1.0321	334	348	363	377	391	404	418	430	444	457	472	486	500	514						
4.8	1.0336	350	364	378	392	406	419	433	446	459	473	488	502	515	530	545					
5.0	1.0351	366	380	393	407	421	435	448	461	475	488	503	517	531	546	561					
5.2	1.0367	381	395	409	423	437	450	464	477	491	504	519	532	546	562	576	589				
5.4	1.0383	397	411	425	438	452	465	480	493	506	520	534	548	562	577	592	605				
5.6	1.0398	412	427	440	454	468	481	495	508	522	535	550	564	577	593	607	621	635			
5.8	1.0414	428	442	456	470	483	497	511	524	537	551	565	579	593	608	623	636	651			
6.0	1.0429	443	458	472	486	499	513	526	539	553	567	582	596	610	624	639	652	667	681		
6.2	1.0445	459	473	487	501	514	528	542	555	568	582	598	611	625	640	655	668	683	697		
6.4	1.0461	475	489	503	516	530	544	558	571	584	598	613	627	641	656	671	684	698	713	727	
6.6	1.0476	491	505	519	532	546	560	574	586	600	614	629	643	657	672	686	699	714	728	742	
6.8	1.0492	507	521	535	548	562	576	589	602	616	630	645	659	673	687	702	715	730	744	758	774
7.0	1.0508	523	537	550	564	578	591	605	618	632	646	661	675	689	703	718	731	746	760	774	789
7.2	1.0524	539	553	566	580	593	607	621	634	648	662	677	691	705	719	734	747	762	776	790	805
7.4	1.0540	555	569	582	596	609	623	637	651	664	678	693	707	721	735	750	763	778	792	806	821
7.6	1.0556	571	585	598	612	625	639	653	667	680	694	709	723	737	751	766	779	794	808	822	837
7.8	1.0572	587	601	614	628	641	655	669	683	696	710	725	739	753	767	782	795	810	824	838	853
8.0	1.0588	603	617	631	644	657	671	685	699	712	726	741	755	769	783	798	811	826	840	853	869
8.2	1.0604	619	633	647	661	674	687	702	715	729	742	757	772	785	799	814	827	842	857	871	886
8.4	1.0620	635	649	663	677	690	704	718	731	745	758	773	788	801	815	831	845	859	873	887	902
8.6	1.0637	651	666	679	693	706	720	734	747	761	774	789	804	818	832	847	860	875	889	903	918
8.8	1.0653	667	682	695	709	722	736	750	764	777	790	805	820	834	848	863	876	891	905	919	935
9.0	1.0669	683	698	711	725	738	752	767	780	793	807	821	836	850	864	879	892	907	921	935	951
9.2	1.0685	700	715	728	742	755	769	783	796	809	823	838	853	867	881	895	909	923	938	952	968
9.4	1.0702	717	731	744	758	771	785	799	813	826	839	854	869	883	898	912	925	940	954	968	984
9.6	1.0718	733	748	761	774	787	802	815	829	842	856	871	886	899	914	929	941	956	970	985	1001
9.8	1.0735	749	764	777	790	804	818	832	846	859	873	887	902	916	931	945	958	973	986	1001	017
10.0	1.0751	765	780	793	807	820	834	848	862	875	889	903	919	933	947	962	975	989	1003	017	033
10.2	1.0768	782	796	809	823	836	851	865	878	892	906	920	936	950	964	978	991	1006	020	034	050
10.4	1.0784	799	813	826	840	853	868	881	895	908	923	937	952	966	981	995	1008	023	036	051	068
10.6	1.0801	815	829	843	856	870	884	898	912	925	939	953	968	983	997	1012	025	039	053	067	084
10.8	1.0817	832	846	859	873	886	901	914	928	941	956	970	986	1000	014	029	042	056	070	084	100
11.0	1.0834	848	863	876	889	903	918	931	945	958	973	987	1003	017	030	045	058	073	087	101	117
11.2	1.0850	865	879	893	906	920	935	948	962	975	990	1004	019	034	047	062	075	090	104	117	135
11.4	1.0868	882	896	909	923	937	952	965	979	992	1007	020	035	050	064	079	092	107	121	135	152
11.6	1.0885	899	913	926	940	954	969	982	996	1009	024	037	052	067	080	095	109	124	138	153	169
11.8	1.0901	916	930	943	957	971	985	998	1013	026	040	054	069	084	098	113	126	142	156	170	186
12.0	1.0918	932	947	960	973	987	1002	015	030	044	057	071	086	101	114	128	142	158	172	187	204
12.2	1.0935	949	964	977	991	1004	019	032	047	061	075	088	103	118	131	146	160	176	190	204	220
12.4	1.0952	966	980	994	1008	021	036	049	064	078	092	105	120	135	149	164	178	193	207	222	238
12.6	1.0969	983	997	1011	025	038	053	067	081	095	109	123	138	152	165	181	195	210	224	240	256
12.8	1.0985	1000	014	028	042	055	070	084	099	112	126	139	155	169	183	198	212	228	242	257	273
13.0	1.1003	017	031	045	059	072	087	101	116	129	144	157	172	186	200	216	230	246	260	274	290
13.2	1.1021	035	049	062	076	089	105	119	133	147	161	175	190	204	218	233	247	263	278	292	308
13.4	1.1038	052	066	079	093	107	122	136	151	164	178	192	207	221	235	251	265	281	295	310	325
13.6	1.1055	069	083	096	110	124	139	153	168	182	196	210	225	239	253	268	282	298	312	327	343
13.8	1.1072	086	100	113	128	141	157	170	185	199	213	227	242	256	270	285	299	316	330	345	361
14.0	1.1089	103	118	131	145	158	174	188	202	216	231	244	259	274	288	303	317	333	347	362	379
14.2	1.1107	121	135	148	162	176	191	205	220	234	248	262	277	291	306	321	334	350	365	380	396
14.4	1.1124	138	152	166	179	193	208	223	237	251	266	279	294	309	324	338	352	368	383	398	414
14.6	1.1142	156	169	184	197	210	225	240	255	269	284	297	312	327	341	356	370	386	401	416	432
14.8	1.1160	173	187	201	215	228	243	258	272	287	301	315	330	345	359	374	388	404	419	434	450
15.0	1.1177	191	205	219	232	246	261	275	290	305	318	333	348	363	377	391	406	422	436	452	467
15.2	1.1195	208	223	236	250	264	279	293	308	322	336	351	366	381	394	409	424	439	454	469	485
15.4	1.1212	226	241	254	268	282	297	311	326	340	354	368	384	398	412	427	441	457	472	488	503
15.6	1.1230	244	258	272	285	299	315	329	343	358	371	386	402	416	430	445	459	476	490	506	521
15.8	1.1248	261	275	290	303	317	333	347	361	376	389	404	420	434	448	463	477	493	508	524	539
16.0	1.1266	279	293	307	321	335	351	365	379	394	408	422	438	452	466	481	495	512	526	542	557

TABLE II. DENSITY (GRAMS/ML.) OF SOLUTIONS IN THE SYSTEM CaO-P$_2$O$_5$-H$_2$O AT 25° C. (Contd.)
(VALUES INTERPOLATED AT ROUND WEIGHT PERCENTAGES OF P$_2$O$_5$ AND CaO)

P$_2$O$_5$, %	CaO, % 0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
16.2	1.1284	296	310	325	339	353	369	383	397	412	426	440	456	470	484	498	514	530	544	560	575
16.4	1.1301	315	328	343	357	371	386	401	415	430	444	458	474	488	502	517	532	548	563	578	594
16.6	1.1319	333	346	360	375	389	404	419	433	448	462	476	492	506	521	535	550	566	581	596	612
16.8	1.1338	351	364	379	393	407	422	437	451	466	481	495	510	524	539	554	569	584	599	614	630
17.0	1.1355	369	383	398	411	426	440	455	469	484	498	513	528	541	556	572	587	603	618	633	649
17.2	1.1374	387	401	416	430	444	458	473	487	502	516	531	546	560	576	590	605	621	636	651	667
17.4	1.1391	406	419	434	448	462	476	491	506	521	534	549	564	579	594	608	624	639	654	669	685
17.6	1.1410	424	437	452	466	480	495	510	524	539	553	567	583	597	611	626	642	658	673	688	704
17.8	1.1428	441	456	470	484	499	513	528	543	557	571	585	601	615	630	645	661	676	691	706	722
18.0	1.1446	460	474	489	502	516	531	546	561	576	589	604	619	634	649	664	679	695	710	725	741
18.2	1.1465	478	492	507	520	535	550	565	580	594	608	623	638	652	667	682	698	714	729	744	759
18.4	1.1483	497	511	525	538	552	568	583	598	612	626	641	656	670	685	700	717	733	748	763	778
18.6	1.1501	515	529	544	557	571	587	601	617	631	644	660	675	689	704	719	735	751	766	781	797
18.8	1.1520	534	548	562	576	590	605	620	634	649	663	679	694	707	722	738	754	769	784	799	816
19.0	1.1538	552	567	581	595	609	624	638	653	668	683	697	712	726	741	756	772	788	803	819	834
19.2	1.1557	572	586	599	613	627	642	657	672	687	701	716	731	744	759	774	791	807	822	837	853
19.4	1.1576	589	604	618	632	646	661	676	691	706	719	735	749	763	777	793	810	826	841	856	872
19.6	1.1594	608	623	637	650	665	679	694	709	724	738	754	768	782	796	812	829	844	859	874	890
19.8	1.1613	626	641	655	669	684	698	713	727	743	757	772	787	801	815	831	847	863	878	893	910
20.0	1.1632	644	659	673	687	703	717	732	746	761	775	791	806	821	836	852	867	882	897	913	928
20.2	1.1651	663	677	693	706	721	736	751	766	779	794	811	826	840	856	871	887	902	917	933	947
20.4	1.1670	683	697	712	726	742	756	770	786	799	814	830	846	860	875	891	907	922	936	952	967
20.6	1.1689	702	716	731	745	761	775	789	805	818	833	849	865	879	894	910	926	942	955	972	987
20.8	1.1707	721	736	750	764	780	794	809	824	837	852	868	884	897	914	929	945	961	975	991	2007
21.0	1.1727	740	755	769	783	799	813	828	843	856	871	887	903	917	933	949	964	980	994	2010	026
21.2	1.1746	759	774	789	803	818	832	847	862	876	891	907	922	937	952	968	984	2000	014	030	045
21.4	1.1765	778	793	808	822	837	851	866	882	894	910	926	942	956	972	987	2004	019	034	050	065
21.6	1.1784	797	812	827	841	857	871	885	901	914	928	945	961	976	992	2007	023	038	053	069	084
21.8	1.1803	817	832	847	861	876	890	905	920	933	948	965	981	996	2011	026	043	058	073	089	104
22.0	1.1823	836	851	866	880	896	909	924	939	953	968	984	2000	015	030	046	062	077	092	108	124
22.2	1.1841	856	871	885	899	915	928	943	958	972	987	2003	019	034	050	066	082	097	112	128	143
22.4	1.1861	875	890	905	919	935	948	963	979	992	2006	023	039	053	069	085	102	117	132	148	163
22.6	1.1880	895	910	925	938	953	968	983	998	2012	026	043	059	073	089	105	121	137	151	167	183
22.8	1.1900	914	929	945	958	973	987	2003	018	032	046	062	078	094	109	125	140	156	171	187	203
23.0	1.1920	934	949	964	978	993	2007	023	037	052	066	082	098	113	128	145	160	176	191	207	223
23.2	1.1939	954	969	984	998	2013	027	042	057	072	086	102	118	133	148	165	181	197	212	228	243
23.4	1.1959	974	989	2004	018	033	047	062	077	092	106	122	138	153	168	185	202	217	232	248	263
23.6	1.1979	994	2008	024	038	053	067	082	097	111	126	142	158	173	188	205	222	237	252	268	284
23.8	1.1998	2013	027	043	057	073	086	101	117	131	146	162	178	193	208	224	241	257	272	288	304
24.0	1.2018	033	048	063	077	092	106	121	136	151	166	182	198	214	229	244	261	277	292	308	323
24.2	1.2037	052	068	082	096	112	126	141	156	171	186	202	218	234	249	265	282	297	312	329	344
24.4	1.2058	072	087	102	117	132	146	161	176	191	206	223	239	254	269	285	302	318	333	349	365
24.6	1.2078	092	107	123	137	152	166	182	197	212	227	243	259	274	279	306	323	338	353	370	385
24.8	1.2097	112	127	143	157	172	187	202	217	232	247	263	280	295	310	326	343	359	374	391	406
25.0	1.2118	132	147	163	177	192	206	222	237	252	267	283	300	315	331	347	364	379	394	411	426
25.2	1.2138	152	167	183	197	212	226	242	257	272	287	304	320	336	351	367	384	400	415	432	447
25.4	1.2158	172	187	203	217	233	247	262	277	293	307	325	341	356	371	387	405	421	436	452	467
25.6	1.2178	192	207	223	237	253	267	283	298	314	328	345	361	376	391	408	426	442	457	473	488
25.8	1.2198	212	227	243	258	274	288	303	319	334	349	366	382	397	412	429	446	462	477	494	509
26.0	1.2219	232	247	264	279	294	308	323	339	354	369	386	402	418	432	449	466	482	497	514	530
26.2	1.2239	253	268	285	299	314	328	344	360	375	390	406	423	439	454	470	487	502	518	535	550
26.4	1.2259	274	289	305	319	335	350	365	380	396	411	427	444	460	475	491	508	524	540	556	571
26.6	1.2280	295	310	326	340	356	370	385	401	417	432	448	465	480	495	512	529	545	561	577	592
26.8	1.2300	315	330	346	361	376	390	406	422	437	452	469	486	501	516	533	550	566	582	598	614
27.0	1.2321	335	350	367	382	397	412	427	442	458	473	490	507	522	537	554	571	587	602	619	635
27.2	1.2342	356	371	388	403	417	432	448	463	480	495	511	527	543	558	575	592	609	624	641	657
27.4	1.2362	377	392	408	423	438	453	468	485	501	515	531	549	565	580	596	613	630	645	662	677
27.6	1.2383	398	413	429	444	459	474	490	506	522	536	552	570	585	600	617	634	651	667	684	699
27.8	1.2403	418	433	450	465	480	495	511	526	543	557	574	591	606	621	638	655	672	688	705	720
28.0	1.2425	440	455	471	486	501	517	532	547	563	578	594	612	628	642	660	677	693	710	726	742
28.2	1.2446	461	476	492	507	522	538	553	569	585	600	616	634	649	664	681	698	715	731	747	764
28.4	1.2466	482	497	513	528	543	560	575	590	606	621	637	655	671	686	702	720	736	753	768	785
28.6	1.2488	503	518	534	549	564	580	595	611	627	642	659	676	693	708	724	742	758	774	790	807
28.8	1.2509	524	539	555	570	585	601	617	632	649	664	681	698	715	730	746	763	779	796	812	828
29.0	1.2530	545	560	576	592	607	623	638	653	670	685	703	720	736	751	766	784	800	817	833	850

TABLE II. DENSITY (GRAMS/ML.) OF SOLUTIONS IN THE SYSTEM CaO-P$_2$O$_5$-H$_2$O AT 25° C. (Contd.)
(VALUES INTERPOLATED AT ROUND WEIGHT PERCENTAGES OF P$_2$O$_5$ AND CaO)

P$_2$O$_5$, %	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
29.2	1.2552	566	581	598	614	628	644	660	675	692	707	724	742	758	773	788	805	821	838	854	871
29.4	1.2572	587	602	619	635	649	665	681	697	714	729	746	763	779	794	810	827	843	860	875	892
29.6	1.2594	609	623	640	656	671	687	702	718	736	751	767	785	801	815	831	849	865	881	897	914
29.8	1.2615	630	645	662	677	692	709	724	740	757	773	789	806	822	837	853	869	886	902	919	936
30.0	1.2637	651	666	683	700	715	731	746	761	778	793	810	827	843	858	875	891	907	924	941	957
30.2	1.2658	673	688	704	721	735	752	769	784	800	815	832	849	864	880	896	913	929	945	963	979
30.4	1.2680	695	710	726	742	757	774	790	805	821	836	853	871	886	902	918	934	950	967	985	3001
30.6	1.2702	717	732	748	764	779	796	811	826	843	858	875	892	908	923	940	956	973	990	3007	023
30.8	1.2723	738	753	770	785	800	817	833	848	865	880	897	914	930	945	962	978	995	3012	028	045
31.0	1.2745	760	775	792	808	823	839	854	869	886	902	918	936	951	967	984	3000	017	033	050	067
31.2	1.2767	782	797	814	829	844	861	876	891	908	924	940	958	974	989	3005	022	039	056	073	089
31.4	1.2789	804	819	836	851	866	883	898	913	930	946	963	980	996	3012	028	045	061	078	095	111
31.6	1.2811	826	841	857	873	889	905	921	936	953	968	985	3002	019	034	050	067	083	100	117	134
31.8	1.2833	848	863	879	895	910	926	942	958	975	990	3007	024	040	055	072	089	105	123	139	156
32.0	1.2855	870	885	901	917	932	948	964	979	997	3013	030	046	062	077	094	111	127	144	161	178
32.2	1.2877	892	907	924	939	954	970	986	3002	019	035	051	068	084	100	117	133	150	167	183	200
32.4	1.2900	915	930	946	962	977	993	3009	024	041	057	074	091	107	123	139	156	173	189	206	223
32.6	1.2922	937	952	968	983	999	3016	031	047	064	080	096	113	129	145	162	178	196	212	228	246
32.8	1.2944	959	974	991	3006	021	038	054	069	086	102	118	135	152	168	184	201	218	234	251	269
33.0	1.2966	981	996	3013	028	043	060	076	091	108	125	140	157	174	190	207	224	241	257	274	291
33.2	1.2988	3003	018	035	051	066	082	098	113	130	147	163	180	196	213	230	246	264	280	297	314
33.4	1.3012	026	041	057	074	089	105	120	136	153	169	186	202	218	236	252	269	287	303	320	336
33.6	1.3033	048	063	080	096	110	127	143	158	176	192	208	225	241	258	275	292	310	326	343	360
33.8	1.3055	071	086	103	118	134	150	166	182	199	215	231	248	264	281	298	315	332	348	366	383
34.0	1.3078	093	108	125	140	156	172	188	204	222	238	254	270	286	304	321	338	355	371	388	406
34.2	1.3102	117	132	148	163	178	194	210	226	244	261	277	293	309	327	344	361	379	394	411	429
34.4	1.3125	140	155	170	186	202	218	233	249	267	284	300	316	332	350	367	384	401	418	434	451
34.6	1.3148	162	177	193	209	224	241	256	272	290	306	324	340	356	374	390	407	425	441	458	475
34.8	1.3171	185	200	217	232	247	263	279	295	313	330	346	362	378	396	413	430	448	464	481	498
35.0	1.3194	208	223	239	255	270	286	302	318	336	353	369	384	401	419	436	452	470	486	504	521
35.2	1.3217	231	246	262	279	294	310	326	341	359	376	392	408	425	442	459	476	494	510	528	545
35.4	1.3240	254	270	286	302	317	333	349	365	382	399	416	432	448	466	482	500	517	533	551	569
35.6	1.3263	277	292	309	325	340	356	372	388	405	423	439	455	471	489	506	523	541	557	574	592
35.8	1.3285	301	316	332	348	363	379	396	411	428	446	462	478	494	511	529	546	564	580	598	615
36.0	1.3309	324	339	356	372	387	403	419	435	452	469	485	502	518	536	553	570	588	604	621	638
36.2	1.3332	347	362	379	395	410	426	443	459	476	493	509	525	541	559	576	593	611	627	645	662
36.4	1.3356	371	386	402	418	433	449	466	482	499	516	532	549	565	583	600	617	635	651	669	686
36.6	1.3380	395	410	426	442	457	473	490	505	523	540	556	572	588	606	624	641	659	675	693	710
36.8	1.3403	418	433	449	465	480	496	512	528	546	564	580	596	613	631	649	665	683	699	717	735
37.0	1.3427	442	457	473	489	504	520	537	553	570	587	603	619	636	654	672	689	707	724	742	758
37.2	1.3450	465	480	497	512	527	544	561	576	593	611	628	644	660	678	696	713	731	747	765	782
37.4	1.3474	489	504	520	536	551	567	584	601	618	635	651	667	684	702	720	737	755	771	789	806
37.6	1.3498	513	528	544	560	575	591	608	624	641	659	675	691	707	726	744	761	779	795	813	831
37.8	1.3522	537	552	568	584	599	615	632	648	665	683	700	715	732	750	768	785	803	819	837	855
38.0	1.3546	561	576	592	608	623	638	656	671	689	707	724	740	756	774	792	809	827	843	861	879
38.2	1.3569	584	600	616	632	647	663	680	696	714	732	749	764	781	799	817	833	851	868	886	904
38.4	1.3593	609	624	640	656	671	687	704	720	737	755	772	788	805	824	841	858	876	894	912	928
38.6	1.3618	633	648	664	681	696	712	728	744	762	780	797	812	829	848	866	882	900	916	934	953
38.8	1.3642	657	672	688	705	720	736	753	769	787	806	822	838	854	873	891	907	925	941	959	978
39.0	1.3666	681	696	712	729	744	760	777	792	810	828	846	861	878	897	914	931	949	966	985	4002
39.2	1.3691	706	721	736	753	768	785	801	816	834	852	870	885	902	920	938	956	974	990	4008	027
39.4	1.3715	730	745	762	778	793	809	826	841	859	877	895	910	927	945	963	981	999	4015	033	051
39.6	1.3739	754	769	786	802	817	834	851	866	884	902	920	936	952	970	988	4006	024	040	058	076
39.8	1.3763	779	794	810	827	842	858	875	891	908	926	944	960	977	995	4013	030	048	065	083	101
40.0	1.3788	803	818	834	850	866	883	900	915	933	951	969	985	4002	020	037	055	073	089	108	126

P$_2$O$_5$, %	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
7.0	1.0789																				
7.2	1.0805	820																			
7.4	1.0821	837	853																		
7.6	1.0837	853	870																		
7.8	1.0853	870	886	903																	
8.0	1.0869	886	902	920																	

TABLE II. DENSITY (GRAMS/ML.) OF SOLUTIONS IN THE SYSTEM CaO-P₂O₅-H₂O AT 25° C. (Contd.)
(VALUES INTERPOLATED AT ROUND WEIGHT PERCENTAGES OF P₂O₅ AND CaO)

P₂O₅, %	CaO, % 2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
8.2	1.0886	902	919	936	951																
8.4	1.0902	919	935	952	967																
8.6	1.0918	935	952	968	982																
8.8	1.0935	951	968	985	999	1014															
9.0	1.0951	967	984	1002	016	031															
9.2	1.0968	984	1001	018	032	048	062														
9.4	1.0984	1001	018	035	048	064	078														
9.6	1.1001	017	034	052	064	081	095	109													
9.8	1.1017	034	051	067	082	097	110	125													
10.0	1.1033	050	067	084	098	113	126	141	157												
10.2	1.1050	067	084	101	115	130	143	158	174												
10.4	1.1068	084	101	118	131	146	160	174	190	205											
10.6	1.1084	101	117	134	148	164	178	191	207	222											
10.8	1.1100	118	134	152	165	180	193	208	224	239	252										
11.0	1.1117	134	151	168	181	196	210	225	241	256	269										
11.2	1.1135	151	168	184	198	213	227	242	258	273	285	304									
11.4	1.1152	168	183	200	215	230	244	259	275	290	304	320									
11.6	1.1169	185	202	219	233	247	262	276	292	308	322	338	356								
11.8	1.1186	202	219	235	249	264	279	294	309	324	338	355	374								
12.0	1.1204	219	235	253	269	283	296	311	326	342	356	373	391	407							
12.2	1.1220	237	253	270	284	299	313	328	344	359	374	391	408	423							
12.4	1.1238	254	270	286	300	316	331	345	361	377	392	408	426	442							
12.6	1.1256	271	287	303	317	333	348	363	379	395	410	426	443	458	474						
12.8	1.1273	288	304	320	334	350	366	381	396	413	428	444	460	476	492						
13.0	1.1289	305	321	338	352	368	383	398	414	430	445	461	478	493	510	527					
13.2	1.1308	323	339	356	370	386	401	416	432	448	463	479	496	511	528	545					
13.4	1.1325	340	357	373	388	403	419	434	450	465	480	497	513	529	546	562	580				
13.6	1.1343	358	374	391	405	421	436	452	467	483	498	514	531	547	563	580	597				
13.8	1.1361	376	392	408	423	439	454	469	485	501	516	532	549	564	581	598	615	633			
14.0	1.1379	394	410	426	441	456	471	487	503	519	534	551	567	582	599	616	633	651			
14.2	1.1396	411	427	444	458	474	489	504	520	537	552	568	584	600	617	634	652	669			
14.4	1.1414	420	445	462	477	493	507	523	538	554	570	586	603	619	635	652	670	687	706		
14.6	1.1432	447	463	480	495	511	525	540	556	573	588	604	620	637	654	670	688	705	723		
14.8	1.1450	465	481	497	513	528	543	558	574	591	606	622	638	655	672	688	706	723	741	759	
15.0	1.1467	482	499	515	530	546	561	576	592	609	624	640	657	674	690	706	724	741	759	777	
15.2	1.1485	500	517	533	548	564	579	594	610	627	642	659	675	691	708	724	742	759	777	795	
15.4	1.1503	518	535	550	566	582	597	612	629	645	660	677	693	709	726	743	761	777	795	812	830
15.6	1.1521	536	553	568	584	600	615	630	647	663	679	695	712	728	744	761	779	795	813	830	848
15.8	1.1539	554	570	586	602	618	634	649	665	681	697	713	730	746	763	779	797	814	832	848	865
16.0	1.1557	572	588	604	619	636	652	667	683	700	715	731	748	765	781	798	815	832	850	866	883
16.2	1.1575	590	606	622	638	654	670	685	702	718	734	750	766	784	800	816	833	850	868	884	901
16.4	1.1594	608	624	640	656	672	688	703	720	736	752	769	785	802	819	834	851	869	886	903	920
16.6	1.1612	626	642	658	674	690	706	721	738	754	771	787	803	820	838	854	870	887	905	921	938
16.8	1.1630	644	661	676	692	709	725	740	756	772	789	805	821	839	856	872	888	905	923	940	956
17.0	1.1649	662	678	694	711	727	743	758	775	791	808	824	840	858	875	890	906	923	941	958	974
17.2	1.1667	681	697	713	729	746	761	777	793	810	826	842	859	876	894	909	925	942	960	976	993
17.4	1.1685	699	716	731	747	764	780	795	812	829	845	861	878	895	913	928	943	960	978	995	2012
17.6	1.1704	718	734	749	765	783	799	814	831	848	864	880	896	914	931	946	962	979	997	2014	031
17.8	1.1722	736	752	768	784	801	817	833	849	866	883	899	915	933	950	965	980	998	2015	033	050
18.0	1.1741	755	771	787	804	820	836	851	868	885	901	917	934	951	968	984	999	2016	034	051	069
18.2	1.1759	774	790	806	822	839	854	870	887	904	920	936	953	970	988	2003	018	036	053	070	088
18.4	1.1778	793	809	824	841	858	873	888	905	923	939	955	972	989	2007	023	038	055	072	089	107
18.6	1.1797	812	827	843	859	876	892	907	924	942	958	974	991	2008	025	041	057	074	091	108	126
18.8	1.1816	830	846	861	878	895	911	926	943	960	976	993	2009	027	044	060	076	093	110	128	146
19.0	1.1834	849	865	880	897	914	929	945	962	979	995	2011	028	046	063	079	095	112	129	148	165
19.2	1.1853	868	884	899	916	933	948	964	980	997	2014	030	047	066	083	098	114	131	149	167	185
19.4	1.1872	886	902	918	934	952	967	983	999	2017	033	049	067	085	102	118	133	151	168	186	204
19.6	1.1890	905	922	937	953	971	986	2002	018	036	052	069	086	104	121	137	153	170	187	205	224
19.8	1.1910	925	941	956	972	989	2005	020	037	055	072	088	105	123	141	157	173	190	207	224	243
20.0	1.1928	943	960	975	992	2009	025	041	058	075	091	108	125	142	160	177	192	209	227	244	262
20.2	1.1947	963	979	995	2012	029	044	060	078	095	111	128	144	162	180	197	212	230	247	263	281
20.4	1.1967	982	998	2014	031	048	064	080	098	114	131	148	164	182	199	217	233	250	266	282	300
20.6	1.1987	2001	018	034	051	067	083	099	117	133	151	167	183	201	218	236	253	269	286	302	319
20.8	1.2007	021	037	054	070	087	103	119	137	153	171	187	203	220	238	256	272	288	306	322	338
21.0	1.2026	041	057	073	090	107	122	138	156	173	190	207	223	240	258	275	292	308	326	342	358

TABLE II. DENSITY (GRAMS/ML.) OF SOLUTIONS IN THE SYSTEM CaO-P₂O₅-H₂O AT 25° C. (Contd.)
(VALUES INTERPOLATED AT ROUND WEIGHT PERCENTAGES OF P_2O_5 AND CaO)

P_2O_5, %	CaO, % 2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
21.2	1.2045	060	077	093	110	126	142	157	174	193	210	227	243	259	277	295	311	328	346	362	378
21.4	1.2065	080	097	113	129	146	162	177	194	213	230	247	263	279	297	315	331	348	366	382	398
21.6	1.2084	100	117	132	148	166	182	197	216	233	250	266	282	299	317	334	351	368	385	401	418
21.8	1.2104	120	136	152	168	186	202	217	236	253	269	286	302	319	337	354	371	388	405	421	438
22.0	1.2124	139	156	172	188	205	222	237	256	273	288	306	322	339	356	373	391	407	424	441	458
22.2	1.2143	159	176	192	208	226	242	257	275	293	308	326	342	359	376	393	411	427	444	461	477
22.4	1.2163	179	195	212	228	246	262	277	295	313	329	346	362	379	396	413	431	447	464	481	497
22.6	1.2183	198	215	231	248	265	282	297	315	333	349	366	382	399	417	433	450	466	484	501	517
22.8	1.2203	218	235	252	268	286	302	317	335	352	369	386	403	419	437	453	470	487	504	521	537
23.0	1.2223	238	255	272	288	305	322	337	355	373	389	407	423	439	457	473	491	507	524	542	558
23.2	1.2243	259	276	292	308	326	342	358	376	394	409	427	443	460	478	494	511	527	545	562	579
23.4	1.2263	279	296	312	328	346	362	378	397	414	430	447	463	480	498	514	532	547	565	582	599
23.6	1.2284	299	316	332	349	367	382	399	417	435	451	467	484	501	518	534	552	568	586	602	619
23.8	1.2304	320	336	352	369	387	403	419	437	455	471	487	505	521	539	555	572	588	606	623	640
24.0	1.2323	340	356	372	389	407	423	439	457	475	491	509	525	541	559	575	592	608	626	643	660
24.2	1.2344	361	377	393	410	428	444	460	479	496	512	529	545	562	579	595	612	629	647	664	681
24.4	1.2365	381	397	413	430	448	464	480	499	517	532	549	565	582	599	615	633	649	667	684	702
24.6	1.2385	401	417	434	451	469	485	501	520	538	553	571	586	603	620	636	654	670	687	705	722
24.8	1.2406	422	438	455	471	489	505	521	540	558	573	591	607	623	641	657	674	691	708	725	742
25.0	1.2426	442	458	476	492	510	526	542	560	579	594	612	628	644	661	676	694	712	729	746	764
25.2	1.2447	463	480	497	513	531	547	563	581	599	615	632	649	664	681	697	716	732	750	767	784
25.4	1.2467	484	501	518	534	552	567	583	602	619	635	652	670	685	703	719	736	753	770	787	804
25.6	1.2488	505	521	538	554	572	588	604	624	640	656	674	690	706	724	740	757	774	791	808	826
25.8	1.2509	526	542	558	575	593	609	625	643	661	676	694	710	726	744	762	778	795	812	830	847
26.0	1.2530	546	562	579	595	613	629	646	665	682	697	715	731	747	765	782	799	815	832	850	868
26.2	1.2550	567	584	600	617	635	650	667	685	702	718	736	752	768	786	802	820	836	854	871	889
26.4	1.2571	588	604	620	637	656	672	688	706	723	740	757	773	790	806	824	842	858	875	892	910
26.6	1.2592	609	625	641	658	677	693	710	726	744	760	778	794	811	828	845	862	879	896	913	931
26.8	1.2614	630	646	662	680	698	715	732	748	766	781	798	815	832	849	866	883	900	918	935	952
27.0	1.2635	652	668	684	702	720	736	753	769	787	803	820	836	853	871	887	904	921	938	956	974
27.2	1.2657	674	689	706	723	742	758	775	790	808	824	841	858	875	892	909	926	942	959	977	996
27.4	1.2677	694	711	727	744	762	779	795	812	829	845	863	879	896	914	930	947	964	981	999	3017
27.6	1.2699	716	732	749	766	782	800	817	833	850	866	884	901	918	935	952	969	986	3002	020	039
27.8	1.2720	736	753	770	786	804	821	838	853	870	886	905	922	938	956	973	990	3007	024	041	060
28.0	1.2742	758	775	792	808	825	843	860	875	892	908	926	943	960	978	994	3011	028	045	063	082
28.2	1.2764	780	797	813	830	847	865	881	897	914	929	948	964	982	3000	016	033	050	067	085	103
28.4	1.2785	800	818	834	851	869	886	902	918	936	952	969	986	3003	021	037	055	072	089	106	125
28.6	1.2807	822	839	856	872	890	907	924	940	957	973	991	3007	025	042	059	076	092	110	128	147
28.8	1.2828	844	861	877	894	911	929	945	961	978	994	3012	029	046	064	080	098	114	132	150	168
29.0	1.2850	865	882	899	916	933	950	967	983	3000	016	034	051	068	086	102	120	136	153	172	190
29.2	1.2871	887	904	921	938	955	972	988	3005	022	037	055	072	090	108	124	142	158	175	194	212
29.4	1.2892	909	925	942	959	976	994	3010	026	044	060	077	094	112	130	146	164	180	197	216	234
29.6	1.2914	930	947	963	980	998	3016	032	048	066	082	099	116	134	152	168	186	202	219	238	256
29.8	1.2936	952	969	986	3003	020	037	054	070	087	103	121	138	156	174	191	207	224	241	259	278
30.0	1.2957	974	991	3008	024	041	059	076	092	109	125	142	159	177	195	212	230	248	263	282	300
30.2	1.2979	996	3013	030	046	064	081	097	114	131	147	165	182	200	218	234	252	268	285	303	322
30.4	1.3001	018	035	051	069	086	103	119	137	153	170	187	204	223	240	257	275	290	307	325	344
30.6	1.3023	039	057	073	090	108	125	141	158	175	192	209	226	245	263	279	297	313	330	347	366
30.8	1.3045	061	079	095	112	130	147	163	179	197	213	231	249	267	285	301	319	335	352	370	389
31.0	1.3067	084	101	117	134	152	169	186	202	220	236	254	271	289	307	323	341	357	374	392	410
31.2	1.3089	106	123	139	157	175	192	208	224	242	258	276	293	312	329	345	363	380	396	414	432
31.4	1.3111	128	145	162	179	197	214	231	247	265	281	299	316	334	352	368	386	402	419	436	455
31.6	1.3134	150	167	184	201	219	237	253	269	287	303	321	338	357	375	391	408	425	442	459	477
31.8	1.3156	172	190	206	224	241	259	275	291	309	326	344	361	380	397	413	430	447	464	482	500
32.0	1.3178	194	212	228	246	264	281	298	314	332	349	366	383	402	420	436	452	469	486	504	523
32.2	1.3200	217	235	251	269	287	304	321	337	355	371	389	406	424	442	458	476	492	509	526	545
32.4	1.3223	240	258	274	292	309	326	344	360	378	394	412	429	448	465	481	499	516	532	549	
32.6	1.3246	262	280	297	314	332	349	366	383	400	417	434	452	470	488	505	523	539	556	572	
32.8	1.3269	285	303	320	336	355	372	389	406	423	439	457	474	493	511	528	545	561	577		
33.0	1.3291	307	325	342	360	377	396	412	428	446	463	480	497	516	534	551	568	583	599		
33.2	1.3314	330	348	365	383	401	418	435	451	469	486	503	519	537	556	574	590	606			
33.4	1.3336	353	371	388	405	423	441	457	474	491	509	526	542	561	579	596	612	628			
33.6	1.3360	377	394	411	428	447	464	480	496	514	531	549	566	585	603	619	636	651			
33.8	1.3383	400	417	434	451	469	486	503	519	537	554	573	590	608	626	641	658				
34.0	1.3406	423	440	458	474	493	510	526	543	561	577	595	612	630	649	665	681				

TABLE II. DENSITY (GRAMS/ML.) OF SOLUTIONS IN THE SYSTEM CaO-P₂O₅-H₂O AT 25° C. (Contd.)
(VALUES INTERPOLATED AT ROUND WEIGHT PERCENTAGES OF P₂O₅ AND CaO)

P_2O_5, %		CaO, %																				
		2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
34.2	1.3429	446	463	481	497	515	533	550	566	584	600	618	636	655	674	687						
34.4	1.3451	469	486	504	521	539	556	574	589	607	624	642	659	678	697	711						
34.6	1.3475	492	509	526	544	563	580	597	613	631	648	665	682	701	720							
34.8	1.3498	515	532	550	567	586	603	620	636	654	671	688	706	725	744							
35.0	1.3521	538	556	574	590	609	626	644	660	677	694	712	729	748								
35.2	1.3545	562	580	597	614	633	650	667	683	701	717	735	753	771								
35.4	1.3569	586	603	620	638	656	674	691	707	725	741	759	775	793								
35.6	1.3592	609	626	644	662	680	697	714	730	748	764	782	799									
35.8	1.3615	632	650	667	686	704	720	738	754	771	788	806	823									
36.0	1.3638	656	674	692	709	727	744	761	777	795	812	829										
36.2	1.3662	680	698	715	733	751	769	785	801	818	836	853										
36.4	1.3686	703	721	739	756	774	792	809	825	841	859											
36.6	1.3710	727	745	763	781	799	817	833	849	866	883											
36.8	1.3735	752	770	788	806	824	841	858	874	890	907											
37.0	1.3758	776	794	812	830	848	866	882	898	913												
37.2	1.3782	800	818	836	854	872	890	906	922	937												
37.4	1.3806	824	842	860	878	896	914	931	946													
37.6	1.3831	849	866	884	902	920	938	955	970													
37.8	1.3855	873	890	908	926	944	962	979														
38.0	1.3879	897	915	933	951	969	987	4003														
38.2	1.3904	922	939	957	975	993	4011															
38.4	1.3928	946	964	982	4000	018	035															
38.6	1.3953	972	988	4007	025	043	060															
38.8	1.3978	996	4014	032	049	068																
39.0	1.4002	020	037	056	073	092																
39.2	1.4027	045	062	081	098																	
39.4	1.4051	069	087	105	123																	
39.6	1.4076	094	111	130																		
39.8	1.4101	119	136	154																		
40.0	1.4126	144	161	179																		

P_2O_5, %		CaO, %																	
		4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7
15.4	1.1830																		
15.6	1.1848																		
15.8	1.1865	880																	
16.0	1.1883	899																	
16.2	1.1901	917	934																
16.4	1.1920	935	952																
16.6	1.1938	953	971																
16.8	1.1956	972	990	2008															
17.0	1.1974	991	2009	026															
17.2	1.1993	2010	028	045	061														
17.4	1.2012	029	046	064	080														
17.6	1.2031	048	065	083	099	116													
17.8	1.2050	066	084	101	118	135													
18.0	1.2069	085	104	121	136	153													
18.2	1.2088	106	123	140	156	173	190												
18.4	1.2107	124	142	158	175	192	209												
18.6	1.2126	143	160	177	194	211	228	244											
18.8	1.2146	162	179	197	213	230	248	263											
19.0	1.2165	181	198	216	232	249	267	273											
19.2	1.2185	201	218	235	251	268	286	302	318										
19.4	1.2204	221	237	254	270	287	305	321	337										
19.6	1.2224	240	257	273	289	306	324	339	356	373									
19.8	1.2242	259	276	292	309	326	343	358	375	391									
20.0	1.2262	278	295	312	328	345	362	378	394	409									
20.2	1.2281	298	314	332	348	364	382	398	413	429	447								
20.4	1.2300	317	334	352	368	384	402	418	432	449	466								
20.6	1.2319	337	354	371	387	404	421	437	452	469	487	503							
20.8	1.2338	357	373	391	407	424	441	457	472	489	507	523							
21.0	1.2358	376	393	410	426	443	461	477	492	509	527	543							

TABLE II. DENSITY (GRAMS/ML.) OF SOLUTIONS IN THE SYSTEM CaO-P2O5-H2O AT 25° C. (Contd.)
(VALUES INTERPOLATED AT ROUND WEIGHT PERCENTAGES OF P2O5 AND CaO)

P_2O_5, %	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7
21.2	1.2378	396	413	429	446	463	481	498	512	529	547	562	578					
21.4	1.2398	416	433	449	466	483	501	518	532	549	567	582	598					
21.6	1.2417	436	452	469	486	503	520	538	552	569	587	602	618					
21.8	1.2438	456	472	489	506	523	540	557	572	589	607	622	638	657				
22.0	1.2458	476	491	509	526	543	559	577	592	609	627	642	658	677				
22.2	1.2477	495	511	529	546	563	579	597	612	629	647	662	678	696	714			
22.4	1.2497	515	531	549	566	582	600	617	632	649	667	683	699	717	734			
22.6	1.2517	535	551	569	586	602	620	637	652	669	687	703	719	737	754			
22.8	1.2537	555	572	588	607	622	640	657	672	690	707	723	739	758	775	791		
23.0	1.2558	576	592	609	627	643	661	677	693	710	727	743	759	778	796	812		
23.2	1.2579	597	613	630	647	664	681	698	714	731	748	764	780	799	817	833	851	
23.4	1.2599	617	633	650	667	684	701	718	734	751	769	785	801	820	837	854	873	
23.6	1.2619	638	654	671	688	705	721	739	754	771	789	805	822	841	858	875	894	
23.8	1.2640	658	674	692	709	725	742	759	774	791	810	826	843	861	878	896	915	934
24.0	1.2660	678	694	712	729	745	762	778	794	812	830	846	862	880	898	917	936	954
24.2	1.2681	699	715	732	749	766	782	800	816	833	851	867	883	902	920	938	957	976
24.4	1.2702	720	735	752	770	787	804	821	837	853	871	887	904	923	940	959	978	997
24.6	1.2722	740	756	773	791	807	824	842	858	874	892	908	925	943	961	979	998	
24.8	1.2742	761	777	794	812	828	845	862	878	894	913	930	946	964	982	3001	020	
25.0	1.2764	782	798	815	832	849	866	883	899	916	934	951	967	985	3004	022		
25.2	1.2784	802	818	836	852	870	887	904	920	937	954	972	988	3006	025	042		
25.4	1.2804	823	839	856	874	891	907	924	941	957	975	992	3008	027	045			
25.6	1.2826	844	860	877	895	912	928	946	962	978	996	3013	030	049	067			
25.8	1.2847	865	881	898	916	932	950	967	983	3000	018	035	051	069	088			
26.0	1.2868	886	902	919	936	953	971	987	3004	022	038	056	072	090				
26.2	1.2889	907	923	940	957	975	992	3008	025	042	060	076	093	110				
26.4	1.2910	929	944	962	978	996	3012	030	046	063	081	098	114					
26.6	1.2931	950	966	982	3000	018	034	052	068	085	102	120	136					
26.8	1.2952	971	987	3003	021	038	055	074	090	106	124	141						
27.0	1.2974	992	3008	025	042	059	076	094	110	128	144	163						
27.2	1.2996	3014	030	046	064	081	098	115	132	150	166	184						
27.4	1.3017	036	052	068	086	103	119	137	154	171	187							
27.6	1.3039	056	073	089	107	125	141	159	175	192	208							
27.8	1.3061	078	094	111	128	146	162	180	196	214								
28.0	1.3082	100	116	132	150	168	184	201	218	235								
28.2	1.3103	121	137	154	171	189	205	223	239									
28.4	1.3125	143	159	176	193	211	227	245	261									
28.6	1.3147	165	181	198	215	233	249	267										
28.8	1.3168	186	202	220	237	255	271	289										
29.0	1.3190	208	224	242	259	276	292	310										
29.2	1.3212	230	246	264	281	298	314											
29.4	1.3234	252	268	286	302	320	336											
29.6	1.3256	274	290	306	324	342												
29.8	1.3278	296	312	329	346	364												
30.0	1.3300	318	335	352	368													
30.2	1.3322	340	356	374	391													
30.4	1.3348	362	377	396														
30.6	1.3366	384	399	417														
30.8	1.3389	406	422	440														
31.0	1.3410	428	444															
31.2	1.3432	450	466															
31.4	1.3455	472																
31.6	1.3477	493																
31.8	1.3500																	
32.0	1.3523																	
32.2	1.3545																	

TABLE III. SPECIFIC CONDUCTANCE (Ohm^{-1} Cm.$^{-1}$) OF SOLUTIONS IN THE SYSTEM CaO-P$_2$O$_5$-H$_2$O AT 25° C.
(VALUES INTERPOLATED AT ROUND WEIGHT PERCENTAGES OF P$_2$O$_5$ AND CaO)

P$_2$O$_5$, %	CaO, % 0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
0.0	0.0000																				
0.1	0.0027																				
0.2	0.0044																				
0.4	0.0071	040																			
0.6	0.0094	062	041																		
0.8	0.0114	081	057	054																	
1.0	0.0134	097	079	073																	
1.2	0.0152	112	096	087	084																
1.4	0.0168	127	110	100	097	095															
1.6	0.0185	142	122	112	107	104															
1.8	0.0200	157	134	123	117	112	110														
2.0	0.0215	173	148	134	127	123	120	119													
2.2	0.0228	188	162	146	137	132	128	127													
2.4	0.0244	204	177	158	148	142	138	136	135												
2.6	0.0259	219	191	171	159	152	148	147	146	145											
2.8	0.0275	235	204	184	172	162	157	155	153	152											
3.0	0.0290	250	217	197	183	174	166	163	160	159	158										
3.2	0.0305	265	232	211	196	184	177	173	168	167	165	164									
3.4	0.0320	281	247	225	209	196	187	183	178	175	173	172									
3.6	0.0335	294	262	239	222	207	198	193	187	184	181	179	178								
3.8	0.0350	309	276	254	236	223	210	203	197	193	189	187	186	185							
4.0	0.0365	323	291	268	250	237	223	214	207	203	198	196	194	193							
4.2	0.0381	337	305	282	263	249	236	226	218	212	208	204	202	199							
4.4	0.0396	352	319	296	277	263	248	238	229	222	217	213	210	208	205						
4.6	0.0411	366	334	310	291	276	262	250	240	233	227	223	218	215	213						
4.8	0.0427	381	349	324	305	290	274	262	251	244	238	233	227	224	220	218					
5.0	0.0442	396	363	338	319	303	286	275	264	256	248	242	237	232	229	226					
5.2	0.0458	412	378	352	333	317	299	288	276	268	259	252	247	242	237	234	230				
5.4	0.0474	426	394	366	347	331	312	300	288	280	271	263	257	251	247	243	238				
5.6	0.0489	442	408	380	360	344	325	313	301	292	283	275	267	262	256	252	247	243			
5.8	0.0505	457	423	394	374	358	338	326	313	303	294	286	278	266	261	257	253	249			
6.0	0.0520	472	438	409	388	372	352	339	326	316	306	297	289	283	276	271	266	262	258		
6.2	0.0536	488	453	423	403	385	365	352	338	327	317	309	301	294	287	282	276	272	267		
6.4	0.0552	503	468	437	417	398	378	364	351	339	329	320	312	304	298	292	286	282	277	273	
6.6	0.0568	519	484	452	431	412	392	377	363	352	341	332	323	315	308	302	296	292	286	282	
6.8	0.0583	536	500	467	445	426	405	390	376	364	352	343	334	326	319	312	306	301	295	291	284
7.0	0.0600	551	516	482	460	439	418	402	388	376	364	354	345	337	329	322	316	310	304	300	294
7.2	0.0616	567	532	498	474	453	432	415	400	387	376	366	356	348	339	332	326	320	314	309	302
7.4	0.0632	583	548	514	489	467	446	428	412	399	388	377	367	359	350	343	336	329	323	318	311
7.6	0.0648	600	564	529	503	481	459	441	425	411	399	388	378	369	361	353	346	339	333	327	319
7.8	0.0665	616	580	545	517	493	473	453	437	423	411	400	389	380	372	363	356	348	342	336	328
8.0	0.0682	633	596	561	533	507	486	466	450	434	422	411	400	391	382	374	366	358	351	345	337
8.2	0.0698	650	613	577	548	522	500	478	462	446	434	423	411	401	392	384	376	367	360	354	346
8.4	0.0715	667	629	592	563	536	514	492	475	458	446	434	422	412	402	394	386	377	369	363	355
8.6	0.0731	683	645	609	578	551	527	504	487	470	458	446	433	423	413	404	396	387	379	372	364
8.8	0.0748	700	662	626	594	566	542	518	500	483	469	457	444	434	424	414	406	396	388	382	372
9.0	0.0765	717	679	642	610	581	557	533	513	496	481	468	455	444	434	424	416	406	397	391	381
9.2	0.0781	734	695	658	626	597	572	547	527	509	492	480	466	455	444	435	426	416	407	400	391
9.4	0.0798	750	712	675	642	613	587	562	541	522	505	492	477	466	455	445	436	426	417	409	400
9.6	0.0816	767	729	692	657	629	601	576	555	536	518	504	488	477	466	455	446	436	426	418	409
9.8	0.0832	785	746	708	674	646	617	591	569	550	530	517	500	487	476	466	456	446	436	427	418
10.0	0.0849	802	762	725	691	663	632	607	584	564	543	529	513	498	486	476	466	455	445	437	427
10.2	0.0866	819	779	742	707	679	648	622	598	578	556	542	526	511	497	486	475	465	455	446	437
10.4	0.0883	836	796	759	724	695	664	638	612	592	570	556	538	524	509	497	485	475	464	455	447
10.6	0.0900	853	813	775	740	712	680	653	628	606	584	569	551	536	521	508	495	485	474	464	456
10.8	0.0917	871	831	792	757	729	696	669	643	621	598	583	564	550	533	519	506	495	484	474	466
11.0	0.0933	888	848	810	775	746	712	685	668	636	612	596	577	562	545	531	517	506	493	483	475
11.2	0.0951	906	865	827	792	763	729	701	674	650	625	610	591	575	557	542	529	517	504	493	485
11.4	0.0968	923	882	844	809	779	745	717	688	665	640	624	605	588	570	555	541	529	516	503	494
11.6	0.0985	940	900	861	825	796	761	733	703	681	654	638	619	602	583	567	553	541	527	514	505
11.8	0.1003	0958	917	879	843	814	778	750	720	696	669	652	632	615	596	580	566	553	539	525	516
12.0	0.1020	0976	934	895	860	831	795	766	736	712	684	666	645	628	610	592	578	565	550	537	527

TABLE III. SPECIFIC CONDUCTANCE (Ohm^{-1} Cm.$^{-1}$) OF SOLUTIONS IN THE SYSTEM CaO-P$_2$O$_5$-H$_2$O AT 25° C. (Contd.)
(VALUES INTERPOLATED AT ROUND WEIGHT PERCENTAGES OF P$_2$O$_5$ AND CaO)

P$_2$O$_5$,%	CaO, %																				
	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
12.2	0.1038	|0993	951	913	877	847	812	782	751	726	699	681	660	642	624	606	592	577	563	549	538
12.4	0.1055	011	|0969	930	894	864	829	800	768	742	714	695	674	655	637	619	604	590	575	561	550
12.6	0.1073	028	|0986	948	912	881	845	816	785	759	729	709	688	669	650	632	616	602	587	573	562
12.8	0.1090	046	003|	0965	930	899	862	833	802	775	744	724	702	683	663	646	629	615	600	584	574
13.0	0.1108	064	021|	0982	946	915	879	850	819	791	760	738	716	697	677	659	642	627	612	596	585
13.2	0.1126	082	039	000|	0964	932	897	866	835	808	775	753	732	712	691	672	655	641	625	609	597
13.4	0.1143	100	057	017|	0982	950	914	884	851	824	792	768	746	726	704	686	668	654	637	621	609
13.6	0.1161	117	075	036	000|	0966	932	901	868	841	808	784	761	740	718	700	682	667	650	634	622
13.8	0.1178	135	093	055	017|	0982	948	917	884	857	824	800	776	755	733	713	695	680	663	646	634
14.0	0.1196	152	110	072	035	000|	0966	935	902	874	841	816	792	769	747	727	708	694	676	659	646
14.2	0.1213	170	128	089	053	018|	0984	952	919	890	858	832	806	784	762	741	722	707	689	672	658
14.4	0.1232	188	145	106	070	036	000|	0970	936	907	875	848	822	799	776	755	736	720	702	684	671
14.6	0.1250	205	163	125	087	052	018|	0987	953	923	890	864	837	814	791	770	750	734	716	697	684
14.8	0.1267	223	180	142	105	070	035	004|	0971	939	907	880	853	829	806	784	764	747	729	710	696
15.0	0.1286	240	198	160	122	087	052	020|	0988	956	924	897	869	845	821	799	778	761	743	723	709
15.2	0.1303	258	216	177	139	104	069	037	004|	0972	940	913	885	860	836	813	792	775	756	736	721
15.4	0.1321	276	232	194	156	121	086	054	020|	0988	956	930	901	875	851	828	806	789	769	750	734
15.6	0.1338	293	250	212	174	138	103	071	037	004|	0972	945	917	890	866	843	821	802	783	762	747
15.8	0.1356	310	266	229	192	155	120	087	053	020|	0988	962	933	906	882	858	835	817	796	776	760
16.0	0.1372	327	284	246	209	171	137	104	069	036	005|	0977	950	922	896	872	850	831	810	789	773
16.2	0.1390	345	301	263	225	188	153	121	086	052	021|	0993	965	938	912	887	864	845	824	803	786
16.4	0.1408	362	319	280	242	205	171	137	102	068	037	010|	0981	953	927	903	879	860	838	817	799
16.6	0.1425	379	336	297	259	221	187	153	118	084	053	025|	0997	969	943	918	894	873	851	830	812
16.8	0.1443	397	353	314	276	237	203	169	134	100	068	041	012|	0985	958	933	908	887	865	843	825
17.0	0.1459	414	370	330	293	253	219	186	150	116	084	057	028	000|	0973	948	924	902	879	857	838
17.2	0.1476	431	386	347	309	270	236	201	166	131	100	072	043	015|	0988	963	938	916	893	870	851
17.4	0.1494	448	403	363	326	286	252	217	182	147	116	088	058	030|	003|	0977	953	930	906	884	865
17.6	0.1510	464	420	380	342	303	267	233	198	162	131	102	074	044	019|	0992	969	945	921	898	878
17.8	0.1527	481	437	395	358	318	283	248	214	178	147	118	089	060	033|	007|	0984	960	935	912	892
18.0	0.1544	498	453	412	374	334	299	264	229	194	162	134	103	074	048	022|	000|	0974	949	925	904
18.2	0.1561	514	469	428	389	350	315	280	245	209	177	149	119	089	063	036	013|	0988	**964**	939	918
18.4	0.1577	531	486	444	405	365	331	295	260	224	193	163	134	103	077	051	027|	003|	0978	954	932
18.6	0.1594	547	503	460	421	382	346	310	275	239	208	178	149	117	092	065	041	017|	0992	967	945
18.8	0.1610	564	518	475	436	397	361	325	291	254	223	193	164	132	106	079	055	032|	007|	0981	959
19.0	0.1626	580	533	490	451	412	376	340	306	269	237	208	179	146	120	093	069	045	020|	0995	972
19.2	0.1643	596	548	506	466	428	391	354	320	284	251	222	194	161	134	107	083	058	033	008|	0986
19.4	0.1658	612	564	522	481	443	406	369	335	299	266	236	209	175	149	122	097	072	047	022|	0999
19.6	0.1674	627	581	536	496	458	420	384	349	313	281	250	223	190	164	136	111	086	060	035|	012
19.8	0.1690	643	596	552	510	473	434	398	364	328	295	264	237	204	178	150	124	099	074	048	026
20.0	0.1706	658	611	566	524	487	449	412	378	342	310	279	250	218	192	164	137	112	086	061	038
20.2	0.1722	674	626	581	539	501	463	426	392	356	324	294	264	232	206	176	150	125	099	074	051
20.4	0.1737	689	640	595	554	516	477	439	406	370	337	307	278	246	219	190	163	138	112	087	064
20.6	0.1754	703	656	609	567	530	491	453	419	383	350	320	291	259	233	203	176	150	124	099	076
20.8	0.1769	717	670	623	581	543	505	467	433	397	363	334	304	272	246	216	189	163	137	112	089
21.0	0.1785	732	684	637	595	557	518	481	446	410	377	347	318	286	259	229	201	176	150	124	101
21.2	0.1800	747	699	652	609	570	532	494	460	424	390	360	331	300	272	241	215	188	162	136	113
21.4	0.1815	762	713	666	624	584	546	507	474	437	404	374	343	313	285	254	227	200	174	149	125
21.6	0.1831	775	727	679	637	598	559	520	487	450	417	386	356	326	297	267	239	212	186	160	137
21.8	0.1845	789	742	692	650	612	573	534	500	463	430	399	368	338	309	280	251	224	198	172	149
22.0	0.1859	803	755	705	663	625	586	547	512	471	443	411	381	351	321	292	263	236	209	184	161
22.2	0.1873	817	768	718	676	638	599	561	524	480	456	424	394	364	335	305	276	248	221	196	172
22.4	0.1887	831	782	731	688	651	612	574	537	494	468	436	406	376	347	317	287	260	233	207	184
22.6	0.1900	843	796	744	701	664	625	586	550	506	480	449	418	388	360	329	299	272	244	219	196
22.8	0.1914	857	809	756	714	676	636	599	563	518	493	461	431	400	372	341	311	283	256	230	207
23.0	0.1927	871	822	769	727	689	648	611	575	531	506	473	442	412	384	353	325	295	269	242	218
23.2	0.1940	875	824	780	739	699	655	620	584	543	518	483	452	424	395	369	339	308	282	255	230
23.4	0.1953	889	837	792	752	710	666	631	594	555	530	494	464	434	407	382	350	320	294	267	242
23.6	0.1965	901	850	805	765	722	679	643	606	566	543	505	476	446	419	394	362	332	306	278	254
23.8	0.1978	914	862	817	778	735	692	656	619	580	555	517	487	458	431	405	374	344	317	290	265
24.0	0.1991	927	876	830	785	748	704	667	631	591	566	529	499	470	442	416	384	355	327	300	276

TABLE III. SPECIFIC CONDUCTANCE (Ohm^{-1} $Cm.^{-1}$) OF SOLUTIONS IN THE SYSTEM $CaO-P_2O_5-H_2O$ AT 25° C. (Contd.)
(VALUES INTERPOLATED AT ROUND WEIGHT PERCENTAGES OF P_2O_5 AND CaO)

P_2O_5, %	CaO, % 0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
24.2	0.2003	1940	888	842	797	760	716	680	642	602	578	541	510	481	453	427	396	366	339	312	287
24.4	0.2015	1952	901	855	810	772	729	692	654	614	590	552	521	492	464	439	407	377	350	323	298
24.6	0.2026	1964	913	867	822	784	741	704	666	626	601	564	533	504	476	450	418	389	361	334	309
24.8	0.2038	1977	925	880	835	797	753	716	678	638	613	576	544	516	488	461	429	400	372	345	319
25.0	0.2050	1988	938	892	847	810	766	727	690	650	624	587	555	527	499	472	440	410	382	356	329
25.2	0.2061	000	1950	904	860	822	778	739	702	662	636	599	566	538	510	483	451	421	394	366	340
25.4	0.2072	013	1962	916	872	834	790	751	714	674	647	610	577	549	521	494	461	432	404	376	350
25.6	0.2083	025	1974	928	884	846	802	763	726	686	658	621	589	560	532	504	471	442	415	386	360
25.8	0.2093	036	1985	939	896	859	814	776	738	697	669	632	600	570	543	514	482	452	425	397	370
26.0	0.2104	047	1997	950	908	871	826	787	749	708	680	643	611	581	553	525	492	463	435	406	380
26.2	0.2114	059	009	1962	920	883	838	799	761	720	691	654	622	591	564	535	502	474	445	416	389
26.4	0.2124	071	021	1974	932	894	850	810	772	732	702	665	632	601	574	545	512	483	455	426	399
26.6	0.2134	081	032	1984	943	905	861	821	784	743	712	676	642	611	584	555	522	492	465	436	408
26.8	0.2143	091	043	1995	954	916	872	832	795	754	722	686	652	622	594	564	532	502	475	446	417
27.0	0.2153	101	055	006	1965	928	884	844	806	765	732	696	662	632	604	574	542	512	484	455	426
27.2	0.2162	111	066	017	1976	939	895	855	817	776	742	706	672	641	613	583	551	521	494	465	436
27.4	0.2171	121	076	029	1987	950	906	865	827	786	752	716	683	651	623	592	560	531	503	475	444
27.6	0.2180	130	086	039	1997	961	916	876	838	797	762	727	692	661	631	601	569	540	512	483	453
27.8	0.2189	139	096	050	008	1971	926	886	849	807	772	737	702	670	640	610	578	550	521	492	461
28.0	0.2198	148	106	060	018	1981	936	896	859	817	781	746	711	679	649	618	586	558	529	500	469
28.2	0.2206	156	116	070	028	1991	947	907	869	828	791	756	721	689	658	627	595	567	538	509	478
28.4	0.2214	165	125	080	038	001	1957	916	879	838	800	766	730	697	666	635	603	575	546	516	486
28.6	0.2222	173	133	089	048	011	1966	926	888	849	809	776	739	706	675	643	612	583	554	525	494
28.8	0.2230	181	142	098	057	020	1976	936	898	858	819	785	748	714	683	651	620	591	562	533	502
29.0	0.2238	188	150	107	066	029	1986	945	907	867	828	793	757	723	690	659	628	598	570	540	509
29.2	0.2245	196	158	115	075	037	1994	955	916	876	837	802	766	730	699	666	635	606	578	548	516
29.4	0.2252	203	165	122	083	045	003	1963	925	885	845	810	775	738	706	674	643	614	586	555	524
29.6	0.2258	210	172	130	091	053	011	1972	934	893	854	819	783	746	714	681	650	621	593	562	530
29.8	0.2265	216	178	136	099	061	019	1980	941	902	861	826	791	754	721	688	657	628	600	569	537
30.0	0.2271	221	185	142	105	068	027	1987	950	910	870	834	800	761	728	695	665	635	607	576	544
30.5	0.2285	236	197	158	119	083	044	005	1967	928	888	851	818	779	744	711	682	651	624	593	561
31.0	0.2297	249	207	170	131	094	053	019	1981	943	904	867	836	794	760	726	696	665	639	608	576
31.5	0.2307	260	216	179	141	105	069	031	1993	956	918	880	850	807	774	739	711	678	653	621	589
32.0	0.2315	270	225	188	149	114	078	038	000	1966	930	891	860	820	786	752	723	689	664	634	600
32.5	0.2322	277	232	195	156	121	083	043	006	1975	939	900	867	830	797	763	732	699	672	643	610
33.0	0.2328	283	238	200	160	126	086	047	011	1979	943	905	874	838	806	771	739	706	678	650	617
33.5	0.2332	286	243	204	164	129	088	050	014	1982	947	909	879	844	813	777	744	712	683	655	622
34.0	0.2334	288	245	206	166	130	090	052	016	1984	950	912	882	846	817	781	747	715	686	660	625
34.5	0.2335	288	245	207	168	130	090	053	017	1984	950	914	884	849	820	784	750	717	689	661	628
35.0	0.2334	286	245	207	168	130	090	053	017	1984	950	915	885	850	821	785	750	719	690	664	630
35.5	0.2331	284	244	206	166	128	089	052	017	1982	950	915	885	850	821	785	750	719	690	664	630
36.0	0.2327	280	242	205	164	126	086	051	016	1980	949	914	886	849	820	784	750	718	690	664	630
36.5	0.2320	276	240	201	161	123	085	050	015	1979	946	912	883	847	819	781	749	716	688	662	629
37.0	0.2311	269	236	197	156	120	082	047	013	1976	945	910	880	845	815	778	745	715	686	660	627
37.5	0.2301	263	231	191	150	115	079	045	010	1974	941	908	879	842	811	775	743	711	684	659	625
38.0	0.2289	254	225	186	144	111	075	041	008	1969	938	905	875	840	808	770	740	708	680	655	622

P_2O_5, %	CaO, % 2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
6.8	0.0284																				
7.0	0.0294																				
7.2	0.0302	298																			
7.4	0.0311	306	302																		
7.6	0.0319	315	310																		
7.8	0.0328	324	318	313																	
8.0	0.0337	333	327	321																	
8.2	0.0346	342	335	330	327																
8.4	0.0355	350	343	338	335																
8.6	0.0364	358	352	347	342																
8.8	0.0372	367	360	355	350	346															
9.0	0.0381	375	368	363	358	353															

TABLE III. SPECIFIC CONDUCTANCE (Ohm⁻¹ Cm.⁻¹) OF SOLUTIONS IN THE SYSTEM CaO-P₂O₅-H₂O AT 25° C. (Contd.)

(VALUES INTERPOLATED AT ROUND WEIGHT PERCENTAGES OF P₂O₅ AND CaO)

P_2O_5, %		CaO, %																				
		2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
9.2	0.0391	384	377	372	366	361	356															
9.4	0.0400	394	386	381	374	368	363															
9.6	0.0409	402	394	389	382	377	370	366														
9.8	0.0418	411	403	398	390	384	378	373														
10.0	0.0427	420	411	406	398	392	385	380	375													
10.2	0.0437	429	420	414	406	400	393	387	382													
10.4	0.0447	438	429	422	414	407	400	395	389	384												
10.6	0.0456	447	438	431	422	415	408	402	396	391												
10.8	0.0466	456	447	439	430	422	416	409	403	398	395											
11.0	0.0475	460	456	447	438	431	424	417	411	405	402											
11.2	0.0485	475	465	456	447	439	432	425	418	413	409	407										
11.4	0.0494	484	475	466	456	448	440	433	426	420	416	414										
11.6	0.0505	494	484	475	465	457	449	442	434	427	424	420	415									
11.8	0.0516	503	493	484	474	466	458	450	442	436	431	427	421									
12.0	0.0527	514	504	493	483	474	467	457	450	443	438	434	427	420								
12.2	0.0538	524	514	503	493	483	476	466	458	452	446	442	434	426								
12.4	0.0550	536	525	513	503	493	485	475	467	460	454	448	440	432								
12.6	0.0562	547	536	524	513	502	494	484	476	468	462	455	447	438	433							
12.8	0.0574	568	546	534	524	512	503	493	485	477	470	463	454	445	439							
13.0	0.0585	570	557	545	534	522	513	502	494	486	478	471	462	452	447	444						
13.2	0.0597	582	568	556	544	533	524	513	504	495	487	479	470	461	454	451						
13.4	0.0609	593	579	567	556	544	534	524	514	504	497	487	478	469	462	457	448					
13.6	0.0622	606	591	579	567	554	545	534	525	514	506	497	487	477	470	464	457					
13.8	0.0634	618	603	590	578	565	556	545	535	525	515	506	496	487	479	471	464	462				
14.0	0.0646	630	615	602	590	576	567	556	546	536	525	516	506	497	488	480	472	467				
14.2	0.0658	642	627	614	601	588	577	566	556	546	535	526	516	506	498	489	481	474				
14.4	0.0671	655	640	626	613	599	588	577	566	556	546	537	526	516	507	499	490	482	476			
14.6	0.0684	667	652	638	625	611	600	588	577	567	556	547	536	526	517	508	499	490	484			
14.8	0.0696	680	664	650	636	622	611	600	588	577	566	557	546	536	527	518	509	500	493	485		
15.0	0.0709	692	676	662	648	634	622	611	600	588	576	567	556	546	537	527	518	509	502	494		
15.2	0.0721	705	689	675	660	645	634	622	611	599	587	577	566	556	547	537	527	518	511	503		
15.4	0.0734	717	701	687	672	657	645	633	621	610	597	588	576	566	557	547	537	527	519	512	504	
15.6	0.0747	730	713	699	684	669	656	644	632	621	608	598	587	576	567	557	547	537	529	520	512	
15.8	0.0760	743	726	711	695	681	668	655	643	631	619	609	597	586	577	567	557	547	538	529	520	
16.0	0.0773	755	738	723	707	692	679	667	654	642	629	619	607	597	587	576	566	556	547	538	529	
16.2	0.0786	767	751	735	719	704	691	678	666	652	640	629	617	607	598	586	575	565	557	547	538	
16.4	0.0799	781	764	747	731	716	702	689	676	664	650	640	628	617	608	596	585	575	566	556	548	
16.6	0.0812	794	777	759	743	728	714	700	687	674	661	650	638	627	618	606	594	584	575	566	556	
16.8	0.0825	807	789	772	756	739	725	712	699	685	672	661	648	637	628	617	604	594	585	575	565	
17.0	0.0838	820	802	784	768	752	737	723	709	696	683	671	658	647	637	627	614	603	594	585	574	
17.2	0.0851	834	815	797	781	764	748	734	721	707	694	682	669	657	648	636	624	613	603	593	583	
17.4	0.0865	846	827	809	793	776	759	746	732	718	704	692	679	667	657	645	633	622	613	603	592	
17.6	0.0878	860	840	822	805	788	771	756	743	729	715	702	689	677	667	655	643	632	622	612	600	
17.8	0.0892	872	853	834	817	800	783	768	753	739	726	713	699	687	677	665	652	641	631	622	610	
18.0	0.0904	886	866	847	830	811	795	780	765	750	736	724	709	697	686	675	662	650	641	630	618	
18.2	0.0918	899	878	860	842	824	807	792	776	761	747	734	719	707	696	684	671	660	650	639	627	
18.4	0.0932	912	891	872	855	836	819	803	787	772	758	745	730	717	706	693	681	669	659	648	636	
18.6	0.0945	924	904	885	867	848	831	815	799	783	769	755	740	727	716	702	690	679	668	657	645	
18.8	0.0959	937	916	897	879	859	842	827	810	794	780	766	750	737	726	712	699	688	677	665	654	
19.0	0.0972	950	928	909	891	871	854	838	821	805	790	776	761	747	735	722	709	697	686	674	662	
19.2	0.0986	962	941	922	903	883	866	850	832	816	801	787	771	757	745	732	719	707	695	683	671	
19.4	0.0999	975	953	935	915	895	877	861	843	826	812	797	782	767	754	742	728	716	705	692	681	
19.6	0.1012	0987	966	947	927	906	889	872	855	837	822	807	792	777	764	751	738	726	714	700	689	
19.8	0.1026	000	0978	959	939	918	901	884	866	848	833	818	802	787	774	761	748	736	723	709	698	
20.0	0.1038	013	0990	972	951	930	912	896	877	859	844	829	812	797	784	770	757	745	732	718	707	
20.2	0.1051	026	003	0983	963	942	924	907	888	870	855	839	823	807	794	780	767	754	741	727	716	
20.4	0.1064	039	015	0995	975	953	936	918	898	881	865	849	833	817	804	789	776	764	750	736	725	
20.6	0.1076	051	027	007	0987	965	947	929	909	892	876	860	843	826	813	799	786	773	759	745	733	
20.8	0.1089	063	039	020	0999	976	958	941	920	902	886	870	853	836	823	809	795	782	768	754	742	
21.0	0.1101	075	051	032	010	0988	970	952	931	913	896	880	863	846	832	818	805	791	777	763	751	

P$_2$O$_5$, %	CaO, %																				
	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
21.2	0.1113	087	063	044	022	000	0981	963	942	924	906	890	873	856	842	828	814	800	786	772	760
21.4	0.1125	100	075	056	034	011	0992	974	952	934	917	900	883	866	851	837	824	810	795	781	769
21.6	0.1137	111	087	067	045	022	004	0985	963	945	927	911	893	876	861	847	833	819	804	789	777
21.8	0.1149	122	099	079	057	034	015	0996	974	956	938	921	903	886	871	856	842	827	814	798	786
22.0	0.1161	134	111	091	068	046	026	007	0985	966	948	931	913	896	881	866	851	836	824	807	795
22.2	0.1172	147	123	103	079	056	037	017	0995	976	958	941	924	906	890	875	860	846	832	816	803
22.4	0.1184	158	134	114	090	067	048	028	006	0987	969	951	934	915	900	884	869	855	840	825	812
22.6	0.1196	170	146	125	101	078	059	039	016	0997	978	961	944	925	909	894	879	864	849	833	821
22.8	0.1207	181	157	136	112	089	069	049	027	007	0988	970	953	934	918	903	888	872	857	842	829
23.0	0.1218	192	169	147	123	100	080	058	037	018	0998	980	963	944	926	912	897	881	866	851	837
23.2	0.1230	204	181	157	134	112	090	068	047	028	009	0990	972	952	935	922	905	890	875	860	845
23.4	0.1242	215	192	168	145	123	101	079	057	038	019	000	0982	963	944	932	914	899	883	869	854
23.6	0.1254	226	203	179	156	134	112	089	067	048	029	010	0990	973	954	942	924	907	892	877	862
23.8	0.1265	236	214	191	167	144	123	100	077	058	039	020	000	0983	964	950	932	916	900	886	871
24.0	0.1276	247	225	201	177	154	123	110	088	067	049	030	010	0992	974	960	940	925	909	894	880
24.2	0.1287	258	235	212	188	165	142	120	098	077	058	039	019	002	0983	969	949	933	917	902	888
24.4	0.1298	269	246	222	199	175	152	130	107	087	068	049	029	011	0992	977	958	942	926	911	896
24.6	0.1309	280	256	233	209	185	162	140	117	097	077	059	038	020	001	0986	966	950	934	919	904
24.8	0.1319	290	266	243	219	195	172	150	127	106	086	068	048	029	010	0995	975	959	943	927	912
25.0	0.1329	300	276	254	229	205	182	159	137	116	096	077	056	038	019	003	0984	966	951	936	920
25.2	0.1340	311	286	264	239	215	192	169	146	126	105	086	066	047	028	011	0992	975	959	944	928
25.4	0.1350	321	296	274	249	225	202	179	156	135	114	095	075	056	037	019	001	0984	968	852	936
25.6	0.1360	331	306	283	259	235	212	188	165	144	122	104	084	065	046	028	009	0991	975	959	944
25.8	0.1370	340	316	293	269	245	221	197	174	152	131	113	093	074	055	036	017	0999	983	967	951
26.0	0.1380	350	326	302	278	254	230	206	183	162	140	121	101	082	063	044	025	006	0990	975	959
26.2	0.1389	360	335	312	287	263	239	215	192	171	149	130	109	090	070	052	033	014	0998	982	966
26.4	0.1399	369	344	321	296	272	247	224	201	180	157	138	117	098	077	060	041	022	006	0989	974
26.6	0.1408	378	353	330	305	281	256	232	209	188	166	146	125	106	085	068	048	029	013	0997	981
26.8	0.1417	387	362	339	314	290	265	241	208	196	174	154	134	114	093	075	056	036	020	004	0987
27.0	0.1426	396	371	348	322	298	273	250	226	204	182	162	141	121	100	082	063	043	027	011	0994
27.2	0.1436	406	380	356	331	306	281	257	234	212	190	170	148	129	107	089	071	051	034	018	001
27.4	0.1444	414	389	365	339	315	290	266	242	221	198	177	156	136	115	096	077	057	041	025	008
27.6	0.1453	423	397	373	347	322	297	274	250	228	205	184	163	143	122	103	084	064	048	031	014
2o.8	0.1461	431	405	381	355	330	306	282	258	236	213	192	170	150	129	110	091	071	055	038	020
28.0	0.1469	439	413	389	363	339	313	289	266	243	221	199	177	157	136	116	097	077	061	044	026
28.2	0.1478	447	421	397	371	346	321	297	273	250	227	206	185	165	143	123	104	085	067	051	033
28.4	0.1486	455	429	404	378	354	329	305	281	257	235	213	191	171	149	129	111	091	074	057	039
28.6	0.1494	464	436	412	386	361	336	312	288	264	242	219	197	177	156	136	117	097	080	063	045
28.8	0.1502	471	444	419	393	367	343	320	296	271	249	226	204	184	162	142	123	103	085	069	050
29.0	0.1509	478	450	426	400	375	350	327	302	277	256	232	210	190	168	148	129	109	091	075	056
29.2	0.1516	486	457	433	407	381	356	334	309	284	262	239	216	196	174	154	135	115	096	080	062
29.4	0.1524	492	464	440	414	388	363	341	316	291	269	245	222	202	180	159	141	121	102	085	066
29.6	0.1530	499	471	446	421	394	369	348	323	297	275	250	229	208	186	165	147	126	107	090	071
29.8	0.1537	506	477	453	427	400	375	354	329	303	282	256	234	214	191	171	152	131	112	095	076
30.0	0.1544	512	485	459	433	407	381	360	335	309	287	263	240	219	197	176	158	137	116	100	081
30.5	0.1561	528	499	474	447	421	395	376	350	324	301	276	253	231	211	188	170	148	127	111	092
31.0	0.1576	542	512	488	460	435	408	388	362	336	316	290	266	243	224	200	182	158	137	121	102
31.5	0.1589	556	525	499	472	447	421	400	374	349	327	302	277	253	234	210	191	168	146	130	111
32.0	0.1600	568	536	510	484	457	431	410	384	359	337	312	288	262	243	218	199	175	154	137	119
32.5	0.1610	579	545	519	492	466	440	418	392	367	344	321	296	270	249	225	205	181	159	142	
33.0	0.1617	588	553	526	499	474	448	424	398	374	350	327	303	276	255	230	210	185	164		
33.5	0.1622	592	558	530	503	477	452	428	402	378	355	332	309	280	259	235	212	188			
34.0	0.1625	596	561	534	506	480	456	431	406	382	358	335	312	283	261	236	215				
34.5	0.1628	600	564	536	509	482	458	433	409	384	360	337	315	285	264	239					
35.0	0.1630	600	565	538	510	484	460	434	410	385	361	339	316	286							
35.5	0.1630	600	565	538	510	485	460	435	410	386	361	340	316								
36.0	0.1630	600	565	538	510	485	460	435	410	385	361	339									
36.5	0.1629	599	565	537	510	484	460	435	410	385	360										
37.0	0.1627	596	562	535	509	483	459	433	409	385											
37.5	0.1625	594	560	534	507	481	457	431	406												
38.0	0.1622	590	558	531	505	480	455	430													

TABLE III. SPECIFIC CONDUCTANCE (Ohm^{-1} Cm.$^{-1}$) OF SOLUTIONS IN THE SYSTEM CaO-P$_2$O$_5$-H$_2$O AT 25° C. (Contd.)
(VALUES INTERPOLATED AT ROUND WEIGHT PERCENTAGES OF P$_2$O$_5$ AND CaO)

P$_2$O$_5$, %	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7
15.4	0.0504																	
15.6	0.0512																	
15.8	0.0520	514																
16.0	0.0529	522																
16.2	0.0538	531	527															
16.4	0.0548	540	535															
16.6	0.0556	549	543															
16.8	0.0565	557	550	545														
17.0	0.0574	566	558	552														
17.2	0.0583	575	566	559	557													
17.4	0.0592	584	574	567	564													
17.6	0.0600	592	582	574	570	566												
17.8	0.0610	601	590	582	577	572												
18.0	0.0618	609	598	590	585	578												
18.2	0.0627	618	606	598	591	585	576											
18.4	0.0636	627	614	606	599	592	583											
18.6	0.0645	636	623	615	606	599	590	583										
18.8	0.0654	644	632	623	614	606	597	590										
19.0	0.0662	652	641	631	621	613	604	596										
19.2	0.0671	661	649	640	629	620	611	603	594									
19.4	0.0681	670	658	648	637	627	617	610	600									
19.6	0.0689	679	666	656	646	635	625	617	607	599								
19.8	0.0698	687	675	665	654	643	632	624	614	605								
20.0	0.0707	696	683	673	662	651	640	630	620	611								
20.2	0.0716	705	692	681	670	659	648	638	627	618	609							
20.4	0.0725	713	700	690	678	667	656	646	635	625	615							
20.6	0.0733	721	709	698	686	675	663	654	643	632	622	612						
20.8	0.0742	730	717	706	695	683	672	661	650	640	629	619						
21.0	0.0751	739	726	714	703	691	680	669	658	647	636	626						
21.2	0.0760	748	735	722	711	699	687	676	665	654	643	633	623					
21.4	0.0769	757	743	731	719	707	695	684	673	662	650	640	630					
21.6	0.0777	765	752	739	726	715	703	692	681	670	658	648	637					
21.8	0.0786	774	760	747	735	722	711	700	688	677	665	654	644	633				
22.0	0.0795	782	768	756	744	730	718	708	696	684	672	662	651	640				
22.2	0.0803	791	777	764	752	738	726	716	704	692	680	669	658	648	637			
22.4	0.0812	799	785	772	759	746	734	723	711	699	687	676	665	654	644			
22.6	0.0821	807	793	781	767	754	742	731	719	707	694	683	672	661	651			
22.8	0.0829	815	801	788	775	762	750	738	726	714	701	690	679	669	657	646		
23.0	0.0837	824	810	796	783	770	758	746	734	721	709	698	686	675	664	653		
23.2	0.0845	831	818	804	791	779	766	754	742	729	718	705	694	682	670	660	649	
23.4	0.0854	839	825	812	799	787	774	761	749	737	726	712	701	688	677	666	654	
23.6	0.0862	847	832	820	806	795	782	769	756	744	734	719	708	695	684	674	661	
23.8	0.0871	856	841	827	814	803	789	777	764	751	740	726	715	702	690	680	667	655
24.0	0.0880	864	849	836	822	810	797	784	772	759	747	734	722	709	697	685	674	661
24.2	0.0888	872	857	843	830	818	804	792	778	766	754	740	728	716	704	692	681	667
24.4	0.0896	880	865	851	837	825	812	799	786	773	761	747	735	722	710	699	687	674
24.6	0.0904	888	873	859	844	833	819	806	793	780	767	754	742	729	717	706	694	
24.8	0.0912	896	881	866	852	840	826	814	800	787	775	760	749	736	724	712	700	
25.0	0.0920	904	889	874	859	847	834	820	807	794	782	767	756	742	730	719		
25.2	0.0928	912	896	882	866	855	841	827	814	801	788	774	762	749	736	725		
25.4	0.0936	919	904	889	874	862	848	834	821	808	795	781	769	756	742			
25.6	0.0944	927	911	896	881	869	855	841	827	815	802	787	776	762	749			
25.8	0.0951	934	919	903	888	875	862	848	834	821	809	794	782	769	755			
26.0	0.0959	941	926	910	895	882	869	855	841	827	815	801	789	775				
26.2	0.0966	949	933	918	902	888	875	861	849	834	822	807	795	782				
26.4	0.0974	956	940	925	909	895	882	868	854	841	828	814	801					
26.6	0.0981	963	947	931	916	901	888	874	861	847	835	820	808					
26.8	0.0987	970	954	938	922	907	895	881	867	854	841	826						
27.0	0.0994	977	961	944	929	914	901	887	874	860	847	833						

P$_2$O$_5$, %	CaO, %																	
	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7
27.2	0.1001	0984	967	951	936	920	907	893	880	866	853	839						
27.4	0.1008	0990	974	957	942	926	913	899	886	872	859							
27.6	0.1014	0997	980	964	948	932	919	905	892	878	865							
27.8	0.1020	003	0986	970	954	938	925	911	897	884								
28.0	0.1026	009	0993	976	960	944	931	917	903	890								
28.2	0.1033	016	0999	982	966	950	936	923	909									
28.4	0.1039	021	004	0988	971	956	942	928	914									
28.6	0.1045	027	010	0994	977	961	947	934										
28.8	0.1050	033	016	000	0983	966	953	940										
29.0	0.1056	039	021	005	0988	972	958	945										
29.2	0.1062	044	026	010	0993	977	963											
29.4	0.1066	049	031	015	0998	982	968											
29.6	0.1071	054	037	020	003	0987												
29.8	0.1076	059	041	025	008	0992												
30.0	0.1081	064	047	030	013													
30.5	0.1092	076	058	041														
31.0	0.1102	086	068															
31.5	0.1111	096																
32.0	0.119																	

TABLE IV. pH OF SOLUTIONS IN THE SYSTEM CaO-P$_2$O$_5$-H$_2$O AT 25° C.
(VALUES INTERPOLATED AT ROUND WEIGHT PERCENTAGES OF P$_2$O$_5$ AND CaO)

Phosphoric acid solutions

P$_2$O$_5$, %	0.0000	0.0005	0.0010	0.0015	0.0022	0.003	0.004	0.006	0.008
pH	7.00	4.16	3.86	3.69	3.57	3.40	3.28	3.12	3.01

P$_2$O$_5$, %	0.010	0.015	0.02	0.03	0.04	0.06	0.08	0.10	0.20
pH	2.92	2.77	2.68	2.53	2.44	2.32	2.23	2.16	1.95

Solutions in the system

P$_2$O$_5$, %	CaO, %															
	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5
0.3	1.83	2.60														
0.4	1.75	2.32														
0.5	1.68	2.15	2.85													
0.6	1.63	2.02	2.60													
0.7	1.59	1.92	2.38													
0.8	1.55	1.84	2.22	2.78												
0.9	1.52	1.78	2.10	2.57												
1.0	1.49	1.72	2.02	2.41												
1.2	1.43	1.64	1.88	2.18	2.56											
1.4	1.39	1.57	1.78	2.03	2.32	2.67										
1.6	1.35	1.52	1.69	1.91	2.15	2.44										
1.8	1.31	1.47	1.62	1.82	2.02	2.26	2.54									
2.0	1.28	1.42	1.57	1.74	1.92	2.11	2.36	2.62								
2.5	1.21	1.32	1.45	1.58	1.73	1.87	2.06	2.24	2.45							
3.0	1.15	1.24	1.35	1.47	1.59	1.71	1.85	1.99	2.16	2.34	2.52					
3.5	1.09	1.18	1.27	1.37	1.48	1.59	1.70	1.81	1.94	2.07	2.23	2.42				
4.0	1.04	1.12	1.21	1.30	1.39	1.49	1.58	1.67	1.79	1.90	2.02	2.16	2.31	2.45		
5.0	0.96	1.02	1.09	1.16	1.24	1.33	1.39	1.48	1.57	1.64	1.73	1.82	1.92	2.03	2.15	2.28
6.0	0.88	0.94	1.00	1.06	1.12	1.19	1.26	1.33	1.40	1.46	1.53	1.61	1.68	1.76	1.83	1.93
7.0	0.81	0.87	0.91	0.97	1.02	1.08	1.14	1.20	1.27	1.32	1.39	1.45	1.51	1.56	1.62	1.70
8.0	0.75	0.80	0.84	0.89	0.94	0.98	1.04	1.09	1.15	1.20	1.26	1.31	1.37	1.41	1.46	1.52
9.0	0.69	0.73	0.78	0.82	0.86	0.90	0.95	1.00	1.04	1.09	1.14	1.19	1.24	1.29	1.33	1.39
10.0	0.63	0.68	0.71	0.75	0.79	0.83	0.86	0.91	0.95	0.99	1.04	1.08	1.12	1.17	1.22	1.26
11.0	0.58	0.61	0.65	0.69	0.73	0.76	0.80	0.84	0.88	0.91	0.94	0.98	1.02	1.06	1.10	1.15
12.0	0.52	0.56	0.59	0.63	0.66	0.70	0.73	0.77	0.80	0.83	0.86	0.90	0.93	0.97	1.01	1.05
13.0	0.47	0.50	0.54	0.57	0.60	0.64	0.66	0.70	0.73	0.76	0.79	0.82	0.85	0.89	0.92	0.95
14.0	0.42	0.45	0.48	0.51	0.54	0.58	0.60	0.63	0.66	0.69	0.72	0.75	0.78	0.81	0.84	0.87
15.0	0.38	0.40	0.43	0.46	0.49	0.52	0.54	0.57	0.60	0.62	0.65	0.68	0.71	0.73	0.76	0.79

TABLE IV. pH OF SOLUTIONS IN THE SYSTEM CaO-P2O5-H2O AT 25° C. (Contd.)
(VALUES INTERPOLATED AT ROUND WEIGHT PERCENTAGES OF P2O5 AND CaO)

P_2O_5, %	CaO, % 0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5
16.0	0.33	0.35	0.38	0.41	0.43	0.46	0.48	0.51	0.54	0.56	0.59	0.61	0.64	0.66	0.69	0.72
17.0	0.28	0.30	0.33	0.35	0.38	0.40	0.43	0.45	0.48	0.50	0.53	0.55	0.57	0.60	0.62	0.65
18.0	0.23	0.26	0.28	0.30	0.32	0.35	0.37	0.39	0.42	0.44	0.47	0.49	0.51	0.53	0.55	0.58
19.0	0.19	0.21	0.23	0.25	0.27	0.29	0.32	0.34	0.36	0.38	0.41	0.43	0.45	0.47	0.49	0.51
20.0	0.14	0.16	0.18	0.20	0.22	0.24	0.26	0.28	0.30	0.32	0.35	0.37	0.39	0.41	0.43	0.45
21.0	0.10	0.12	0.13	0.15	0.17	0.19	0.21	0.23	0.25	0.27	0.29	0.31	0.33	0.35	0.37	0.39
22.0	0.05	0.07	0.09	0.11	0.12	0.14	0.16	0.18	0.19	0.21	0.23	0.25	0.27	0.29	0.31	0.33
23.0	0.01	0.03	0.04	0.06	0.07	0.09	0.11	0.13	0.14	0.16	0.18	0.19	0.21	0.23	0.25	0.26
24.0	-0.03	-0.02	0.00	0.01	0.03	0.04	0.06	0.08	0.09	0.11	0.12	0.14	0.15	0.17	0.19	0.20
25.0	-0.08	-0.06	-0.05	-0.03	-0.02	0.00	0.01	0.03	0.04	0.06	0.07	0.08	0.10	0.12	0.13	0.15
26.0	-0.12	-0.10	-0.09	-0.08	-0.07	-0.05	-0.04	-0.02	-0.01	0.01	0.02	0.03	0.05	0.06	0.08	0.09
27.0	-0.16	-0.15	-0.14	-0.12	-0.11	-0.10	-0.08	-0.07	-0.06	-0.04	-0.03	-0.02	-0.01	0.01	0.02	0.04
28.0	-0.20	-0.19	-0.18	-0.17	-0.16	-0.14	-0.13	-0.12	-0.11	-0.10	-0.08	-0.07	-0.06	-0.04	-0.03	-0.02
29.0	-0.24	-0.23	-0.22	-0.21	-0.20	-0.19	-0.18	-0.17	-0.16	-0.15	-0.13	-0.12	-0.11	-0.10	-0.08	-0.07
30.0	-0.28	-0.27	-0.27	-0.26	-0.25	-0.24	-0.22	-0.21	-0.20	-0.19	-0.18	-0.17	-0.16	-0.15	-0.14	-0.13
31.0	-0.32	-0.31	-0.31	-0.30	-0.29	-0.28	-0.27	-0.26	-0.25	-0.24	-0.23	-0.22	-0.21	-0.20	-0.19	-0.18
32.0	-0.37	-0.36	-0.35	-0.34	-0.33	-0.32	-0.31	-0.31	-0.30	-0.29	-0.28	-0.27	-0.26	-0.25	-0.24	-0.23
33.0	-0.41	-0.40	-0.39	-0.38	-0.38	-0.37	-0.36	-0.35	-0.34	-0.34	-0.33	-0.32	-0.31	-0.30	-0.30	-0.29
34.0	-0.44	-0.44	-0.43	-0.43	-0.42	-0.41	-0.41	-0.40	-0.39	-0.39	-0.38	-0.37	-0.36	-0.35	-0.34	-0.34
35.0	-0.48	-0.48	-0.47	-0.47	-0.46	-0.46	-0.45	-0.45	-0.44	-0.43	-0.43	-0.42	-0.41	-0.41	-0.40	-0.39
36.0	-0.52	-0.52	-0.51	-0.51	-0.51	-0.50	-0.50	-0.49	-0.49	-0.48	-0.48	-0.47	-0.46	-0.46	-0.45	-0.45
37.0	-0.56	-0.56	-0.56	-0.56	-0.55	-0.55	-0.55	-0.54	-0.54	-0.53	-0.53	-0.53	-0.52	-0.52	-0.51	-0.51
38.0	-0.60															

P_2O_5, %	CaO, % 1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
5.0	2.28															
6.0	1.93	2.02	2.13	2.25												
7.0	1.70	1.77	1.84	1.91	2.00	2.09	2.20									
8.0	1.52	1.58	1.64	1.69	1.76	1.83	1.89	1.98	2.07							
9.0	1.39	1.43	1.48	1.53	1.58	1.64	1.69	1.75	1.81	1.87	1.94	2.02				
10.0	1.26	1.31	1.35	1.40	1.45	1.50	1.55	1.59	1.63	1.69	1.74	1.81	1.87	1.92		
11.0	1.15	1.19	1.23	1.27	1.32	1.36	1.41	1.46	1.50	1.55	1.59	1.64	1.69	1.74	1.79	1.84
12.0	1.05	1.08	1.12	1.16	1.20	1.24	1.28	1.33	1.37	1.41	1.45	1.50	1.54	1.58	1.63	1.67
13.0	0.95	0.99	1.03	1.06	1.10	1.13	1.17	1.21	1.25	1.28	1.32	1.36	1.40	1.44	1.49	1.52
14.0	0.87	0.90	0.93	0.97	1.00	1.03	1.07	1.10	1.13	1.17	1.20	1.24	1.28	1.31	1.35	1.39
15.0	0.79	0.82	0.85	0.88	0.91	0.94	0.97	1.00	1.03	1.06	1.09	1.13	1.16	1.20	1.23	1.27
16.0	0.72	0.74	0.78	0.80	0.83	0.86	0.88	0.91	0.94	0.97	1.00	1.03	1.06	1.09	1.12	1.15
17.0	0.65	0.67	0.70	0.72	0.75	0.77	0.80	0.83	0.85	0.88	0.91	0.94	0.97	1.00	1.02	1.05
18.0	0.58	0.60	0.63	0.65	0.67	0.70	0.72	0.74	0.77	0.79	0.82	0.85	0.88	0.91	0.93	0.96
19.0	0.51	0.53	0.56	0.58	0.60	0.62	0.64	0.67	0.69	0.71	0.74	0.76	0.79	0.82	0.84	0.87
20.0	0.45	0.47	0.49	0.51	0.53	0.55	0.57	0.59	0.62	0.64	0.66	0.68	0.71	0.74	0.76	0.78
21.0	0.39	0.41	0.43	0.45	0.47	0.49	0.51	0.53	0.55	0.57	0.59	0.61	0.63	0.66	0.68	0.70
22.0	0.33	0.34	0.36	0.38	0.40	0.42	0.44	0.46	0.48	0.50	0.52	0.54	0.56	0.58	0.60	0.62
23.0	0.26	0.28	0.30	0.32	0.34	0.35	0.37	0.39	0.41	0.43	0.45	0.47	0.49	0.51	0.53	0.55
24.0	0.20	0.22	0.24	0.26	0.27	0.29	0.31	0.33	0.34	0.36	0.38	0.40	0.42	0.44	0.46	0.48
25.0	0.15	0.17	0.18	0.20	0.21	0.23	0.25	0.27	0.28	0.30	0.31	0.33	0.35	0.37	0.38	0.40
26.0	0.09	0.11	0.12	0.14	0.15	0.17	0.19	0.20	0.22	0.24	0.25	0.27	0.28	0.30	0.31	0.33
27.0	0.04	0.05	0.07	0.08	0.10	0.11	0.13	0.14	0.16	0.17	0.19	0.20	0.22	0.23	0.25	0.26
28.0	-0.02	-0.01	0.01	0.02	0.03	0.05	0.06	0.08	0.09	0.11	0.12	0.13	0.15	0.16	0.18	0.19
29.0	-0.07	-0.06	-0.04	-0.03	-0.02	-0.01	0.01	0.02	0.03	0.05	0.06	0.08	0.09	0.11	0.12	0.13
30.0	-0.13	-0.11	-0.10	-0.09	-0.08	-0.07	-0.06	-0.05	-0.04	-0.02	-0.01	0.00	0.02	0.03	0.04	0.06
31.0	-0.18	-0.17	-0.15	-0.14	-0.13	-0.12	-0.11	-0.10	-0.08	-0.07	-0.06	-0.05	-0.03	-0.02	-0.01	0.01
32.0	-0.23	-0.22	-0.21	-0.20	-0.19	-0.18	-0.16	-0.15	-0.14	-0.13	-0.12	-0.11	-0.09	-0.08	-0.07	-0.06
33.0	-0.29	-0.28	-0.27	-0.26	-0.25	-0.24	-0.23	-0.22	-0.21	-0.20	-0.19	-0.18	-0.17	-0.16	-0.14	-0.13
34.0	-0.34	-0.33	-0.32	-0.31	-0.30	-0.29	-0.28	-0.27	-0.26	-0.25	-0.24	-0.23	-0.22	-0.21	-0.19	-0.18
35.0	-0.39	-0.38	-0.37	-0.37	-0.36	-0.35	-0.34	-0.33	-0.32	-0.31	-0.30	-0.29	-0.28	-0.27	-0.26	-0.25

TABLE IV. pH OF SOLUTIONS IN THE SYSTEM CaO-P₂O₅-H₂O AT 25° C. (Contd.)
(VALUES INTERPOLATED AT ROUND WEIGHT PERCENTAGES OF P₂O₅ AND CaO)

P_2O_5, %	CaO, %															
	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
36.0	-0.45	-0.44	-0.43	-0.43	-0.42	-0.41	-0.40	-0.40	-0.39	-0.38	-0.37	-0.36	-0.35	-0.34	-0.33	-0.32
37.0	-0.51	-0.50	-0.50	-0.49	-0.49	-0.48	-0.47	-0.47	-0.46	-0.45	-0.45	-0.44	-0.43	-0.42	-0.41	

P_2O_5, %	CaO, %															
	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5
11.0	1.84															
12.0	1.67	1.71	1.77	1.81												
13.0	1.52	1.56	1.60	1.65	1.69	1.73										
14.0	1.39	1.43	1.46	1.50	1.54	1.58	1.62	1.65								
15.0	1.27	1.30	1.33	1.37	1.41	1.44	1.48	1.51	1.55	1.58						
16.0	1.15	1.18	1.22	1.25	1.28	1.31	1.35	1.38	1.42	1.44	1.47	1.50				
17.0	1.05	1.08	1.11	1.14	1.17	1.20	1.23	1.27	1.30	1.32	1.35	1.38	1.41	1.44		
18.0	0.96	0.99	1.01	1.04	1.07	1.10	1.13	1.16	1.19	1.21	1.24	1.27	1.30	1.33	1.36	1.39
19.0	0.87	0.89	0.92	0.95	0.97	1.00	1.03	1.06	1.09	1.11	1.14	1.16	1.19	1.22	1.25	1.28
20.0	0.78	0.80	0.83	0.86	0.88	0.91	0.93	0.96	0.94	1.01	1.04	1.06	1.09	1.12	1.15	1.17
21.0	0.70	0.72	0.75	0.77	0.79	0.82	0.84	0.87	0.90	0.92	0.95	0.97	1.00	1.02	1.05	1.07
22.0	0.62	0.64	0.66	0.69	0.71	0.73	0.76	0.78	0.81	0.83	0.85	0.88	0.90	0.93	0.95	0.98
23.0	0.55	0.57	0.59	0.61	0.63	0.65	0.67	0.69	0.72	0.74	0.77	0.79	0.81	0.83	0.85	0.88
24.0	0.48	0.49	0.51	0.53	0.55	0.58	0.59	0.61	0.64	0.66	0.68	0.70	0.73	0.75	0.77	0.79
25.0	0.40	0.42	0.44	0.46	0.48	0.50	0.52	0.53	0.56	0.58	0.60	0.62	0.64	0.66	0.68	0.70
26.0	0.33	0.35	0.37	0.39	0.40	0.43	0.44	0.46	0.48	0.50	0.52	0.54	0.56	0.58	0.59	0.62
27.0	0.26	0.28	0.30	0.32	0.33	0.35	0.37	0.38	0.40	0.42	0.44	0.46	0.48	0.50	0.51	0.53
28.0	0.19	0.21	0.23	0.24	0.26	0.27	0.29	0.31	0.32	0.34	0.36	0.37	0.39	0.40	0.42	0.44
29.0	0.13	0.15	0.16	0.18	0.19	0.21	0.23	0.24	0.26	0.27	0.29	0.31	0.32	0.34	0.35	0.37
30.0	0.06	0.07	0.08	0.10	0.11	0.13	0.14	0.16	0.17	0.19	0.20	0.22	0.23	0.25	0.26	
31.0	0.01	0.02	0.04	0.05	0.06	0.07	0.09	0.10	0.12	0.13	0.15	0.16	0.17			
32.0	-0.06	-0.04	-0.03	-0.02	0.00	0.01	0.02	0.04	0.05	0.06	0.08					
33.0	-0.13	-0.12	-0.11	-0.09	-0.08	-0.07	-0.06	-0.05	-0.03							
34.0	-0.18	-0.17	-0.16	-0.15	-0.13	-0.13	-0.12									
35.0	-0.25	-0.24	-0.23	-0.22												
36.0	-0.32	-0.31														

P_2O_5, %	CaO, %												
	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7
18.0	1.39												
19.0	1.28	1.31	1.34										
20.0	1.17	1.20	1.23	1.25	1.28								
21.0	1.07	1.10	1.12	1.15	1.17	1.20	1.22						
22.0	0.98	1.00	1.02	1.04	1.07	1.09	1.12	1.14	1.16				
23.0	0.88	0.90	0.93	0.95	0.97	0.99	1.02	1.04	1.06	1.08	1.10		
24.0	0.79	0.81	0.83	0.85	0.87	0.90	0.92	0.94	0.96	0.98	1.00	1.02	1.04
25.0	0.70	0.72	0.74	0.76	0.78	0.80	0.82	0.84	0.86	0.88	0.90		
26.0	0.62	0.63	0.65	0.67	0.69	0.71	0.73	0.75	0.77				
27.0	0.53	0.55	0.57	0.59	0.60	0.62	0.64						
28.0	0.44	0.45	0.47	0.49	0.50								
29.0	0.37	0.39	0.40										

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