

References

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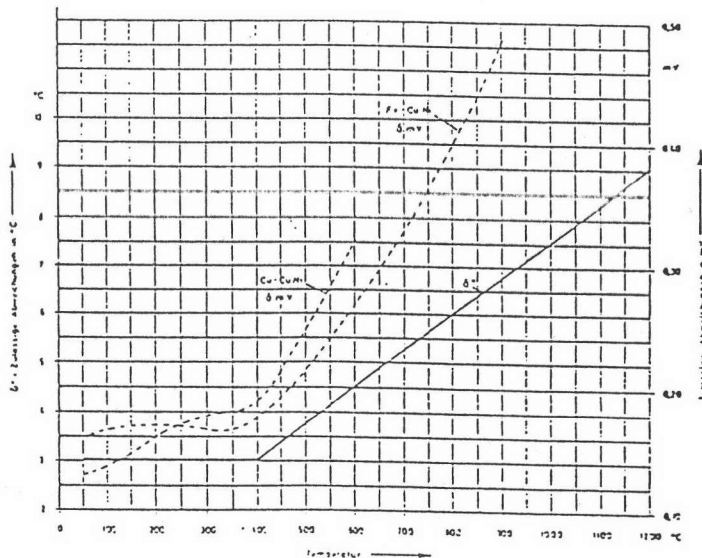
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Appendices

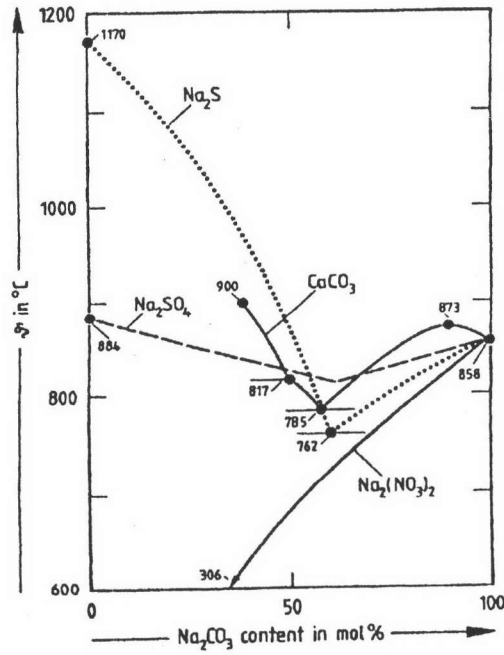
Appendix A

Table for the NiCr-Ni type K thermocouple

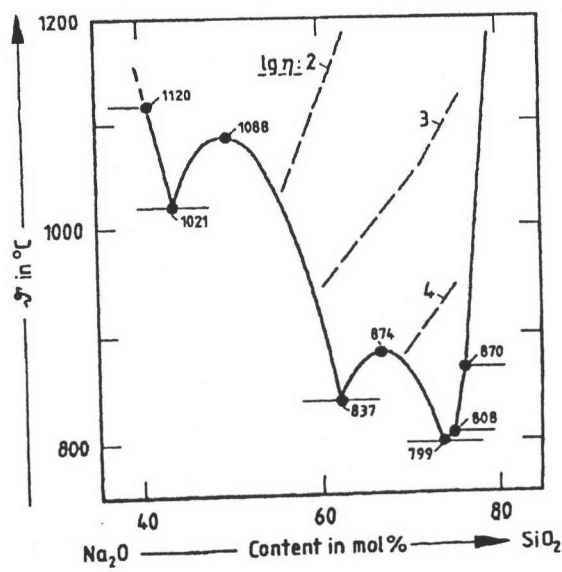
°C	mV	mV/°C	°C	mV	mV/°C	°C	mV	mV/°C	°C	mV	mV/°C	°C	mV	mV/°C	°C	mV	mV/°C		
-200	-5,891	0,016	-100	-3,553	0,031	± 0 ± 0	+ 100	+ 4,095	0,041	+ 200	+ 8,137	0,040	+ 300	+ 12,207	0,042				
190	5,730	0,018	90	3,242	0,032	+ 10	+ 0,397	0,040	110	4,508	0,041	210	8,537	0,040	310	12,523	0,042		
180	5,550	0,020	80	2,920	0,033	20	0,798	0,040	120	4,919	0,041	220	8,938	0,040	320	13,039	0,042		
170	5,354	0,021	70	2,586	0,034	30	1,203	0,041	130	5,327	0,041	230	9,341	0,040	330	13,456	0,042		
160	5,141	0,023	60	2,243	0,035	40	1,611	0,041	140	5,733	0,041	240	9,745	0,040	340	13,874	0,042		
150	4,912	0,024	50	1,889	0,036	50	2,022	0,041	150	6,137	0,040	250	10,151	0,041	350	14,292	0,042		
140	4,669	0,024	40	1,527	0,036	60	2,436	0,041	160	6,539	0,040	260	10,560	0,041	360	14,712	0,042		
130	4,410	0,026	30	1,156	0,037	70	2,850	0,041	170	6,939	0,040	270	10,969	0,040	370	15,132	0,042		
120	4,138	0,029	20	0,777	0,038	80	3,266	0,042	180	7,338	0,040	280	11,381	0,041	380	15,552	0,042		
110	3,852	0,030	10	0,392	0,040	90	3,681	0,041	190	7,737	0,040	290	11,793	0,041	390	15,974	0,042		
+ 400	+ 16,395	0,042	+ 500	+ 20,640	0,043	+ 600	+ 24,902	0,043	+ 700	+ 29,128	0,042	+ 800	+ 33,277	0,041	+ 900	+ 37,325	0,040		
410	16,818	0,042	510	21,066	0,043	610	25,327	0,042	710	29,547	0,042	810	33,686	0,041	910	37,724	0,040		
420	17,241	0,042	520	21,493	0,043	620	25,751	0,043	720	29,965	0,042	820	34,095	0,041	920	38,122	0,040		
430	17,664	0,042	530	21,919	0,043	630	26,176	0,043	730	30,383	0,042	830	34,502	0,041	930	38,519	0,040		
440	18,088	0,042	540	22,346	0,043	640	26,599	0,042	740	30,799	0,042	840	34,909	0,041	940	38,915	0,040		
450	18,513	0,043	550	22,772	0,043	650	27,022	0,042	750	31,214	0,042	850	35,314	0,041	950	39,310	0,040		
460	18,938	0,043	560	23,198	0,043	660	27,445	0,042	760	31,629	0,041	860	35,718	0,040	960	39,703	0,039		
470	19,363	0,044	570	23,624	0,043	670	27,867	0,042	770	32,042	0,041	870	36,121	0,040	970	40,096	0,039		
480	19,788	0,043	580	24,050	0,043	680	28,288	0,042	780	32,455	0,041	880	36,524	0,040	980	40,488	0,039		
490	20,214	0,043	590	24,476	0,043	690	28,709	0,042	790	32,866	0,041	890	36,925	0,040	990	40,879	0,039		
1000	41,259		+ 1100	+ 45,108	0,038	+ 1200	+ 48,828	0,036	+ 1300	+ 52,398	0,035								
1010	41,657	0,039	1110	45,486	0,038	1210	49,192	0,036	1310	52,747	0,035								
1020	42,045	0,039	1120	45,863	0,038	1220	49,555	0,036	1320	53,093	0,034								
1030	42,432	0,039	1130	46,238	0,038	1230	49,916	0,036	1330	53,439	0,034								
1040	42,817	0,039	1140	46,612	0,037	1240	50,276	0,036	1340	53,782	0,034								
1050	43,202	0,038	1150	46,985	0,037	1250	50,633	0,036	1350	54,125	0,034								
1060	43,585	0,038	1160	47,356	0,037	1260	50,990	0,035	1360	54,466	0,034								
1070	43,968	0,038	1170	47,726	0,037	1270	51,344	0,035	1370	54,807	0,034								
1080	44,349	0,038	1180	48,095	0,037	1280	51,697	0,035											
1090	44,729	0,038	1190	48,462	0,037	1290	52,049	0,035											



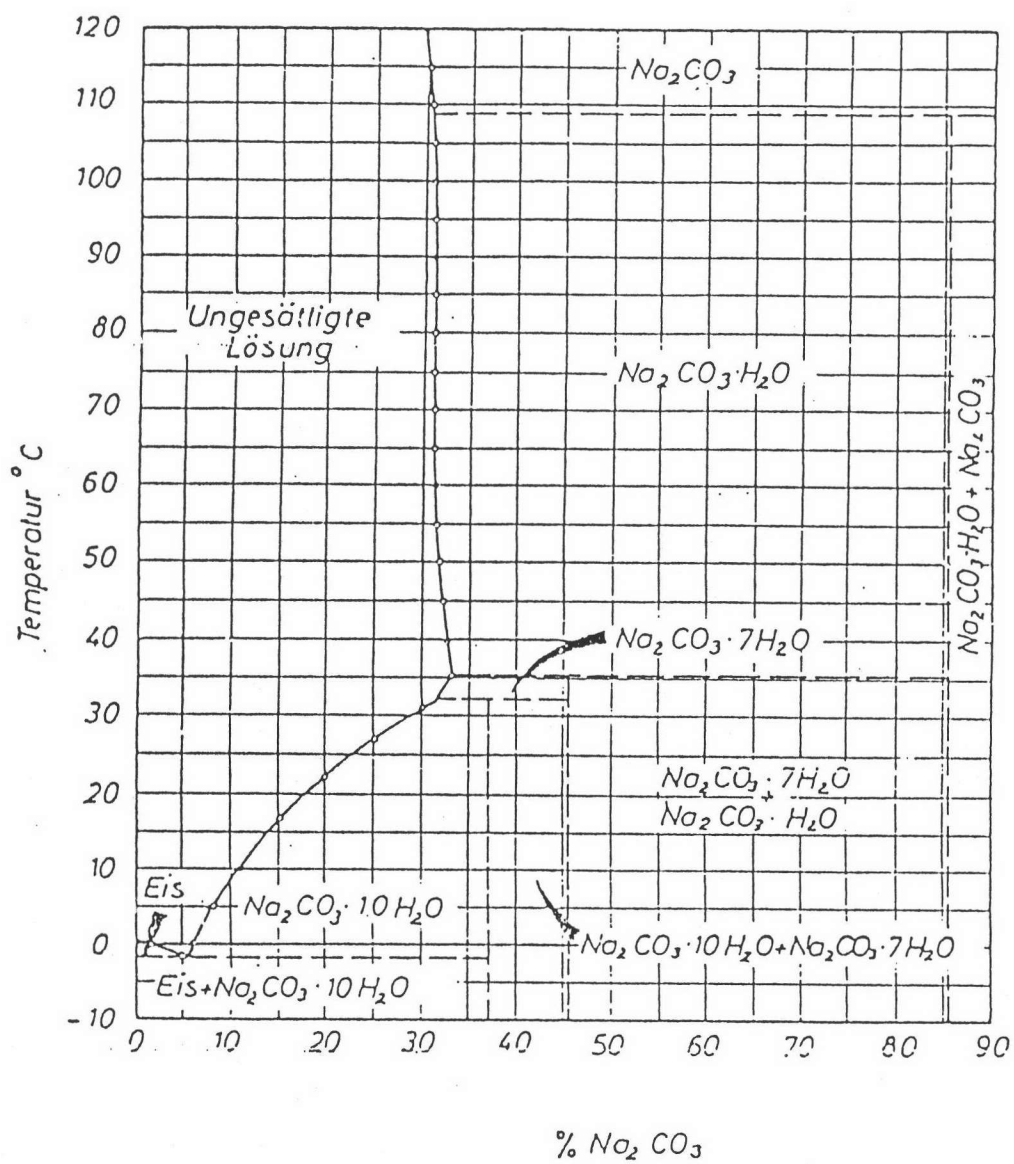
Appendix B
Phase diagram



Liquidus curves of the binary systems of Na_2CO_3 with Na_2S , Na_2SO_4 , CaCO_3 , or NaNO_3 .



Liquidus curve and melt viscosities in the binary system $\text{Na}_2\text{O}-\text{SiO}_2$; re-designed; η in dPa s.

Phase diagram of system Na_2CO_3 - H_2O



Vita

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