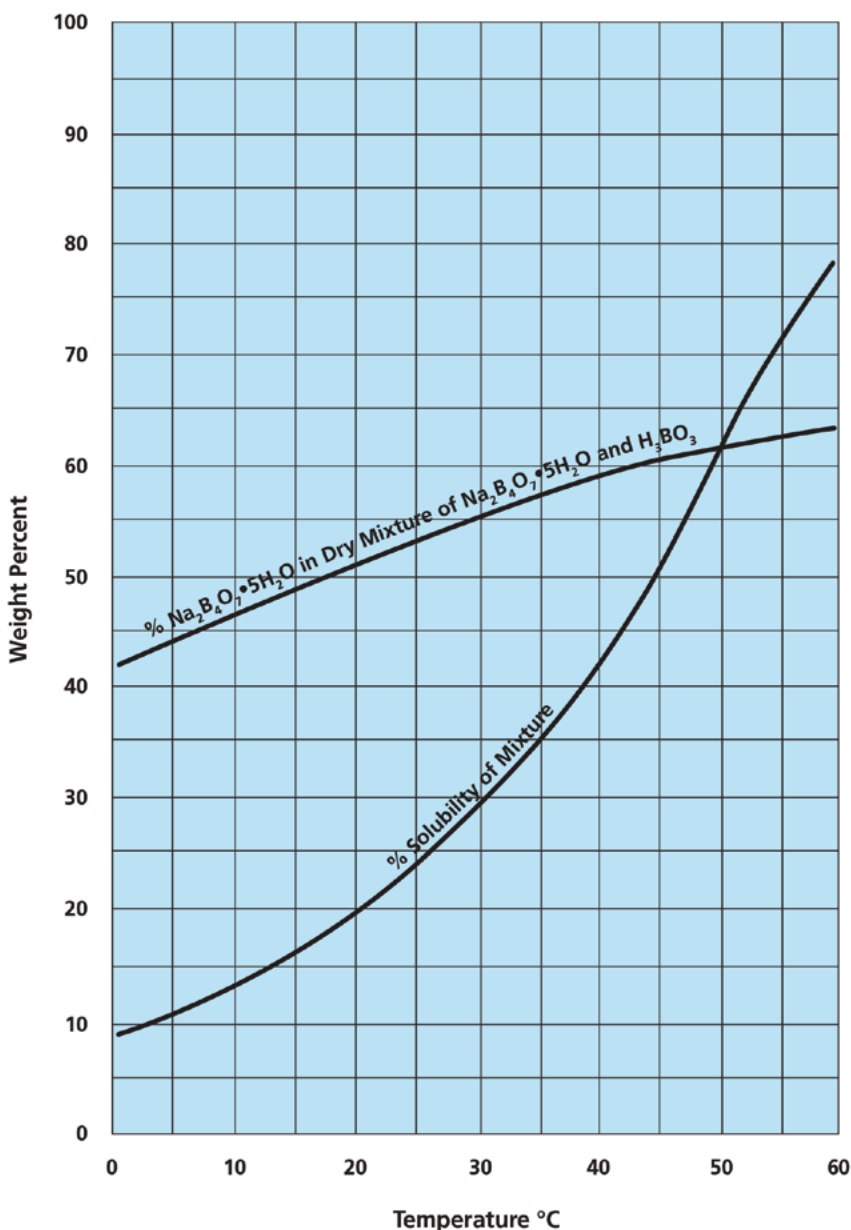


Neobor® Borax 5 mol - Boric acid mixtures of maximum solubility

(Based on typical analysis)



Explanation

Example: To determine the solubility and composition of a mixture of Borax 5 mol and boric acid at 30°C. Proceed along the horizontal ordinate to 30°C. Read upward to the lower line labeled Percent Solubility of Mixture, and then across to where the vertical ordinate reads 30% by weight is given as the maximum solubility. To determine the ratio of the two components at this temperature and at this solubility, proceed along the horizontal ordinate to the 30° temperature as above and read upward to the top line which gives the composition of the mixture and then across where it can be read that this mixture contains 57% Borax 5 mol and 43% boric acid.

Composition of Neobor® (Borax 5 mol) – Boric acid solid mixtures

(Based on typical analysis of technical grade products)

Wt. %		Mole Ratios		Wt. % B ₂ O ₃
Neobor Borax 5 Mol	Boric Acid	Na ₂ O/B ₂ O ₃	B ₂ O ₃ /Na ₂ O	
100	0	.500	2.00	48.6
95	5	.471	2.12	49.0
90	10	.443	2.26	49.4
85	15	.415	2.41	49.8
80	20	.387	2.58	50.1
75	25	.360	2.78	50.5
70	30	.334	3.00	50.9
66.67	33.33	.316	3.16	51.2
65	35	.308	3.25	51.3
60	40	.282	3.55	51.7
55	45	.257	3.90	52.04
53.71	46.29	.250	4.00	52.1
50	50	.232	4.32	52.4
46	54	.212	4.72	52.7
45	55	.207	4.84	52.8
43.60	56.40	.2000	5.000	52.9
40	60	.183	5.48	53.2
36.70	63.30	.1667	6.000	53.44
35	65	.1586	6.306	53.57
33.33	66.67	.1506	6.639	53.70
30	70	.1349	7.413	53.96
25	75	.1117	8.953	54.34
20	80	.08870	11.27	54.72
15	85	.06607	15.14	55.10
10	90	.04374	22.86	55.49
5	95	.02172	46.04	55.87
0	100	.00000	infinity	56.25