COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Disodium hydrogenphosphate; Na_2HPO_4; [7558-79-4] (2) Dipotassium hydrogenphosphate; K_2HPO_4; [7758-11-4] (3) Water; H_2O; [7732-18-5]	Ravich, M.I.; Popova, Z.V. *Izv. Akad. Nauk SSSR, Ser. Khim.* 1942, 268-75.
VARIABLES: Composition and temperature.	**PREPARED BY:** J. Eysseltová

EXPERIMENTAL VALUES:

Solubility in the K_2HPO_4-Na_2HPO_4-H_2O system.

K_2HPO_4		Na_2HPO_4		H_2O	solid[b]
mass%	mol/kg[a]	mass%	mol/kg[a]	mass%[a]	phase
		temp. = 0°C.			
----	----	10.80	0.85	89.20	A
25.57	2.06	3.24	0.32	71.19	"
31.84	2.83	3.66	0.40	64.50	"
35.17	3.32	3.94	0.46	60.89	"
39.41	4.13	5.82	0.75	54.77	A + B
40.83	4.36	5.42	0.71	53.75	B
44.59	5.02	4.38	0.60	51.03	B + C
53.41	7.03	2.98	0.48	43.61	B
55.61	7.69	2.86	0.48	41.53	B + D[c]
55.60	7.70	2.92	0.50	41.48	"
		temp. = 25°C.			
60.66	9.42	2.36	0.45	36.98	D
59.68	9.59	4.60	0.90	35.72	"
57.85	9.49	7.14	1.43	35.01	B + D
54.94	8.43	7.66	1.44	37.40	B
45.31	5.81	9.91	1.56	44.78	"
30.98	3.47	17.80	2.44	51.22	"
29.57	3.30	19.05	2.61	51.38	"
26.64	2.97	21.82	2.98	51.54	B + E
26.61	2.97	22.04	3.02	51.35	E
26.31	2.91	21.76	2.95	51.93	"

(continued next page)

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
The isothermal method was used but no details are given. Equilibrium was reached in one day. Phosphate was determined as $Mg_2P_2O_7$, potassium was determined as $KClO_4$, and sodium was determined as sodium zincuranylacetate after separating out H_3PO_4 with the use of zinc acetate.	The $Na_2HPO_4 \cdot 12H_2O$ and the $K_2HPO_4 \cdot 3H_2O$ were recrystallized.
	ESTIMATED ERROR: No information is given.
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Disodium hydrogenphosphate; Na_2HPO_4; [7558-79-4]	Ravich, M.I.; Popova, Z.V.
(2) Dipotassium hydrogenphosphate; K_2HPO_4; [7758-11-4]	*Izv. Akad. Nauk SSSR, Ser. Khim.* 1942, 268-75.
(3) Water; H_2O; [7732-18-5]	

EXPERIMENTAL VALUES cont'd:

Solubility in the K_2HPO_4-Na_2HPO_4-H_2O system.

K_2HPO_4		Na_2HPO_4		H_2O	solid[b]
mass%	mol/kg[a]	mass%	mol/kg[a]	mass%[a]	phase
		temp. = 25°C.			
26.72	2.98	21.84	2.99	51.44	E
26.63	2.95	21.48	2.91	51.89	"
25.84	2.84	22.02	2.97	52.14	"
23.13	2.39	21.40	2.71	55.47	A + E
23.54	2.43	20.78	2.62	55.68	"
23.12	2.41	21.72	2.77	55.16	A
18.80	1.68	16.94	1.85	64.26	"
10.87	0.84	14.46	1.36	74.67	"
6.42	0.46	13.20	1.16	80.38	"
-----	----	10.80	0.85	89.20	"

[a] These values were calculated by the compiler.

[b] The solid phases are: A = $Na_2HPO_4 \cdot 12H_2O$; B = $KNaHPO_4 \cdot 5H_2O$; C = $K_2HPO_4 \cdot 6H_2O$; D = $K_2HPO_4 \cdot 3H_2O$; E = $Na_2HPO_4 \cdot 7H_2O$.

[c] This is a metastable state.

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Disodium hydrogenphosphate; Na_2HPO_4; [7558-79-4] (2) Sodium nitrate; $NaNO_3$; [7631-99-4] (3) Water; H_2O; [7732-18-5]	Makin, A.V.; Karnaukhov, A.S. *Zh. Neorg. Khim.* 1957, 2, 1420-3.
VARIABLES: Composition at 25°C.	**PREPARED BY:** J. Eysseltová

EXPERIMENTAL VALUES:

Solubility in the Na_2HPO_4-$NaNO_3$-H_2O system at 25°C.

$NaNO_3$		Na_2HPO_4		H_2O	solid[b]
mass%	mol/kg[a]	mass%	mol/kg[a]	mass%	phase
0	0	10.32	0.81	89.68	A
3.31	0.44	8.71	0.70	87.98	"
7.80	1.08	7.50	0.62	84.70	"
12.03	1.74	6.67	0.58	81.30	"
17.06	2.63	6.51	0.60	76.43	"
21.87	3.58	6.26	0.61	71.87	"
25.67	4.45	6.26	0.66	67.91	A + B
26.01	4.53	6.46	0.67	67.53	"
26.05	4.53	6.33	0.66	67.62	"
26.46	4.62	6.19	0.65	67.35	"
26.08	4.54	6.30	0.66	67.62	"
32.06	5.86	3.57	0.39	64.37	B
36.05	6.86	2.16	0.24	61.79	"
41.72	8.57	1.00	0.12	57.28	"
47.90	10.82	0	0	52.10	"

[a] The mol/kg H_2O values were calculated by the compiler.

[b] The solid phases are: A = $Na_2HPO_4 \cdot 12H_2O$; B = $NaNO_3$.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The isothermal method was used. The time allowed for equilibration was 12 - 45 hours. About 1 - 2 g of liquid and solid phases were sampled simultaneously. The phases were separated from each other by filtration. The phosphate content was determined gravimetrically as $NH_4MgPO_4 \cdot 6H_2O$. The sodium ion content was determined as sodium uranylacetate after removal of the phosphate ion. Nitrate ion content was determined by difference. The water content was determined by drying at 105°C to constant weight.

SOURCE AND PURITY OF MATERIALS:

The Na_2HPO_4 and the $NaNO_3$ were each recrystallized twice.

ESTIMATED ERROR:

No information is given. The compiler estimates the reproducibility to be about 1%.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Disodium hydrogenphosphate; Na_2HPO_4; [7558-79-4] (2) Sodium chloride; NaCl; [7647-14-5] (3) Water; H_2O; [7732-18-5]	Makin, A.V. *Zh. Neorg. Khim.* 1957, 2, 2794-6.
VARIABLES: Composition at 25°C.	**PREPARED BY:** J. Eysseltová

EXPERIMENTAL VALUES:

Solubility in the Na_2HPO_4-NaCl-H_2O system at 25°C.

Na_2HPO_4		NaCl		H_2O	solid[b]
mass%	mol/kg[a]	mass%	mol/kg[a]	mass%	phase
10.32	0.81	----	----	89.68	A
9.26	0.76	5.09	1.02	85.65	"
9.32	0.81	9.48	2.00	81.20	"
9.51	0.89	15.72	3.60	74.77	"
8.50	0.84	19.96	4.77	71.54	A + B
9.67	0.97	20.17	5.01	69.86	"
9.50	0.96	20.99	5.17	69.51	"
9.37	0.94	20.32	4.94	70.31	"
9.12	0.91	20.54	5.00	70.34	"
8.69	0.85	19.67	4.70	71.64	"
5.31	0.52	22.24	5.25	72.45	B
3.01	0.29	23.46	5.46	73.53	"
----	----	26.42	6.14	73.58	"

[a] The mol/kg H_2O values were calculated by the compiler.

[b] The solid phases are: A = $Na_2HPO_4 \cdot 12H_2O$; B = NaCl.

In addition to the above data, the author also gives the composition of the respective eutonic solution as: 9.14 mass% Na_2HPO_4 (0.91 mol/kg--compiler) 20.33 mass% NaCl (4.93 mol/kg--compiler), and 70.53 mass% water.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
The isothermal method was used. The analyses were done gravimetrically but no details are given.	No information is given.
	ESTIMATED ERROR: No details are given. The compiler estimates the reproducibility of the analyses to be about ± 3%.
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Disodium hydrogenphosphate; Na_2HPO_4; [7558-79-4] (2) Disodium sulfate; Na_2SO_4; [7557-82-6] (3) Water; H_2O; [7732-18-5]	1. Makin, A.V. *Uch. Zapiski Gos. Ped. In-ta* 1959, *30*, 291-6. 2. Druzhinin, I.G.; Makin, A.V. *Izv. Akad. Nauk Kirg. SSR, Ser. Estestv. i Tekhn. Nauk* 1960, *2*, 19-24.
VARIABLES: Composition at 25°C.	PREPARED BY: J. Eysseltová

EXPERIMENTAL VALUES:

Solubility in the Na_2HPO_4-Na_2SO_4-H_2O system at 25°C.

Na_2SO_4		Na_2HPO_4		H_2O	solid[b]
mass%	mol/kg[a]	mass%	mol/kg[a]	mass%	phase
----	----	10.32	0.81	89.68	A
4.25	0.34	8.90	0.72	86.85	"
7.79	0.65	7.99	0.67	84.22	"
9.82	0.84	7.52	0.64	82.66	"
12.77	1.12	7.38	0.65	74.85	"
15.02	1.37	7.62	0.69	77.36	A + B
15.20	1.38	7.38	0.67	77.43	"
15.03	1.37	7.62	0.69	77.35	"
15.06	1.37	7.48	0.68	77.46	"
15.06	1.37	7.44	0.68	77.50	"
15.04	1.37	7.45	0.68	77.51	"
15.04	1.37	7.54	0.68	77.42	"
16.27	1.47	5.92	0.54	77.81	B
17.83	1.61	4.14	0.37	78.03	"
19.19	1.73	2.70	0.24	78.11	"
21.98	1.98	----	----	78.02	"

[a] The mol/kg H_2O values were calculated by the compiler.

[b] The solid phases are: A = $Na_2HPO_4 \cdot 12H_2O$; B = $Na_2SO_4 \cdot 10H_2O$.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
The isothermal method was used. The mixtures were placed in a water thermostat and allowed to equilibrate for 3 days. Phosphate content was determined gravimetrically as $Mg_2P_2O_7$, sulfate content was determined gravimetrically as $BaSO_4$, sodium was determined by difference, and the water content was determined by drying at 105° C to constant weight.	Both salts were purified by recrystallization.
	ESTIMATED ERROR: The temperature was controlled to within ± 0.1 K. The compiler estimates that the reproducibility of the analyses was about 0.5%.
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Disodium hydrogenphosphate; Na_2HPO_4; [7558-79-4] (2) Hydrogen peroxide; H_2O_2; [7722-84-1] (3) Water; H_2O; [7732-18-5]	Ukraintseva, E.A. *Izv. Sib. Otd. Akad. Nauk SSSR, Ser. Khim.* 1963, 3, 14-24.
VARIABLES: Composition at 0°C.	**PREPARED BY:** J. Eysseltová

EXPERIMENTAL VALUES:

Solubility in the Na_2HPO_4-H_2O_2-H_2O system at 0°C.

Na_2HPO_4		H_2O_2		H_2O	solid[b]
mass%	mol/kg[a]	mass%	mol/kg[a]	mass%[a]	phase
1.6	0.11	----	----	98.4	A
4.0	0.32	9.2	3.12	86.8	"
11.0	1.21	20.0	8.52	69.0	"
12.2	1.28	20.8	9.12	67.0	"
23.6	3.29	26.0	15.16	50.4	"
24.0	3.38	26.1	15.37	49.9	"
27.3	4.15	26.4	16.76	46.3	"
42.2	9.64	27.0	25.77	30.8	A + B
40.9	9.05	27.3	25.23	31.8	B
38.7	8.95	30.9	29.88	30.4	"
37.5	8.79	32.5	31.84	30.0	"
35.4	9.47	38.3	42.81	26.3	"
35.3	11.04	42.2	55.13	22.5	"
32.9	10.06	44.1	56.36	23.0	"
26.9	9.86	53.9	82.52	19.2	C
26.7	14.23	60.1	133.8	13.2	"
29.1	46.5	66.5	444	4.4	"

[a] These values were calculated by the compiler.

[b] The solid phases are: A = $Na_2HPO_4 \cdot 12H_2O$; B = $Na_2HPO_4 \cdot 1.5H_2O_2$; C = $Na_2HPO_4 \cdot 2.5H_2O_2$.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The only information given is that the duration of the experiments was 3 to 14 hours. The composition of the solid phases was determined by the Schreinemakers' method. Hydrogen peroxide content was determined by titration with 0.1 N $KMnO_4$ in solutions containing sulfuric acid. The phosphate was determined gravimetrically as $Mg_2P_2O_7$.

SOURCE AND PURITY OF MATERIALS:

Chemically pure hydrogen peroxide without stabilizers was used. No information is given about the $Na_2HPO_4 \cdot 12H_2O$.

ESTIMATED ERROR:

No information is given.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Disodium hydrogenphosphate; Na_2HPO_4; [7558-79-4] (2) Disodium silicate; Na_2SiO_3; [6834-92-0] (3) Water; H_2O; [7732-18-5]	Manvelyan, M.G.; Galstyan, V.D.; Oganesyan, E.B.; Sayamyan, E.A. *Arm. Khim. Zh.* 1971, *26*, 510-12.
VARIABLES: Composition at 20°C.	**PREPARED BY:** J. Eysseltová

EXPERIMENTAL VALUES:

Solubility in the Na_2HPO_4-Na_2SiO_3-H_2O system at 20°C.

Na_2HPO_4		Na_2SiO_3		H_2O	solid[b]
mass%	mol/kg[a]	mass%	mol/kg[a]	mass%[a]	phase
7.2	0.55	0.5	0.04	92.3	A
9.5	0.75	1.2	0.11	89.3	"
11.8	0.96	1.8	0.17	86.4	"
12.5	1.04	2.9	0.28	84.6	"
15.3	1.36	5.3	0.55	79.4	"
15.1	1.38	8.1	0.86	76.8	B
14.9	1.42	11.5	1.28	73.6	"
9.0	0.83	14.5	1.55	76.5	"
7.9	0.74	16.5	1.79	75.6	"
4.8	0.44	18.9	2.03	76.3	"
4.9	0.46	20.5	2.25	74.7	C
2.5	0.23	21.5	2.32	76.0	"
2.5	0.23	20.0	2.11	77.5	"
1.9	0.17	20.1	2.11	78.0	"

[a] These values were calculated by the compiler.

[b] The solid phases are A = $Na_2HPO_4 \cdot 12H_2O$; B = $Na_3PO_4 \cdot 12H_2O$; C = $Na_2SiO_3 \cdot 9H_2O$.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The isothermal method was used. A month was allowed for equilibration. No details about the apparatus or the analytical methods are given.

SOURCE AND PURITY OF MATERIALS:

Reagent grade $Na_2HPO_4 \cdot 12H_2O$ and $Na_2SiO_3 \cdot 9H_2O$ were used.

ESTIMATED ERROR:

No information is given.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Disodium hydrogenphosphate; Na_2HPO_4; [7558-79-4] (2) Magnesium hydrogenphosphate; $MgHPO_4$; [7757-86-0] (3) Water; H_2O; [7732-18-5]	Dudakov, V.G.; Shternina, E.B. *VINITI Nr. 469-74*, 1974.
VARIABLES: Composition at 25°C.	**PREPARED BY:** J. Eysseltová

EXPERIMENTAL VALUES:

Solubility in the $MgHPO_4$-Na_2HPO_4-H_2O system at 25°C.

$10^5 C_{Mg}$	$10^3 C_{2Na}$	$10^3 C_{HPO_4}$	$MgHPO_4$[a]	Na_2HPO_4[a]	H_2O[a]		solid[b]
g ion/1000 g H_2O			mass%	mass%	mass%	pH	phase
802	----	8.02	0.096	----	99.90	6.98	A
543	32.4	37.78	0.065	0.46	99.48	8.19	"
421	79.8	84.02	0.050	1.12	98.83	8.86	"
277	159	162.2	0.032	2.21	97.76	9.23	"
338	310	313.0	0.038	4.22	95.74	9.24	"
553	527	532.6	0.061	6.96	92.97	9.23	"
741	665	672.1	0.081	8.63	91.29	9.26	"
821	726	733.9	0.089	9.35	90.56	9.36	"
1070	817	827.9	0.115	10.39	89.49	9.35	A + B
994	811	820.9	0.107	10.33	89.57	9.35	B
849	814	822.7	0.091	10.36	89.55	9.36	"
594	820	826.4	0.063	10.43	89.50	9.33	"
321	828	830.7	0.034	10.53	89.44	9.36	"
220	825	826.9	0.023	10.49	89.48	9.35	"
---	834	833.5	-----	10.60	89.40	9.36	"

[a] These values were calculated by the compiler using the authors' values for the ionic concentrations.

[b] The solid phases are: A = $MgHPO_4 \cdot 3H_2O$; B = $Na_2HPO_4 \cdot 12H_2O$.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The isothermal method was used. Equilibrium was checked refractometrically and by repeated analysis. No details are given about the apparatus or the sampling. Magnesium was determined gravimetrically as pyrophosphate, by complexiметric titration, or colorimetrically. Sodium was determined by flame photometry. Phosphate was determined gravimetrically as magnesium pyrophosphate or as ammonium phosphomolybdate. Water was determined by drying the sample at a temperature a little above its dehydration temperature or over concentrated H_2SO_4. The solid phases were identified by Schreinemakers' method, crystallooptically, and roentgenographically.

SOURCE AND PURITY OF MATERIALS:

The $MgHPO_4 \cdot 3H_2O$ was synthesized from $MgCO_3$ and H_3PO_4. Other experimental details are given in ref. (1).

ESTIMATED ERROR:

No information is given.

REFERENCES:

1. Vorob'ev, G.I.; Rykova, G.A.; Shternina, E.B. *Zh. Neorg. Khim.* 1970, *15*, 2644.

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Disodium hydrogenphosphate; Na_2HPO_4; [7558-79-4] (2) Disodium ethylenediaminetetraacetate; $C_{10}H_{14}O_8Na_2$; [139-33-3] (3) Water; H_2O; [7732-18-5]	Dudakov, V.G.; Shternina, E.B. *VINITI Nr. 469-74* 1974.
VARIABLES: Composition at 25°C.	**PREPARED BY:** J. Eysseltová

EXPERIMENTAL VALUES:

Solubility in the NaH_2EDTA-Na_2HPO_4-H_2O system at 25°C.

H_2EDTA^{2-}	HPO_4^{2-}	2 Na^+	Na_2H_2EDTA	Na_2HPO_4	H_2O		
(g ion/1000 g H_2O)			mass%[a]	mass%[a]	mass%[a]	pH	solid phase[b]
0.3083	----	0.308	10.29	----	89.71	4.35	A
0.3168	0.2793	0.596	10.19	3.43	86.38	4.58	"
0.3221	0.4642	0.786	10.11	5.56	84.32	4.82	"
0.3221	0.5799	0.902	9.97	6.86	83.17	4.87	"
0.3309	0.7872	1.12	9.97	9.06	80.97	5.02	"
0.3564	0.9237	1.28	10.50	10.39	79.11	5.25	A + B
0.3194	0.9022	1.22	9.53	10.28	80.18	7.08	B
0.2412	0.8972	1.15	7.38	10.48	82.15	7.89	"
0.1773	0.8793	1.06	5.54	10.50	83.96	8.68	"
0.1232	0.8828	1.01	3.92	10.71	85.37	8.94	"
0.0501	0.8498	0.851	1.64	10.60	87.76	9.27	"
----	0.8335	0.834	----	10.59	89.41	9.33	"

[a] These values were calculated by the compiler and were based on the concentration values given by the authors.

[b] The solid phases are: A = $Na_2H_2EDTA \cdot 2H_2O$; B = $Na_2HPO_4 \cdot 12H_2O$.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The isothermal method was used. Equilibrium was checked refractometrically and by repeated analysis. Sodium was determined by flame photometry, EDTA was determined by retitration using $Bi(NO_3)_3$, phosphate was determined gravimetrically as magnesium diphosphate or as ammonium phosphomolybdate, depending on its expected concentration. Water content was determined by drying the sample at a temperature slightly above that for the dehydration of the respective hydrate, or over H_2SO_4. The composition of the solid phases was determined by the Schreinemakers' method and crystallo-optically and roentgenographically.

SOURCE AND PURITY OF MATERIALS:

This has been described elsewhere (1).

ESTIMATED ERROR:

No information is given.

REFERENCES:

1. Vorob'ev, G.I.; Rykova, G.A.; Shternina, E.B. *Zh. Neorg. Khim.* 1970, *15*, 2644.

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Disodium hydrogenphosphate; Na_2HPO_4; [7558-79-4] (2) Diammonium hydrogenphosphate; $(NH_4)_2HPO_4$; [7783-28-0] (3) Water; H_2O; [7732-18-5]	Platford, R.F. *J. Chem. Eng. Data* 1974, *19*, 166-8.
VARIABLES:	**PREPARED BY:**
Composition at 25°C.	J. Eysseltová

EXPERIMENTAL VALUES:

Solubility in the Na_2HPO_4-$(NH_4)_2HPO_4$-H_2O system at 25°C.

Na_2HPO_4		$(NH_4)_2HPO_4$		solid[b]
mass%	mol/kg[a]	mass%	mol/kg[a]	phase
10.4	0.82	0.00	0.00	A
12.3	1.01	2.0	0.18	"
16.0	1.39	3.3	0.31	A + B
15.6	1.38	4.6	0.44	B
13.6	1.19	5.9	0.55	"
11.3	0.97	7.0	0.65	"
10.5	0.92	8.9	0.84	"
9.7	0.88	12.8	1.25	"
9.1	0.84	14.4	1.42	"
8.2	0.78	18.0	1.85	"
8.4	0.83	20.4	2.17	"
8.0	0.85	25.5	2.90	"
7.8	0.90	31.2	3.87	"
8.5	1.16	40.1	5.91	B + C
7.1	0.97	41.3	6.06	C
4.8	0.62	40.8	5.68	"
1.8	0.22	41.3	5.50	"
0.0	0.00	41.5	5.37	"

[a] The mol/kg H_2O values were calculated by the compiler.

[b] The solid phases are: A = $Na_2HPO_4 \cdot 12H_2O$; B = $NaNH_4HPO_4 \cdot 4H_2O$; C = $(NH_4)_2HPO_4$.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

Conventional measurements were made on aliquots of saturated solutions. The ammonium salt was determined gravimetrically as ammoniumtetraphenylborate (1) and the total salt content was determined by evaporation to constant weight in vacuum over H_2SO_4. The sodium salt was then estimated by difference. The composition of the eutonics was checked by an isopiestic method (2).

SOURCE AND PURITY OF MATERIALS:

The AR grade phosphates were recrystallized once from water. The Na_2HPO_4 was dried at 105°C. The $(NH_4)_2HPO_4$ was dried in vacuum over sulfuric acid at room temperature.

ESTIMATED ERROR:

Nothing is given.

REFERENCES:

1. Vogel, A.I. *Quantitative Inorganic Analysis*, Wiley. New York, 1961, p. 566.
2. Platford, R.F. *Amer. J. Sci.* 1972, *272*, 959.

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Disodium hydrogenphosphate; Na_2HPO_4; [7558-79-4] (2) Boric acid; H_3BO_3; [11113-50-1] (3) Water; H_2O; [7732-18-5]	Beremzhanov, B.A.; Savich, R.F.; Kunanbaeva, G.S. *Prikl. Teor. Khim.* 1978, 8-14.
VARIABLES: Composition at 25°C.	**PREPARED BY:** J. Eysseltová

EXPERIMENTAL VALUES:

Solubility in the Na_2HPO_4-H_3BO_3-H_2O system at 25°C.

Na_2HPO_4			H_3BO_3				refr.	solid[b]
mass%	mol%	mol/kg[a]	mass%	mol%	mol/kg[a]	pH	index	phase
12.00	1.70	0.96	----	----	----	9.93	1.520	A
15.46	2.31	1.33	2.68	0.91	0.52	9.60	1.495	"
16.60	2.32	1.45	3.11	1.00	0.63	----	1.491	"
18.11	2.83	1.63	3.77	1.32	0.78	9.85	-----	"
18.95	2.92	1.74	4.46	1.59	0.94	9.47	1.487	"
20.43	3.10	1.91	4.38	1.59	0.94	----	-----	"
20.82	3.24	1.97	4.86	1.79	1.06	9.56	1.480	"
23.82	2.83	2.38	5.84	2.24	1.34	9.44	1.477	A + B
19.81	3.01	1.90	6.68	2.50	1.47	9.19	1.464	B
19.44	2.99	1.85	6.76	2.51	1.48	----	1.468	"
17.51	2.76	1.67	8.94	3.31	1.96	8.65	1.453	"
16.28	2.64	1.58	11.30	4.21	2.52	----	-----	"
15.89	2.59	1.57	12.82	4.83	2.91	7.77	1.442	B + C
12.80	1.96	1.15	8.96	3.10	1.85	7.47	1.429	C
11.00	1.61	0.94	6.62	2.24	1.30	----	-----	"
10.08	1.44	0.84	5.75	1.92	1.10	6.18	1.395	"
8.34	1.18	0.68	5.51	1.80	1.03	----	-----	"
5.16	0.69	0.41	5.54	1.75	1.00	5.69	1.382	"
4.24	0.58	0.33	5.37	1.60	1.15	5.32	1.374	"
0	0	0	5.00	1.50	0.85	4.10	1.340	"

[a] The mol/kg H_2O values were calculated by the compiler.

[b] The solid phases are: A = Na_2HPO_4; B = $Na_2B_4O_7$; C = H_3BO_3.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The standard isothermal method was used. Two series of experiments were performed. In one series, one component was added to saturated solutions of the other. In the other series, solutions of different concentrations of one component were prepared and the other component was then added to these solutions until saturation. Sodium content was determined by flame photometry, phosphate content was determined gravimetrically and the boric acid was determined by titration. No other details are given.

SOURCE AND PURITY OF MATERIALS:

No information is given.

ESTIMATED ERROR:

No information is given.

REFERENCES: