COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7] (2) Disodium sulfate; Na_2SO_4; [7757-82-6] (3) Water; H_2O, [7732-18-5]	Apfel, O. Dissertation, Technical University, Darmstadt 1911.
VARIABLES: Composition at 25°C.	**PREPARED BY:** J. Eysseltová

EXPERIMENTAL VALUES:

Composition of saturated solutions in the NaH_2PO_4-Na_2SO_4-H_2O system at 25°C.

PO_4^{3-}	SO_4^{2-}	NaH_2PO_4 [a]		Na_2SO_4 [a]		H_2O [a]
mol/1000 g soln	mol/1000 g soln	mass%	mol/kg	mass%	mol/kg	mass%
4.08	----	48.97	8.00	----	----	51.03
3.92	0.11	47.05	7.63	1.56	0.21	51.39
3.82	0.26	45.85	7.57	3.69	0.52	50.46
3.58	0.45	42.97	7.07	6.39	0.89	50.64
3.27	0.71	39.25	6.45	10.08	1.40	50.67
3.29	0.72	39.49	6.54	10.23	1.43	50.28

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

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
Equilibrium was reached isothermally. Equilibrium was ascertained by repeated analysis of the liquid phase. The solid and liquid phases were separated from each other by filtration through a mat of platinum wires. Phosphate content was determined gravimetrically as $Mg_2P_2O_7$. The sulfate content was determined gravimetrically as $BaSO_4$. Sodium content was determined as Na_2SO_4 after removing the phosphate and sulfate as $Pb_3(PO_4)_2$ and $PbSO_4$.	No information is given.
	ESTIMATED ERROR: No information is given.
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7] (2) Ammonium dihydrogenphosphate; $NH_4H_2PO_4$; [7722-76-1] (3) Water; H_2O; [7732-18-5]	Shpunt, S.J. *Zh. Prikl. Khim.* 1940, *13*, 9-18.
VARIABLES: Temperature and composition.	**PREPARED BY:** J. Eysseltová

EXPERIMENTAL VALUES:

Part 1. Crystallization temperatures on sections of the NaH_2PO_4-$NH_4H_2PO_4$-H_2O system.

NaH_2PO_4		$NH_4H_2PO_4$			
mass%	mol/kg[a]	mass%	mol/kg[a]	t/°C	solid phase[b]
		Section I			
7.7	0.70	----	----	-2.1	A
7.4	0.70	4.8	0.48	-3.3	"
7.0	0.70	9.1	0.94	-4.5	"
6.8	0.71	13.0	1.41	-5.5	"
6.5	0.70	16.7	1.89	-0.6	B
6.2	0.70	20.0	2.36	8.5	"
6.0	0.70	23.1	2.83	17.1	"
5.8	0.71	25.9	3.30	25.0	"
5.6	0.71	28.6	3.78	30.8	"
		Section II			
15.4	1.52	----	----	-4.5	A
15.0	1.52	2.9	0.31	-5.0	"
14.6	1.53	5.7	0.62	-5.6	"
14.2	1.53	8.3	0.93	-6.1	"
13.9	1.54	10.7	1.23	-6.7	"
13.2	1.54	15.2	1.84	1.4	B
12.8	1.52	17.3	2.15	8.9	"
12.5	1.53	19.3	2.46	13.6	"
12.2	1.53	21.3	2.78	19.8	"
12.0	1.53	23.1	3.09	24.5	"
11.7	1.54	24.8	3.39	30.1	"

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AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
A standard visual polythermic method and the isothermal method were used but no details are given. The P_2O_5 content was determined by a standard method described in the "NIUIF materials" but no reference is given. The ammonia content was determined by the Kjeldahl method. The sodium ion content was probably determined by difference-compiler.	No information is given.
	ESTIMATED ERROR: The temperature was controlled to within ±0.2 K.
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7]	Shpunt, S.J.
(2) Ammonium dihydrogenphosphate; $NH_4H_2PO_4$; [7722-76-1]	*Zh. Prikl. Khim.* 1940, *13*, 9-18.
(3) Water; H_2O; [7732-18-5]	

EXPERIMENTAL VALUES cont'd.

Part 1. Crystallization temperatures on sections of the NaH_2PO_4-$NH_4H_2PO_4$-H_2O system.

NaH_2PO_4		$NH_4H_2PO_4$			
mass%	mol/kg[a]	mass%	mol/kg[a]	t/°C	solid[b] phase
		Section III			
23.1	2.50	----	----	-6.6	A
22.7	2.51	2.0	0.23	-7.1	"
22.2	2.50	3.8	0.45	-7.6	"
21.8	2.50	5.7	0.68	-8.0	"
21.4	2.50	7.4	0.90	-8.5	"
21.0	2.50	9.1	1.13	-9.0	"
20.3	2.50	12.2	1.57	-2.2	B
19.9	2.50	13.8	1.81	3.5	"
19.6	2.50	15.2	2.03	7.9	"
19.2	2.52	17.3	2.37	13.1	"
18.7	2.51	19.3	2.70	19.0	"
18.1	2.50	21.3	3.06	26.1	"
17.7	2.49	23.1	3.39	30.1	"
		Section IV			
34.6	4.41	----	----	-2.7	C
33.9	4.41	2.0	0.27	-2.6	"
33.2	4.39	3.8	0.52	-2.5	"
32.6	4.40	5.7	0.80	-2.6	"
32.0	4.40	7.4	1.06	-2.5	"
31.5	4.42	9.1	1.33	-2.9	"
30.9	4.41	10.7	1.59	1.9	B
30.4	4.41	12.2	1.85	9.0	"
29.9	4.42	13.8	2.13	13.9	"
29.4	4.42	15.2	2.38	18.5	"
28.4	4.41	18.0	2.92	27.6	"
		Section V			
38.5	5.22	----	----	7.1	C
37.8	5.23	2.0	0.29	6.8	"
37.1	5.23	3.8	0.56	6.9	"
36.4	5.24	5.7	0.86	7.2	"
35.8	5.25	7.4	1.13	7.1	"
35.2	5.26	9.1	1.42	7.1	"
34.5	5.24	10.7	1.70	7.1	B + C
33.9	5.24	12.2	1.97	12.1	B
33.3	5.24	13.8	2.27	17.9	"
32.8	5.26	15.2	2.54	22.8	"
32.2	5.25	16.7	2.84	27.3	"
		Section VI			
42.3	6.11	----	----	14.5	C
41.4	6.09	2.0	0.31	14.4	"
39.9	6.11	5.7	0.91	14.7	"
38.4	6.09	9.1	1.51	14.6	"
37.1	6.10	12.2	2.09	14.5	"
36.4	6.09	13.8	2.41	20.9	B
35.9	6.12	15.2	2.70	26.6	"
35.2	6.10	16.7	3.02	31.1	"

(continued next page)

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7]	Shpunt, S.J.
(2) Ammonium dihydrogenphosphate; $NH_4H_2PO_4$; [7722-76-1]	*Zh. Prikl. Khim.* 1940, *13*, 9-18
(3) Water, H_2O; [7732-18-5]	

EXPERIMENTAL VALUES cont'd.

Part 1. Crystallization temperatures on sections of the NaH_2PO_4-$NH_4H_2PO_4$-H_2O system.

NaH_2PO_4		$NH_4H_2PO_4$			
mass%	mol/kg[a]	mass%	mol/kg[a]	t/°C	solid[b] phase
		Section VII			
24.9	2.91	3.8	0.46	-8.4	A
26.6	3.18	3.7	0.46	-8.8	"
28.2	3.44	3.6	0.46	-9.7	"
31.1	3.96	3.5	0.46	-8.2	C
32.5	4.22	3.4	0.46	-5.3	"
34.1	4.54	3.3	0.46	-1.2	"
36.5	5.04	3.2	0.46	3.4	"
38.5	5.49	3.1	0.46	7.8	"
41.9	6.32	2.9	0.46	15.6	"
44.8	7.12	2.8	0.46	20.8	"
46.1	7.50	2.7	0.46	24.3	"
		Section VIII			
19.9	2.30	8.0	0.96	-7.9	A
22.0	2.61	7.8	0.96	-8.7	"
23.8	2.89	7.6	0.96	-9.3	"
25.6	3.18	7.4	0.96	-9.9	"
27.3	3.47	7.2	0.96	-10.7	A + C
28.8	3.74	7.1	0.96	-8.0	C
31.7	4.29	6.8	0.96	-3.3	"
34.1	4.79	6.6	0.97	1.5	"
36.5	5.33	6.4	0.97	6.5	"
38.5	5.80	6.2	0.97	10.7	"
40.2	6.22	6.0	0.97	14.7	"
41.9	6.68	5.8	0.96	18.3	"
44.8	7.52	5.6	0.98	23.5	"
47.3	8.31	5.3	0.97	28.2	"

Part 2. Solutions coexisting with two solid phases.

	NaH_2PO_4		$NH_4H_2PO_4$		H_2O	
t/°C	mass%	mol/kg[a]	mass%	mol/kg[a]	mass%	solid[b] phase
-4.3	----	----	16.7	1.74	83.3	A + B
-9.9	32.4	3.99	----	----	67.6	A + C
-6.0	6.6	0.70	14.7	1.62	78.7	A + B
-7.1	13.6	1.53	12.4	1.46	74.0	"
-9.1	21.0	2.53	9.8	1.23	69.2	"
-2.8	31.3	4.39	9.3	1.36	59.4	B + C
7.1	34.4	5.22	10.7	1.69	54.9	"
14.7	37.3	6.09	11.7	1.99	51.0	"
-10.2	30.0	3.75	3.4	0.44	66.6	A + C
-10.7	27.4	3.49	7.2	0.96	65.4	"

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COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7]	Shpunt, S.J.
(2) Ammonium dihydrogenphosphate; $NH_4H_2PO_4$; [7722-76-1]	*Zh. Prikl. Khim.* 1940, *13*, 9-18.
(3) Water; H_2O; [7732-18-5]	

EXPERIMENTAL VALUES cont'd.

Part 3. Solubility isotherms.

$NH_4H_2PO_4$			NaH_2PO_4			H_2O		
mass%	c[c]	mol/kg[a]	mass%	c[c]	mol/kg[a]	mass%	c[c]	solid phase[b]
			temp. = -9.9°C					
----	----	----	32.4	100.0	3.99	67.6	1391	A + C
3.6	11.7	0.46	28.6	88.3	3.51	67.8	1400	A
7.5	24.0	0.96	24.6	76.0	3.02	67.9	1398	"
9.2	29.6	1.18	22.8	70.4	2.79	68.0	1402	A + B
8.5	23.8	1.17	28.4	76.2	3.75	63.1	1129	B + C
3.4	10.4	0.45	30.4	89.6	3.83	66.2	1302	C
			temp. = -7°C					
----	----	----	24.2	100.0	2.66	75.8	2092	A
4.0	16.5	0.46	21.0	83.5	2.33	75.0	1988	"
8.4	33.5	0.98	17.4	66.5	1.95	74.2	1893	"
12.3	48.1	1.45	13.8	51.9	1.56	73.9	1851	A + B
10.6	34.6	1.34	20.8	65.4	2.53	68.6	1436	B
8.8	23.7	1.24	29.4	76.3	3.96	61.8	1068	B + C
7.0	19.8	0.96	29.7	80.2	3.91	63.3	1140	C
3.4	10.0	0.45	31.5	90.0	4.03	65.1	1239	"
----	----	----	33.6	100.0	4.22	66.4	1261	"
			temp. = -4.3°C					
----	----	----	15.1	100.0	1.48	84.9	3745	A
8.8	56.8	0.91	7.0	43.2	0.69	84.2	3484	"
16.8	100.0	1.76	----	----	----	83.2	3184	A + B
15.3	70.9	1.70	6.6	29.1	0.70	78.1	2309	B
13.3	50.8	1.58	13.5	49.2	1.54	73.2	1782	"
11.4	36.4	1.46	20.6	63.6	2.52	68.0	1396	"
9.1	23.8	1.30	30.3	76.2	4.16	60.6	1015	B + C
6.9	18.9	0.96	31.0	81.1	4.16	62.1	1084	C
3.3	9.5	0.45	32.8	90.5	4.28	63.9	1175[d]	"
----	----	----	34.6	100.0	4.41	65.4	----	"
			temp. = 0°C					
18.4	100.0	1.96	----	----	----	81.6	2833	B
16.9	73.4	1.92	6.4	26.6	0.70	76.7	2127	"
16.06	65.0	1.86	9.02	35.0	1.00	74.92	1941	"
14.7	54.0	1.77	13.1	46.0	1.51	72.2	1697	"
13.11	42.6	1.66	18.46	57.4	2.25	68.43	1420	"
12.9	40.1	1.67	20.0	59.9	2.48	67.1	1333	"
10.53	28.5	1.48	27.47	71.5	3.69	62.0	1077	"
10.0	25.1	1.48	31.1	74.9	4.40	58.9	944	"
9.64	24.1	1.43	31.69	75.9	4.50	58.67	937	B + C
9.8	24.3	1.46	31.7	75.7	4.51	58.5	931	"
6.7	17.4	0.97	33.2	82.8	4.60	60.1	999	C
5.8	15.3	0.83	33.5	84.7	4.60	60.7	1024	"
3.2	8.8	0.45	34.8	91.2	4.68	62.0	1083	"
2.62	7.3	0.36	34.84	92.7	4.64	62.54	1109	"
----	----	----	36.4	100.0	4.77	63.6	1150	"

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COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7]	Shpunt, S.J.
(2) Ammonium dihydrogenphosphate; $NH_4H_2PO_4$; [7722-76-1]	*Zh. Prikl. Khim.* 1940, *13*, 9-18.
(3) Water, H_2O; [7732-18-5]	

EXPERIMENTAL VALUES cont'd.

Part 3. Solubility isotherms.

$NH_4H_2PO_4$			NaH_2PO_4			H_2O		
mass%	c[c]	mol/kg[a]	mass%	c[c]	mol/kg[a]	mass%	c[c]	solid[b] phase
				temp. = +10°C				
21.8	100.0	2.42	----	----	----	78.2	2288	B
20.5	77.6	2.43	6.2	22.4	0.70	73.3	1766	"
18.0	59.7	2.26	12.7	40.3	1.53	69.3	1470	"
16.1	46.4	2.16	19.4	53.6	2.51	64.5	1196	"
12.7	30.5	1.93	30.2	69.5	4.41	57.1	875	"
11.5	26.0	1.84	34.1	74.0	5.22	54.4	788	"
11.1	24.6	1.81	35.5	75.4	5.54	53.4	757	B + C
6.2	14.6	0.96	38.0	85.4	5.67	55.8	838	C
3.0	7.3	0.45	39.5	92.7	5.72	57.5	900	"
----	----	----	40.5	100.0	5.67	59.5	961	"
				temp. = +20°C				
25.9	100.0	3.04	----	----	----	74.1	1824	B
24.2	81.4	3.00	5.7	18.6	0.68	70.1	1508	"
21.4	64.9	2.80	12.1	35.1	1.52	66.5	1293	"
19.5	51.8	2.75	18.9	48.2	2.56	61.6	1048	"
15.8	36.1	2.50	29.2	63.9	4.42	55.0	806	"
14.5	31.5	2.40	32.9	68.5	5.21	52.6	730	"
13.4	27.6	2.33	36.7	72.4	6.13	49.9	658	"
12.4	24.9	2.22	39.1	75.1	6.72	48.5	621	B + C
5.7	12.2	0.96	42.9	87.8	6.95	51.4	701	C
2.8	6.2	0.45	44.2	93.8	6.95	53.0	750	"
----	----	----	45.3	100.0	6.90	54.7	789	"
				temp. = +30°C				
30.2	100.0	3.76	----	----	----	69.8	1477	B
28.0	84.0	3.66	5.5	16.0	0.70	66.5	1278	"
26.10	73.6	3.54	9.77	26.4	1.27	64.13	1156	"
25.2	69.5	3.46	11.5	30.5	1.51	63.3	1116	"
23.0	56.9	3.40	18.2	43.1	2.58	58.8	930	"
20.0	45.6	3.16	24.97	54.4	3.78	55.03	802	"
18.6	40.7	3.04	28.2	59.3	4.42	53.2	745	"
17.3	36.1	2.96	31.9	63.9	5.23	50.8	678	"
16.2	32.3	2.91	35.4	67.7	6.09	48.4	617	"
15.78	31.6	2.82	35.62	68.4	6.11	48.60	622	"
13.30	24.9	2.58	41.89	75.1	7.79	44.81	536	B + C
13.20	24.9	2.54	41.60	75.1	7.67	45.20	544	"
9.55	18.5	1.78	43.75	81.5	7.80	46.70	580	C
6.26	12.3	1.15	46.50	87.7	8.20	47.24	594	"
5.2	10.2	0.96	47.8	89.8	8.47	47.0	588	"
3.42	6.8	0.62	48.55	93.2	8.42	48.03	615	"
2.5	5.0	0.45	49.0	95.0	8.42	48.5	627	"
----	----	----	51.2	100.0	8.74	48.8	628	"

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

[b] The solid phases are: A = ice; B = $NH_4H_2PO_4$; C = $NaH_2PO_4 \cdot 2H_2O$.

[c] The concentration units are: mol/100 mol of solute.

[d] The compiler calculates this missing value to be 1259.

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7] (2) Sodium nitrate; $NaNO_3$; [7631-99-4] (3) Water; H_2O; [7732-18-5]	Shpunt, S.J. *Zh. Prikl. Khim.* 1940, *13*, 19-28.
VARIABLES:	**PREPARED BY:**
Temperature and composition.	J. Eysseltová

EXPERIMENTAL VALUES:

Part 1. Composition of the relevant sections.

I. 46.9% $NaNO_3$ + 4.8% NaH_2PO_4 + 48.2% H_2O, water added.
II. 43.8% $NaNO_3$ + 8.5% NaH_2PO_4 + 47.7% H_2O, water added.
III. 42.0% $NaNO_3$ + 11.0% NaH_2PO_4 + 47.0% H_2O, water added.
IV. 39.0% $NaNO_3$ + 13.2% NaH_2PO_4 + 47.8% H_2O, water added.
V. 38.0% $NaNO_3$ + 18.0% NaH_2PO_4 + 44.0% H_2O, water added.
VI. 28.7% $NaNO_3$ + 27.4% NaH_2PO_4 + 43.9% H_2O, water added.
VII. 26.4% $NaNO_3$ + 29.0% NaH_2PO_4 + 41.6% H_2O, water added.
VIII. 16.0% $NaNO_3$ + 38.0% NaH_2PO_4 + 46.0% H_2O, water added.
IX. 12.0% $NaNO_3$ + 88.0% H_2O; NaH_2PO_4 added.
X. 6.0% $NaNO_3$ + 94.0% H_2O, NaH_2PO_4 added.

Part 2. Crystallization temperatures.

Section I

NaH_2PO_4		$NaNO_3$			NaH_2PO_4		$NaNO_3$		
mass%	mol/kg[a]	mass%	mol/kg[a]	t/°C	mass%	mol/kg[a]	mass%	mol/kg[a]	t/°C
4.7	0.78	46.2	11.07	36.5	4.0	0.58	38.8	7.98	2.2
4.5	0.73	44.1	10.09	26.1	3.8	0.53	37.3	7.45	-4.5
4.3	0.67	42.2	9.28	17.8	3.7	0.51	35.9	6.99	-10.2
4.2	0.63	40.4	8.58	10.4	3.6	0.49	34.7	6.62	-15.4
3.4	0.45	33.4	6.22	-18.4	1.6	0.16	15.4	2.18	-6.8
3.2	0.41	31.2	5.60	-16.1	1.4	0.14	13.3	1.83	-5.8
3.0	0.37	29.3	5.09	-14.8	1.1	0.10	10.4	1.38	-4.4
2.3	0.26	22.6	3.54	-10.4	0.9	0.08	8.6	1.12	-3.7
2.0	0.21	18.3	2.70	-8.2					

(continued next page)

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
No information is given.	No information is given.
	ESTIMATED ERROR:
	No information is given.
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7]	Shpunt, S.J.
(2) Sodium nitrate; $NaNO_3$; [7631-99-4]	*Zh. Prikl. Khim.* 1940, *13*, 19-28.
(3) Water; H_2O; [7732-18-5]	

EXPERIMENTAL VALUES cont'd:

Part 2. Crystallization temperatures.

Section II									
NaH_2PO_4		$NaNO_3$			NaH_2PO_4		$NaNO_3$		
mass%	mol/kg[a]	mass%	mol/kg[a]	t/°C	mass%	mol/kg[a]	mass%	mol/kg[a]	t/°C
8.2	1.39	42.7	10.23	35.3	5.8	0.75	29.9	5.47	-17.4
7.5	1.17	39.1	8.61	17.8	5.4	0.68	28.1	4.97	-16.0
7.2	1.08	37.5	7.98	9.8	4.1	0.46	21.5	3.40	-10.9
6.9	1.01	36.0	7.42	1.4	3.3	0.35	17.4	2.58	-8.4
6.8	0.98	35.2	7.14	-2.3	2.8	0.28	14.6	2.08	-6.9
6.6	0.93	34.4	6.86	-6.0	2.4	0.24	12.6	1.74	-6.0
6.5	0.90	33.6	6.61	-9.7	1.9	0.18	9.9	1.32	-4.5
6.3	0.86	32.9	6.37	-13.6	1.6	0.15	8.0	1.04	-3.8
6.2	0.84	32.0	6.09	-15.8	1.3	0.12	6.9	0.89	-3.0
6.0	0.79	30.9	5.76	-18.2					
Section III									
10.6	1.81	40.6	9.79	34.3	8.0	1.08	30.4	5.80	-16.4
10.2	1.67	38.8	8.95	24.7	5.8	0.67	22.3	3.65	-12.2
9.8	1.54	37.2	8.26	16.3	4.7	0.51	17.8	2.70	-9.1
9.4	1.43	35.7	7.65	9.2	3.9	0.40	14.8	2.14	-7.4
9.0	1.32	34.3	7.12	0.8	3.3	0.33	12.7	1.78	-6.3
8.7	1.24	33.1	6.69	-6.0	2.9	0.28	11.1	1.52	-5.4
8.4	1.17	31.9	6.29	-11.2	2.3	0.22	8.9	1.18	-4.3
8.2	1.13	31.4	6.12	-13.2	1.9	0.17	7.4	0.96	-3.5
8.1	1.11	31.0	5.99	-15.2					
Section IV									
12.7	2.12	37.5	8.86	27.7	9.0	1.16	26.6	4.86	-18.0
12.1	1.94	35.8	8.08	19.0	8.5	1.06	25.0	4.42	-16.4
11.6	1.79	34.3	7.46	11.1	8.0	0.97	23.6	4.06	-14.0
11.1	1.65	32.9	6.91	3.5	6.2	0.68	18.3	2.85	-10.1
10.7	1.56	32.2	6.63	0.4	5.0	0.52	14.9	2.19	-8.1
10.2	1.42	30.2	5.96	-5.3	4.3	0.43	12.6	1.78	-6.5
10.0	1.38	29.6	5.77	-7.2	3.3	0.32	9.6	1.30	-4.9
9.7	1.31	28.5	5.42	-13.0					
Section V									
16.5	2.83	34.9	8.45	30.7	12.3	1.66	25.9	4.93	-9.8
16.1	2.69	34.0	8.02	26.5	11.6	1.51	24.4	4.48	-14.3
15.9	2.62	33.5	7.79	22.7	11.3	1.45	23.7	4.29	-16.8
15.8	2.58	33.2	7.66	20.7	11.0	1.39	23.1	4.12	-16.0
15.5	2.49	32.7	7.43	18.0	10.4	1.28	21.9	3.80	-14.5
15.3	2.43	32.3	7.25	15.5	9.9	1.19	20.9	3.55	-13.5
14.8	2.29	31.3	6.83	13.2	9.4	1.11	19.9	3.31	-12.6
14.5	2.20	30.5	6.52	10.6	8.6	0.98	18.2	2.92	-11.2
14.0	2.07	29.6	6.17	8.0	7.1	0.76	15.0	2.26	-8.9
13.9	2.04	29.2	6.04	6.3	6.0	0.62	12.8	1.85	-7.3
13.5	1.94	28.4	5.75	3.7	5.3	0.53	11.8	1.67	-6.3
13.1	1.84	27.5	5.45	-1.1	4.2	0.40	8.9	1.20	-4.9
12.7	1.75	26.7	5.18	-4.8	3.5	0.33	7.3	0.96	-3.8
Section VI									
34.9	7.88	28.2	8.99	38.5	30.7	5.75	24.8	6.56	24.1
34.3	7.52	27.7	8.58	34.4	29.6	5.30	23.9	6.05	20.5
33.8	7.24	27.3	8.26	31.6	27.6	4.61	22.5	5.30	15.9
33.2	6.92	26.8	7.88	29.5	25.8	4.02	20.8	4.58	6.8
31.9	6.27	25.7	7.13	26.2					

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COMPONENTS:	ORIGINAL MEASUREMENTS
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7] (2) Sodium nitrate; $NaNO_3$; [7631-99-4] (3) Water; H_2O; [7732-18-5]	Shpunt, S.J. *Zh. Prikl. Khim.* 1940, *13*, 19-28.

EXPERIMENTAL VALUES cont'd:

Part 2. Crystallization temperatures.

Section VII

NaH_2PO_4		$NaNO_3$			NaH_2PO_4		$NaNO_3$		
mass%	mol/kg[a]	mass%	mol/kg[a]	t/°C	mass%	mol/kg[a]	mass%	mol/kg[a]	t/°C
26.7	4.57	24.6	5.94	28.8	15.8	1.89	14.6	2.47	-12.9
25.7	4.23	23.7	5.51	24.7	15.1	1.77	13.9	2.30	-11.9
23.8	3.66	22.0	4.78	18.7	12.2	1.33	11.3	1.74	-9.1
22.2	3.22	20.4	4.18	11.9	10.3	1.07	9.5	1.39	-7.4
20.8	2.89	19.2	3.76	6.2	8.9	0.89	8.2	1.16	-6.1
20.0	2.71	18.5	3.54	2.5	7.8	0.76	7.2	1.00	-5.5
19.3	2.56	17.8	3.33	-1.2	7.0	0.67	6.5	0.88	-4.9
18.4	2.37	17.0	3.10	0.0	5.8	0.54	5.3	0.70	-3.9
17.5	2.20	16.1	2.85	-11.1	4.9	0.45	4.5	0.58	-3.2
16.6	2.03	15.3	2.64	-13.7					
Section VIII									
38.0	6.88	16.0	4.09	33.6	21.3	2.55	9.0	1.52	-11.7
37.0	6.50	15.6	3.87	31.7	20.3	2.37	8.4	1.39	-10.8
35.4	5.93	14.9	3.53	28.2	18.4	2.08	7.8	1.24	-9.4
33.9	5.45	14.3	3.25	24.7	15.1	1.60	6.3	0.94	-7.2
31.4	4.72	13.2	2.80	17.6	12.8	1.30	5.4	0.78	-5.9
29.1	4.14	12.3	2.47	11.2	11.0	1.08	4.6	0.64	-4.9
27.8	3.83	11.7	2.28	7.8	8.7	0.83	3.7	0.50	-3.9
26.0	3.44	11.0	2.05	0.8	7.2	0.67	3.0	0.39	-3.2
24.5	3.13	10.3	1.86	-4.2	5.3	0.48	2.2	0.28	-2.4
23.8	3.00	10.0	1.78	-7.0	4.2	0.37	1.8	0.22	-1.8
22.5	2.76	9.5	1.64	-12.7					
Section IX									
0	0.0	12.0	1.60	-4.8	34.1	4.90	7.9	1.60	13.3
7.0	0.71	11.2	1.61	-6.6	36.4	5.42	7.6	1.60	16.6
12.7	1.40	11.5	1.78	-8.4	38.4	5.91	7.5	1.63	20.5
17.7	2.04	9.9	1.61	-10.2	39.4	6.16	7.3	1.61	22.2
22.0	2.67	9.4	1.61	-11.6	40.2	6.36	7.1	1.58	23.7
25.6	3.26	8.9	1.60	-6.4	41.1	6.60	7.0	1.59	25.3
27.3	3.55	8.7	1.60	-2.8	41.9	6.82	6.9	1.59	26.3
28.8	3.83	8.6	1.62	-0.1	43.4	7.26	6.8	1.61	28.7
31.7	4.39	8.2	1.60	7.1	45.1	7.78	6.6	1.61	29.8
Section X									
----	----	6.0	0.75	-2.2	36.4	5.07	3.8	0.75	9.2
7.0	0.67	5.6	0.75	-4.1	38.4	5.52	3.7	0.75	13.4
12.7	1.29	5.2	0.74	-5.7	39.4	5.76	3.6	0.74	14.9
17.7	1.90	4.9	0.74	-7.2	40.2	5.96	3.6	0.75	16.6
22.0	2.50	4.7	0.75	-8.7	41.1	6.18	3.5	0.74	18.1
25.6	3.05	4.5	0.76	-10.2	41.9	6.38	3.4	0.73	19.5
27.3	3.33	4.4	0.76	-10.9	43.4	6.80	3.4	0.73	22.6
28.8	3.59	4.3	0.76	-8.5	44.8	7.18	3.2	0.72	24.8
30.3	3.85	4.2	0.75	-4.7	45.5	7.39	3.2	0.73	26.2
31.7	4.11	4.1	0.75	-1.8	46.1	7.58	3.2	0.74	27.4
34.1	4.59	4.0	0.76	4.3					

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COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7] (2) Sodium nitrate; $NaNO_3$; [7631-99-4] (3) Water; H_2O; [7732-18-5]	Shpunt, S.J. *Zh. Prikl. Khim.* 1940, *13*,]9-28.

EXPERIMENTAL VALUES cont'd:

Part 3. Solutions coexisting with two equilibrium solid phases.

NaH_2PO_4		$NaNO_3$		H_2O		
mass%	mol/kg[a]	mass%	mol/kg[a]	mass%	t/°C	solid phase[c]
----	----	38.4	7.33	61.6	-17.5	A + B
3.6	0.48	34.1	6.44	62.3	-18.4	A + B
6.2	0.84	32.0	6.09	61.8	-18.9	A + B
8.4	1.17	31.8	6.26	59.8	-12.8	B + C
7.8	1.03	29.4	5.51	62.8	-18.8	A + C
11.2	1.67	32.8	6.89	56.0	2.3	B + C
9.2	1.20	27.2	5.03	63.6	-18.5	A + C
15.5	2.48	32.4	7.32	52.1	15.1	B + C
11.6	1.51	24.4	4.48	64.0	-17.2	A + C
26.0	4.63	27.2	6.84	46.8	29.8	B + C
17.7	2.23	16.2	2.89	66.1	-14.6	A + C
23.0	2.84	9.6	1.68	67.4	-12.8	A + C
23.4	2.89	9.2	1.60	67.4	-12.5	A + C
27.8	3.41	4.3	0.74	67.9	-10.9	A + C

Part 4. Solubility isotherms in the NaH_2PO_4-$NaNO_3$-H_2O system.

NaH_2PO_4			$NaNO_3$			H_2O		
mass%	mol/kg[a]	M[b]	mass%	mol/kg[a]	M[b]	mass%	M[b]	solid phase[c]
			temp. = -17.5°C.					
----	----	---	38.4	7.33	100.0	61.6	758	A + B
3.6	0.48	7.0	34.4	6.53	93.0	62.0	793	B
6.3	0.85	12.1	32.2	6.16	87.9	61.5	793	"
7.6	1.03	14.8	31.0	5.94	85.2	61.4	797	B + C
8.0	1.08	16.0	30.0	5.69	84.0	62.0	820	C
9.4	1.24	19.5	27.5	5.13	80.5	63.1	872	"
10.7	1.39	23.1	25.2	4.62	76.9	64.1	924	A + C
8.9	1.14	19.3	26.3	4.77	80.7	64.8	940	A
7.4	0.96	19.6	28.3	5.18	84.4	64.3	906	"
5.9	0.77	12.2	30.0	5.51	87.8	64.1	886	"
3.4	0.44	6.8	32.8	6.05	93.2	63.8	856	"
			temp. = -14°C.					
----	----	---	39.1	7.55	100.0	60.9	736	B
3.7	0.50	7.0	35.3	6.81	93.0	61.0	759	"
6.4	0.88	12.1	33.0	6.41	87.9	60.6	762	"
8.2	1.13	15.6	31.4	6.12	84.4	60.4	766	B + C
8.3	1.14	15.9	31.2	6.07	84.1	60.5	771	C
9.6	1.28	19.4	28.2	5.33	80.6	62.2	840	"
12.0	1.59	25.3	25.0	4.67	74.7	63.0	888	"
17.8	2.25	43.9	16.2	2.89	56.1	66.0	1082	"
19.4	2.43	49.6	14.0	2.47	50.4	66.6	1133	A + C
17.1	2.11	43.9	15.5	2.70	56.1	67.4	1152	A
10.0	1.21	25.1	21.2	3.62	74.9	68.8	1149	"
7.6	0.90	19.4	22.5	3.79	80.6	69.9	1182	"
6.4	0.77	15.7	24.4	4.15	84.3	69.2	1132	"
5.1	0.61	12.3	25.8	4.39	87.7	69.1	1109	"
2.9	0.35	6.8	28.2	4.82	93.2	68.9	1076	"
----	----	---	31.4	5.38	100.0	68.6	1028	"

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COMPONENTS:	ORIGINAL MEASURMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7] (2) Sodium nitrate; $NaNO_3$; [7631-99-4] (3) Water; H_2O; [7732-18-5]	Shpunt, S.J. *Zh. Prikl. Khim.* 1940, *13*, 19-28

EXPERIMENTAL VALUES cont'd:

Part 4. Solubility isotherms in the NaH_2PO_4-$NaNO_3$-H_2O system.

NaH_2PO_4			$NaNO_3$			H_2O		
mass%	mol/kg[a]	M[b]	mass%	mol/kg[a]	M[b]	mass%	M[b]	solid phase[c]
			temp. = -9.9°C.					
----	----	---	39.8	7.78	100.0	60.2	714	B
1.30	0.18	2.3	38.99	7.68	97.7	59.71	707	"
3.8	0.53	6.9	36.2	7.10	93.1	60.0	728	"
6.01	0.85	10.8	34.95	6.96	89.2	59.04	712	"
6.6	0.92	12.1	33.7	6.64	87.9	59.7	736	"
8.5	1.20	15.7	32.3	6.42	84.3	59.2	730	"
9.02	1.28	16.5	32.37	6.50	83.5	58.61	714	B + C
8.8	1.24	16.3	32.0	6.36	83.7	59.2	781	C
10.0	1.37	19.5	29.3	5.68	80.5	60.7	789	"
10.43	1.46	19.8	29.85	5.88	80.2	59.72	757	"
12.3	1.66	25.8	25.8	4.90	74.8	61.9	848	"
15.75	2.08	34.4	21.3	3.98	65.6	62.95	916	"
18.1	2.31	43.9	16.6	2.99	56.1	65.3	1039	"
20.74	2.62	52.4	13.38	2.39	47.6	65.88	1108	"
23.6	2.95	63.1	9.8	1.73	36.9	66.6	1187	"
24.1	3.00	65.3	9.1	1.60	34.7	66.8	1205	"
28.4	3.52	82.3	4.3	0.75	17.7	67.3	1300	"
32.4	3.99	100.0	----	----	----	67.6	1391	A
25.0	2.95	79.7	4.5	0.75	20.3	70.5	1497	"
19.2	2.20	63.0	8.0	1.29	37.0	72.8	1592	"
17.3	1.98	55.2	10.0	1.62	44.8	72.7	1545	"
13.3	1.48	43.8	12.1	1.91	56.2	74.6	1639	"
7.9	0.87	25.1	16.6	2.59	74.9	75.5	1607	"
6.0	0.66	19.5	17.7	2.73	80.5	76.3	1639	"
5.0	0.55	15.8	19.0	2.94	84.2	76.0	1592	"
3.9	0.43	12.1	20.2	3.13	87.9	75.9	1562	"
2.3	0.25	6.9	21.8	3.38	93.1	75.9	1531	"
----	----	----	23.3	3.57	100.0	76.7	1552	"
			temp. = 0°C.					
----	----	----	41.9	8.48	100.0	58.1	654	B
4.02	0.58	6.9	38.67	7.94	93.1	57.31	653	"
4.0	0.58	6.9	38.43	7.85	93.1	57.6	660	"
7.0	0.67	12.2	35.8	7.33	87.8	57.2	666	"
7.98	1.17	13.8	35.24	7.30	86.2	56.78	656	"
9.0	1.32	15.7	34.2	7.08	84.3	56.8	661	"
10.64	1.57	18.7	32.96	6.88	81.3	56.40	657	B + C
10.5	1.54	18.6	32.7	6.77	81.4	56.8	667	"
10.9	1.59	19.6	32.0	6.59	80.4	57.1	679	C
13.17	1.89	24.5	28.81	5.84	75.5	58.02	718	"
13.2	1.86	25.2	27.8	5.54	74.8	59.0	750	"
19.50	2.68	40.9	19.97	3.88	59.1	60.53	847	"
20.0	2.70	43.8	18.2	3.46	56.2	61.8	902	"
25.9	3.41	63.0	10.8	2.01	37.0	63.3	1027	"
26.67	3.54	64.3	10.52	1.97	35.7	62.81	1008	"
31.83	4.18	82.8	4.70	0.87	17.2	63.47	1106	"
32.6	4.28	85.3	4.0	0.74	14.7	63.4	1106	"
36.4	4.77	100.0	----	----	----	63.6	1150	"

(continued next page)

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7]	Shpunt. S.J.
(2) Sodium nitrate; $NaNO_3$; [7631-99-4]	*Zh. Prikl. Khim.* 1940, *13*, 19-28.
(3) Water; H_2O; [7732-18-5]	

EXPERIMENTAL VALUES cont'd:

Part 4. Solubility isotherms in the NaH_2PO_4-$NaNO_3$-H_2O system.

NaH_2PO_4			$NaNO_3$			H_2O		
mass%	mol/kg[a]	M[b]	mass%	mol/kg[a]	M[b]	mass%	M[b]	solid phase[c]
			temp. = 10°C.					
----	----	---	43.9	9.21	100.0	56.1	604	B
4.2	0.63	6.9	40.5	8.62	93.1	55.3	603	"
7.4	1.12	12.2	37.7	8.09	87.8	54.9	604	"
9.5	1.46	15.8	36.1	7.81	84.2	54.4	600	"
11.6	1.78	19.5	34.1	7.39	80.5	54.3	605	"
13.6	2.11	22.7	32.7	7.16	77.3	53.7	599	B + C
14.4	2.17	25.2	30.3	6.45	74.8	55.3	645	C
20.4	2.92	40.4	21.3	4.30	59.6	58.3	769	"
21.9	3.14	43.8	19.9	4.02	56.2	58.2	778	"
29.0	4.10	63.0	12.1	2.42	37.0	58.9	856	"
33.0	4.66	74.5	8.0	1.60	25.5	59.0	890	"
36.8	5.16	87.2	3.8	0.75	12.8	59.4	939	"
40.5	5.67	100.0	----	----	----	59.5	961	"
			temp. = 20°C.					
----	----	----	46.0	10.02	100.0	54.0	555	B
4.5	0.71	6.8	42.7	9.51	93.2	52.8	545	"
7.8	1.24	12.2	39.8	8.94	87.8	52.4	546	"
8.86	1.41	13.9	38.89	8.76	86.1	52.25	547	"
9.9	1.58	15.6	38.0	8.58	84.4	52.1	546	"
12.4	2.01	19.6	36.1	8.25	80.4	51.5	545	"
15.57	2.54	24.9	33.35	7.68	75.1	51.08	544	"
15.8	2.58	25.2	33.1	7.62	74.8	51.1	545	"
17.79	2.96	28.3	32.05	7.52	71.7	50.16	540	B + C
18.1	2.99	29.0	31.5	7.35	71.0	50.4	542	"
23.0	3.62	40.5	24.0	5.33	59.5	53.0	621	C
24.7	3.90	43.7	22.5	5.01	56.3	52.08	624	"
26.10	4.07	48.4	20.44	4.50	51.6	52.46	625	"
32.6	5.05	62.9	13.6	2.97	37.1	53.8	692	"
32.27	4.94	63.2	13.33	2.88	36.8	54.40	709	"
38.1	5.84	78.3	7.5	1.62	21.7	54.4	745	"
42.2	6.46	89.9	3.4	0.74	10.1	54.4	772	"
45.3	6.90	100.0	----	----	----	54.7	789	"
			temp. = 30°C.					
----	----	----	48.0	10.86	100.0	52.0	490	B
4.7	0.78	6.8	44.8	10.44	93.2	50.5	498	"
6.25	1.05	9.1	43.98	10.40	90.9	49.77	485	"
8.1	1.35	12.1	41.9	9.86	87.9	50.0	496	"
9.10	1.53	13.5	41.31	9.80	86.5	49.59	490	"
10.4	1.74	15.6	39.8	9.40	84.4	49.8	494	"
13.0	2.21	19.5	38.0	9.12	80.5	49.0	490	"
13.31	2.27	19.9	37.77	9.08	80.1	48.92	490	"
16.7	2.87	25.4	34.8	8.44	74.6	48.5	491	"
20.3	3.56	30.7	32.25	8.00	69.3	47.45	482	"
24.99	4.44	38.6	28.10	7.05	61.4	46.91	485	"
26.72	4.80	41.2	26.89	6.82	58.8	46.39	479	B + C
26.0	4.63	40.4	27.2	6.84	59.6	46.8	485	"
27.6	4.87	43.7	25.2	6.28	56.3	47.2	498	C
28.85	5.13	45.7	24.3	6.11	54.3	46.82	493	"
36.5	6.32	62.7	15.4	3.77	37.3	48.10	551	"
37.45	6.56	64.0	14.95	3.70	36.0	47.60	542	"
40.76	7.10	71.7	11.41	2.81	28.3	47.83	561	"
45.0	7.75	82.9	6.6	1.60	17.1	48.4	594	"
46.20	8.10	84.0	6.25	1.55	16.0	47.55	576	"
48.87	8.47	92.0	3.04	0.74	8.0	48.09	603	"
49.1	8.54	92.0	3.0	0.74	8.0	47.9	599	"
51.2	8.74	100.0	----	----	----	48.3	628	"

[a] The mol/kg H_2O values were calculated by the compiler.
[b] The concentration units are: mol/100 mol of solute.
[c] The solid phases are: A = ice; B = $NaNO_3$; C = $NaH_2PO_4 \cdot 2H_2O$.

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7] (2) Sodium chloride; NaCl; [7647-14-5] (3) Water; H_2O; [7732-18-5]	Brunisholz, G.; Bodmer, M. *Helv. Chim. Acta* 1963, *46*, 7, 288, 2566-74.
VARIABLES: Composition and temperature.	**PREPARED BY:** J. Eysseltová

EXPERIMENTAL VALUES:

Solubility isotherms in the NaH_2PO_4-NaCl-H_2O system

Na^+	Cl^-	NaH_2PO_4		NaCl		H_2O		
ion%	ion%	mass%	mol/kg[a]	mass%	mol/kg[a]	n[b]	mass%[a]	solid phase[c]
				temp. = 0°C.				
91.06	86.56	2.64	0.30	24.88	5.87	818.6	72.47	A
76.31	64.51	8.32	0.99	22.11	5.44	658.7	69.55	A + B
63.31	44.92	13.50	1.59	16.09	3.91	637.9	70.39	B
50.76	26.47	19.97	2.39	10.50	2.58	568.9	69.52	"
43.09	14.98	25.54	3.13	6.57	1.65	502.0	67.87	"
				temp. = 25°C.				
93.26	89.86	1.97	0.22	25.53	6.02	828.1	72.48	A
89.73	84.52	3.30	0.39	26.34	6.40	732.8	70.35	"
84.62	76.97	4.92	0.57	24.02	5.78	739.1	71.05	"
74.50	61.37	9.40	1.13	21.81	5.42	628.1	68.77	"
65.45	48.15	14.42	1.82	19.57	5.07	527.2	66.00	"
52.67	28.95	24.99	3.46	14.87	4.23	379.8	60.12	A + B
44.71	16.87	32.45	4.66	9.62	2.84	329.7	57.91	B
39.75	9.65	38.46	5.77	6.00	1.84	289.9	55.53	"
37.45	5.89	41.64	6.36	3.80	1.19	274.0	54.55	"

(continued next page)

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
At 0 and 25°C the usual techniques were used (1). At 75°C a self-constructed apparatus was used for equilibration and sampling. The dihydrogenphosphate content was determined acidimetrically (after first changing it to H_3PO_4 by ion exchange) using chlorophenol red as indicator. The chloride ion content was determined by titrating potentiometrically with silver nitrate. The sodium ion and water contents were determined by difference.	No information is given.
	ESTIMATED ERROR: No information is given.
	REFERENCES: 1. Flatt, R. *Chimia* 1962, *6*, 62.

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7]	Brunisholz, G.; Bodmer, M.
(2) Sodium chloride; NaCl; [7647-14-5]	*Helv. Chim. Acta* 1963, 46, 7, 288, 2566-74.
(3) Water; H_2O; [7732-18-5]	

EXPERIMENTAL VALUES cont'd:

Solubility isotherms in the NaH_2PO_4-NaCl-H_2O system.

Na^+	Cl^-	NaH_2PO_4		NaCl		H_2O		
ion%	ion%	mass%	mol/kg[a]	mass%	mol/kg[a]	n[b]	mass%[a]	solid phase[c]
				temp. = 75°C.				
73.29	59.89	10.40	1.29	22.70	5.80	572.9	66.88	A
43.69	15.21	39.75	6.64	10.41	3.57	236.2	49.82	"
36.06	3.79	60.24	13.83	3.46	1.63	128.8	36.28	A + C

[a] These values were calculated by the compiler.

[b] The concentration units are: mol/100 mol solute.

[c] The solid phases are: A = NaCl; B = $NaH_2PO_4 \cdot 2H_2O$; C = NaH_2PO_4.

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7] (2) Potassium dihydrogenphosphate; KH_2PO_4; [7778-70-0] (3) Water; H_2O; [7732-18-5]	Brunisholz, G.; Bodmer, M. *Helv. Chim. Acta* 1963, *46*, 288, 2566-74.
VARIABLES: Composition and temperature.	**PREPARED BY:** J. Eysseltová

EXPERIMENTAL VALUES:

Solubility isotherms in the KH_2PO_4-NaH_2PO_4-H_2O system.

K^+	Na^+	H_2O	KH_2PO_4 [a]		NaH_2PO_4 [a]		H_2O	
ion%	ion%	n [b]	mass%	mol/kg	mass%	mol/kg	mass%	solid phase [c]
				temp. = 0°C				
27.03	6.30	1495	11.73	1.00	2.41	0.23	85.85	A
21.62	11.71	1217	11.20	0.98	5.35	0.53	83.42	"
16.47	16.86	941.5	10.56	0.97	9.53	0.99	79.89	"
13.00	20.33	756.9	9.92	0.95	13.68	1.49	76.39	"
5.11	28.22	326.1	6.98	0.87	34.03	4.80	58.97	A + B
2.80	30.53	355.5	3.64	0.43	35.08	4.77	61.26	B
0	33.33	390.7	0.00	0.00	36.25	4.73	63.74	"

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AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
The usual techniques (1) were used at 0 and 25°C. At 75°C a self-constructed apparatus was used for equilibration and for sampling. $H_2PO_4^-$ was changed to H_3PO_4 by ion exchange and then titrated acidimetrically using chlorophenol red as indicator. K^+ was determined gravimetrically as $KClO_4$ or as the tetraphenylborate. Na^+ and H_2O were determined by difference.	No information is given.
	ESTIMATED ERROR: No information is given.
	REFERENCES: 1. Flatt, R. *Chimia* 1962, *6*, 62.

COMPONENTS	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7]	Brunisholz, G. Bodmer, M.
(2) Potassium dihydrogenphosphate; KH_2PO_4; [7778-70-0]	*Helv. Chim. Acta* 1963, *46*, 288, 2566-74.
(3) Water; H_2O; [7732-18-5]	

EXPERIMENTAL VALUES cont'd:

Solubility isotherms in the KH_2PO_4-NaH_2PO_4-H_2O system.

K^+	Na^+	H_2O	KH_2PO_4 [a]		NaH_2PO_4 [a]		H_2O	solid [c]
ion%	ion%	n [b]	mass%	mol/kg	mass%	mol/kg	mass%	phase
				temp. = 25°C				
30.44	2.89	927.3	19.55	1.82	1.63	0.17	78.80	A
26.20	7.13	808.6	18.79	1.80	4.50	0.48	76.69	"
22.96	10.37	718.3	18.06	1.77	7.19	0.80	74.74	"
18.58	14.75	602.5	16.69	1.71	11.68	1.36	71.61	"
13.29	20.04	457.0	14.53	1.61	19.33	2.43	66.12	"
10.90	22.43	347.0	14.23	1.74	25.83	3.59	59.93	"
5.03	28.30	198.4	8.94	1.40	44.38	7.92	46.66	A + B
4.71	28.62	200.4	8.34	1.30	44.70	7.93	46.94	B
2.56	30.77	211.9	4.43	0.67	47.01	8.06	48.55	"
1.44	31.89	226.2	2.42	0.35	47.28	7.83	50.29	"
1.11	32.22	227.5	1.86	0.27	47.66	7.86	50.47	"
0	33.33	236.2	0.00	0.00	48.47	7.83	51.52	"
				temp. = 75°C				
26.76	6.57	332.5	34.96	4.47	7.57	1.09	57.46	A
18.23	15.10	236.3	29.02	4.28	21.20	3.55	49.76	"
10.53	22.80	149.6	20.88	3.91	39.87	8.46	39.23	"
6.22	27.11	94.1	14.61	3.67	56.15	16.00	29.23	A + C
2.93	30.40	105.6	6.70	1.54	61.33	15.99	31.95	C
0	33.33	111.7	0.00	0.00	66.57	16.57	33.44	"

[a] These values were calculated by the compiler.

[b] The concentration units are: mol H_2O/100 g equiv. of the solute.

[c] The solid phases are: A = KH_2PO_4; B = $NaH_2PO_4 \cdot 2H_2O$; C = NaH_2PO_4.

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7] (2) Sodium perchlorate; $NaClO_4$; [7601-89-0] (3) Water; H_2O; [7732-18-5]	Lilich, L.S.; Alekseeva, E.A.; *Zh. Neorg. Khim.*, 1969, *14*, 1655-8.
VARIABLES: Composition at 25°C.	**PREPARED BY:** J. Eysseltová

EXPERIMENTAL VALUES:

Solubility in the NaH_2PO_4-$NaClO_4$-H_2O system at 25°C.

NaH_2PO_4		$NaClO_4$		H_2O	solid[a]
mass%	mol/kg	mass%	mol/kg	mass%	phase
48.69	7.91	----	----	51.31	A
46.59	7.53	1.86	0.29	51.55	"
40.84	6.50	6.80	1.06	52.36	"
37.71	5.95	9.50	1.47	52.79	"
34.24	5.38	12.81	1.97	52.95	"
27.99	4.37	18.67	2.86	53.34	"
24.69	3.85	21.51	3.26	53.50	"
22.89	3.55	23.43	3.56	53.68	"
13.89	2.18	33.15	5.11	52.96	"
11.53	1.84	36.41	5.71	52.06	"
8.37	1.37	40.82	6.56	50.81	"
5.23	0.90	46.36	7.82	48.41	"
3.55	0.64	50.11	8.83	46.34	"
1.47	0.31	59.44	12.42	39.09	"
0.66	0.17	67.09	16.99	32.25	B
0.74	0.19	65.97	16.94	32.29	"
0.39	0.10	67.35	17.05	32.26	"

[a] The solid phases are: A = $NaH_2PO_4 \cdot 2H_2O$; B = $NaClO_4 \cdot H_2O$.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
No information is given.	No information is given.
	ESTIMATED ERROR: No information is given.
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7] (2) Potassium dihydrogenphosphate; KH_2PO_4; [7778-70-0] (3) Water; H_2O; [7732-18-5]	Babenko, A.M.; Vorob'eva, T.A. *Zh. Prikl. Khim. (Leningrad)* 1975, *48*, 11, 2437-41.
VARIABLES: Temperature and composition.	**PREPARED BY:** J. Eysseltová

EXPERIMENTAL VALUES:

Part 1. Solubility isotherms in the KH_2PO_4-NaH_2PO_4-H_2O system.

NaH_2PO_4		KH_2PO_4		H_2O	
mass%	mol/kg[a]	mass%	mol/kg[a]	mass%	solid phase[b]
		temp. = -10°C			
34.2	4.51	2.632	0.31	63.168	A
31.0	4.03	4.83	0.55	64.170	"
28.6	3.67	6.426	0.73	64.974	"
34.7	4.61	2.612	0.31	62.688	B
33.0	4.41	4.69	0.55	62.31	"
29.3	3.79	6.363	0.72	64.337	"
		temp. = -5°C			
19.2	1.98	0	0	80.8	A
17.2	1.80	3.312	0.31	79.488	"
14.0	1.46	6.02	0.55	79.980	"
11.4	1.18	7.974	0.73	80.626	"
18.16	2.08	9.2	0.93	72.64	C
27.42	3.57	8.6	0.99	63.98	"
35.4	4.56	0	0	64.6	B
36.2	4.92	2.522	0.31	61.248	"
34.6	4.74	4.578	0.55	60.822	"
30.8	4.08	6.228	0.73	62.976	"

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AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
A modified polythermic method was used (1).	Chemically pure or reagent grade dihydrogenphosphates were used. They were recrystallized twice and dried at 105°C. The purity is stated to be near to 100%.
	ESTIMATED ERROR: Nothing is stated.
	REFERENCES: 1. Kaganskii, I.M. *Zavod. Lab.* 1967, *1*, 119.

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7]	Babenko, A.M.; Vorob'eva, T.A.
(2) Potassium dihydrogenphosphate; KH_2PO_4; [7778-70-0]	*Zh. Prikl. Khim. (Leningrad)* 1975, *48*, 11, 2437-41.
(3) Water; H_2O; [7732-18-5]	

EXPERIMENTAL VALUES cont'd:

Part 1. Solubility isotherms in the KH_2PO_4-NaH_2PO_4-H_2O system.

NaH_2PO_4		KH_2PO_4		H_2O	
mass%	mol/kg[a]	mass%	mol/kg[a]	mass%	solid[b] phase
		temp. = 0°C			
0	0	12.3	1.03	87.7	C
8.92	0.92	10.8	0.99	80.280	"
17.98	2.06	10.1	1.03	71.92	"
27.18	3.57	9.4	1.09	63.42	"
37.6	5.02	0	0	62.4	B
37.8	5.27	2.488	0.31	59.712	"
36.0	5.04	4.48	0.55	52.52	"
32.1	4.33	6.111	0.73	61.79	"
		temp. = 10°C			
0	0	15.2	1.32	84.8	C
8.72	0.93	12.8	1.20	78.48	"
17.6	2.08	12.0	1.25	70.4	"
26.7	3.57	11.0	1.30	62.3	"
32.868	4.69	8.7	1.09	58.432	"
42.2	6.08	0	0	57.8	B
34.056	4.69	5.4	0.66	60.544	"
41.0	6.03	2.36	0.31	56.64	"
39.4	5.82	4.242	0.55	56.358	"
35.2	4.97	5.832	0.73	58.97	"
		temp. = 20°C			
0	0	18.0	1.61	82.0	C
8.5	0.92	15.0	1.44	76.5	"
17.24	2.08	13.8	1.47	68.96	"
26.25	3.57	12.5	1.50	61.25	"
32.4	4.69	10.1	1.29	57.6	"
46.6	7.27	0	0	53.4	B
44.0	6.82	2.24	0.31	53.760	"
42.4	6.59	4.032	0.55	53.568	"
38.2	5.66	5.562	0.73	56.238	"

Part 2. Crystallization temperatures and composition of solutions existing in equilibrium with two or three solid phases.

	NaH_2PO_4		KH_2PO_4		H_2O	
t/°C	mass%	mol/kg[a]	mass%	mol/kg[a]	mass%	solid[b] phase
-2.5	0	0	11.6	0.96	88.4	A + C
-4.2	9.0	0.92	10.0	0.91	81.0	A + C
-6.5	18.2	2.08	9.0	0.91	72.8	A + C
-9.6	27.6	3.57	8.0	0.91	64.4	A + B + C
-8.8	33.5	4.20	0	0	66.5	A + B
-10.1	34.6	4.59	2.616	0.31	62.784	A + B
-10.5	32.8	4.37	4.704	0.55	62.496	A + B
-10.1	29.2	3.78	6.372	0.73	64.428	A + B
7.6	32.940	4.69	8.5	1.07	58.560	B + C
14.6	36.8	5.55	8.0	1.06	55.2	B + C
24.8	41.4	6.82	8.0	1.16	50.6	B + C
33.0	45.5	8.33	9.0	1.45	45.5	B + C + D
40.2	56.0	10.60	0	0	44.0	B + D
47.0	52.0	9.40	1.92	0.31	46.08	B + D
50.0	52.0	9.70	3.36	0.55	44.64	B + D
52.8	49.0	8.80	4.59	0.73	46.41	B + D
19.2	48.5	8.98	6.5	1.06	45.0	B + D

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COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7]	Babenko, A.M., Vorob'eva, T.A.
(2) Potassium dihydrogenphosphate; KH_2PO_4; [7778-70-0]	*Zh. Prikl. Khim.* (*Leningrad*) 1975, *48*, 11, 2437-41.
(3) Water; H_2O; [7732-18-5]	

EXPERIMENTAL VALUES cont'd:

Part 2. Crystallization temperatures and composition of solutions existing in equilibrium with two or three solid phases.

	NaH_2PO_4		KH_2PO_4		H_2O	
t/°C	mass%	mol/kg[a]	mass%	mol/kg[a]	mass%	solid phase[b]
45.1	52.780	11.51	9.0	1.73	38.220	C + D + E
62.4	55.8	13.59	10.0	2.15	34.2	D + E
57.2	60.8	12.92	0	0	39.2	D + E
65.0	60.0	13.02	1.6	0.31	38.4	D + E
64.0	58.0	12.37	2.94	0.55	39.06	D + E
66.5	56.0	11.96	3.96	0.52	40.04	D + E
49.0	53.45	11.16	7.05	0.97	39.5	D + E

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

[b] The solid phases are: A = ice; B = $NaH_2PO_4 \cdot 2H_2O$; C = KH_2PO_4; D = $NaH_2PO_4 \cdot H_2O$; E = NaH_2PO_4.

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7] (2) Sodium borate; $NaBO_2$; [7775-19-1] (3) Water; H_2O, [7732-18-5]	Beremzhanov, B.A.; Savich, R.F.; Kunanbaev, G.S. *Khim. Khim. Tekhnol. (Alma Alta)* 1977, *22*, 15-20.
VARIABLES: Composition at 25 and 35°C.	**PREPARED BY:** J. Eysseltová

EXPERIMENTAL VALUES:

Solubility isotherms in the NaH_2PO_4-$NaBO_2$-H_2O system.

B_2O_3		P_2O_5				NaH_2PO_4 [a]		$NaBO_2$ [a]		
mass%	mol%	mass%	mol%	refr. index	pH	mass%	mol/kg	mass%	mol/kg	solid phase [b]
				temp. = 25°C						
8.91	0.0125	----	----	1.394	10.80	0.00	0.00	16.84	2.87	A
4.52	0.0226	2.04	0.0002	1.365	10.38	3.45	0.32	8.54	1.46	"
4.01	0.0107	1.25	0.0016	1.365	10.49	2.11	0.20	7.56	1.29	"
1.47	0.0039	3.92	0.0052	1.354	9.69	6.63	0.62	2.78	0.47	"
5.43	0.0147	1.15	0.0015	1.380	10.73	1.94	0.18	10.26	1.75	"
2.52	0.0062	5.23	0.0070	1.362	9.31	8.84	0.83	4.76	0.81	"
2.74	0.0075	5.50	0.0074	1.364	9.20	9.30	0.87	5.18	0.88	"
1.50	0.0041	5.98	0.0081	1.369	8.18	10.11	0.94	2.84	0.48	"
7.00	0.0191	0.99	0.0013	1.372	10.92	1.67	0.16	13.23	2.25	"
3.25	0.0090	5.97	0.0090	1.370	9.05	10.10	0.94	6.14	1.05	A + B
----	-----	26.40	0.0435	1.407	3.03	44.64	4.17	0.00	0.00	C
1.28	0.0038	14.23	0.0212	1.405	4.25	24.06	2.25	2.32	0.40	"
1.02	0.0031	16.06	0.0239	1.400	3.99	27.16	2.54	1.93	0.33	"
0.50	0.0015	18.00	0.0272	1.401	4.01	30.44	2.84	0.94	0.16	"
1.42	0.0041	13.17	0.0198	1.411	4.52	22.27	2.08	2.68	0.46	"
3.69	0.0109	12.10	0.0177	1.418	6.87	20.46	1.91	6.97	1.19	B + C
1.51	0.0041	5.58	0.0075	1.367	8.48	9.44	0.88	2.85	0.49	B
2.40	0.0069	10.81	0.0154	1.400	6.67	18.23	1.71	4.54	0.77	"
1.36	0.0038	8.96	0.0124	1.375	7.50	15.15	1.42	2.57	0.43	"
1.01	0.0028	8.60	0.0118	1.373	7.48	14.54	1.36	1.91	0.33	"

(continued next page)

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
The isothermal method was used. The phases were separated from each other by filtration through a Schott filter. In the analyses, the BO_2^- content was determined by titration with a 0.1 N solution of a base containing mannite, Na^+ was determined by flame photometry, and PO_4^{3-} was determined gravimetrically by precipitation as $NH_4MgPO_4 \cdot 6H_2O$. The precipitating solution contained limonic acid.	The materials were of a chemically pure grade.
	ESTIMATED ERROR: No information is given.
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7]	Beremzhanov, B.A.; Savich, R.F.; Kunanbaev, G.S.
(2) Sodium borate; $NaBO_2$; [7775-19-1]	*Khim. Khim. Tekhnol.* (*Alma Alta*) 1977, *22*, 15-20.
(3) Water; H_2O; [7732-18-5]	

EXPERIMENTAL VALUES cont'd:

Solubility isotherms in the NaH_2PO_4-$NaBO_2$-H_2O system.

B_2O_3		P_2O_5				NaH_2PO_4 [a]		$NaBO_2$ [a]		
mass%	mol%	mass%	mol%	refr. index	pH	mass%	mol/kg	mass%	mol/kg	solid [b] phase
				temp. = 35°C						
13.16	0.0375	----	----	1.400	10.36	0.00	0.00	24.87	4.24	A
2.42	0.0065	3.85	0.0051	1.368	10.13	6.51	0.61	4.57	0.78	"
2.51	0.0068	4.00	0.0053	1.371	10.65	6.76	0.63	4.74	0.81	"
1.26	0.0033	1.18	0.0001	1.370	10.36	2.00	0.19	2.38	0.40	"
5.02	0.0134	0.75	0.0010	1.391	11.17	1.27	0.12	9.45	1.62	"
1.49	0.0039	2.59	0.0034	1.365	10.02	4.38	0.41	2.82	0.48	"
2.54	0.0071	7.20	0.0099	1.365	8.19	12.18	1.14	4.80	0.82	B
1.90	0.0054	6.17	0.0083	1.362	9.60	10.43	0.97	3.59	0.61	"
1.83	0.0049	2.51	0.0032	1.367	10.66	4.24	0.40	3.46	0.59	A
5.03	0.0146	8.96	0.0128	1.391	7.51	11.77	1.10	9.51	1.62	B
----	------	32.40	0.0603	1.412	3.02	54.79	5.12	0.00	0.00	C
0.84	0.0025	15.25	0.0596	1.377	3.24	25.79	2.41	1.59	0.27	"
1.20	0.0035	14.16	0.0206	1.380	3.40	23.94	2.24	2.27	0.39	"
1.71	0.0049	11.82	0.0169	1.380	3.63	19.99	1.87	3.23	0.55	"
2.51	0.0073	11.76	0.0169	1.383	3.70	19.87	1.89	4.74	0.81	"
7.48	0.0234	10.10	0.0149	1.413	7.00	17.08	1.60	14.14	2.41	B + C
1.43	0.0043	12.71	0.0183	1.381	3.61	21.49	2.01	2.70	0.46	C
4.20	0.0121	9.20	0.0131	1.385	7.44	15.56	1.45	7.94	1.35	B
2.05	0.0057	7.03	0.0096	1.365	9.10	11.89	1.11	3.87	0.66	"
3.50	0.0099	7.98	0.0111	1.371	7.92	13.49	1.26	6.62	1.13	"

[a] These values were calculated by the compiler from the authors' data.

[b] The solid phases are: A = $NaBO_2 \cdot 4H_2O$; B = $Na_2B_4O_7 \cdot 10H_2O$; C = $NaH_2PO_4 \cdot 2H_2O$.

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7] (2) Potassium dihydrogenphosphate; KH_2PO_4; [7778-70-0] (3) Water: H_2O; [7732-18-5]	Khallieva, Sh.D. *Izv. Akad. Nauk Turkm. SSR, Ser. Fiz.-Tekh., Khim. Geol. Nauk* 1977, 3, 125-6.
VARIABLES:	PREPARED BY:
Composition at 40°C.	J. Eysseltová

EXPERIMENTAL VALUES:

Solubility in the KH_2PO_4-NaH_2PO_4-H_2O system at 40°C.

KH_2PO_4		NaH_2PO_4		H_2O	
mass%	mol/kg[a]	mass%	mol/kg[a]	mass%	solid[b] phase
27.12	2.73	----	----	72.88	A
25.05	2.55	2.76	0.32	72.19	"
23.60	2.50	7.10	0.83	69.30	"
20.36	2.32	15.19	1.96	64.45	"
18.33	2.20	20.53	2.79	61.14	"
17.01	2.18	25.74	3.75	57.25	"
15.69	2.19	31.60	5.00	52.71	"
9.79	1.78	49.90	10.31	40.31	A + B
5.19	0.92	53.32	10.71	41.49	B
-----	----	56.31	10.74	43.69	"

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

[b] The solid phases are: A = KH_2PO_4; B = $NaH_2PO_4 \cdot H_2O$.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The isothermal method was used. The experiments were performed in glass vessels with stirrers. Equilibrium was checked by repeated analysis of the saturated solution. Standard analytical methods were used for the determination of sodium, potassium, and dihydrogenphosphate ions.

SOURCE AND PURITY OF MATERIALS:

Reagent grade materials were used.

ESTIMATED ERROR:

The temperature was constant to within ±0.5 K. No other information is given.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7] (2) Sodium chloride; NaCl; [7647-14-5] (3) Water; H_2O; [7732-18-5]	Khallieva, Sh.D. *Izv. Akad. Nauk Turkm. SSR, Ser. Fiz.-Tekh., Khim. Geol. Nauk* 1977, 3, 125-6.
VARIABLES: Composition at 40°C.	**PREPARED BY:** J. Eysseltová

EXPERIMENTAL VALUES:

Solubility in the NaH_2PO_4-NaCl-H_2O system at 40°C.

NaH_2PO_4		NaCl		H_2O	
mass%	mol/kg[a]	mass%	mol/kg[a]	mass%	solid phase[b]
56.31	10.74	----	----	43.69	A
47.09	8.38	6.08	2.22	46.83	"
45.25	8.09	8.14	2.99	46.61	"
37.15	6.25	13.31	4.60	49.54	A + B
30.57	4.56	13.60	4.17	55.83	B
16.67	2.16	19.05	5.07	66.28	"
10.22	1.26	21.94	5.53	67.84	"
3.80	0.44	24.90	5.98	71.30	"
----	----	26.54	6.18	73.46	"

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

[b] The solid phases are: A = $NaH_2PO_4 \cdot H_2O$; B = NaCl.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The isothermal method was used. Equilibrium was ascertained by repeated analysis of the saturated solution. Standard analytical methods were used for the determination of sodium, chloride, and dihydrogenphosphate ions, but no details are given. The water content was probably determined by difference (compiler).

SOURCE AND PURITY OF MATERIALS:

The sodium dihydrogenphosphate and the sodium chloride were of reagent grade quality.

ESTIMATED ERROR:

The temperature was controlled to within ±0.5K. No other information is given.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7] (2) Sodium chloride; NaCl; [7647-14-5] (3) Water; H_2O; [7732-18-5]	Girich, T.E.; Gulyamov, Yu.M.; Ganz, S.N.; Miroshina, O.S. *Vopr. Khim. Khim. Tekhnol.* 1979, 57, 58-61.
VARIABLES: Composition at 298 and 323 K.	**PREPARED BY:** J. Eysseltová

EXPERIMENTAL VALUES:

Composition and properties of saturated solutions in the NaH_2PO_4-NaCl-H_2O system.

NaH_2PO_4				NaCl			H_2O			density	
mass%	mol/kg[a]	M[b]	c[b]	mass%	mol/kg[a]	M[b]	mass%[a]	c[b]	η/cP	g cm^{-3}	solid phase[c]
					temp. = 298 K.						
----	----	---	---	26.23	6.08	109.41	73.77	914.0	1.695	1.199	A
5.94	0.71	12.80	10.59	24.49	6.01	108.08	69.61	827.3	2.547	1.231	"
11.46	1.42	25.72	20.46	21.72	5.56	99.98	66.82	795.5	2.724	1.256	"
23.55	3.21	57.79	42.81	15.34	4.29	77.19	61.11	740.8	4.846	1.324	"
23.64	3.22	58.03	43.04	15.25	4.27	76.80	61.11	741.69	5.390	1.331	B
26.00	3.59	64.76	47.94	13.77	3.91	70.32	60.23	740.31	6.574	1.350	"
27.59	3.87	69.81	49.08	13.13	3.79	68.12	59.28	739.57	6.195	1.340	C
31.53	4.51	81.19	60.03	10.23	3.00	54.04	58.24	739.37	6.959	1.352	"
39.40	5.84	105.18	81.39	4.39	1.33	24.05	56.21	773.78	11.35	1.397	"
48.03	7.70	138.63	100.0	----	----	----	51.97	721.35	24.40	1.446	"

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AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The isothermal method was used. The mixtures were equilibrated for 13 hours at 298 K and for 8 hours at 323 K. The phosphate ion content was determined photocolorimetrically, the sodium ion photometrically and the chloride ion by difference. The composition of the solid phases was determined by the Schreinemakers' method.

SOURCE AND PURITY OF MATERIALS:

The NaCl was of a special purity. Reagent grade NaH_2PO_4 was recrystallized twice before being used.

ESTIMATED ERROR:

Nothing is stated.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7]	Girich, T.E.; Gulyamov, Yu.M.; Ganz, S.N.; Miroshina, O.S.
(2) Sodium chloride; NaCl; [7647-14-5]	*Vopr. Khim. Khim. Tekhnol.* 1979, 57, 58-61.
(3) Water; H_2O; [7732-18-5]	

EXPERIMENTAL VALUES cont'd:

Composition and properties of saturated solutions in the NaH_2PO_4-NaCl-H_2O system.

NaH_2PO_4				NaCl			H_2O			density	
mass%	mol/kg[a]	M[b]	c[b]	mass%	mol/kg[a]	M[b]	mass%[a]	c[b]	η/cP	g cm^{-3}	solid phase[c]
					temp. = 323 K.						
----	----	---	---	26.99	6.32	113.75	73.01	879.09	1.502	1.202	A
7.34	0.88	15.91	13.20	23.52	5.82	104.68	69.14	829.07	2.589	1.248	"
13.84	1.76	31.77	24.46	20.83	5.45	98.12	65.33	769.46	3.169	1.273	"
19.43	2.59	46.74	34.19	18.22	5.00	89.96	62.35	731.43	3.064	1.311	"
23.07	3.18	57.29	40.49	16.53	4.68	84.22	60.40	706.67	3.094	1.328	"
27.82	3.99	72.00	48.80	14.23	4.20	75.54	57.95	677.77	4.117	1.452	"
36.16	5.69	102.52	61.70	10.94	3.53	63.63	52.90	601.86	7.597	1.709	"
45.82	8.01	144.30	77.37	6.54	2.34	42.21	47.64	536.18	----	1.921	"
47.78	8.67	156.08	78.68	6.31	2.35	42.30	45.91	504.08	12.734	1.951	D
52.25	9.97	179.53	88.15	4.09	1.60	28.85	43.66	479.88	17.800	1.559	"
53.54	10.35	185.71	88.48	3.39	1.34	24.17	43.07	479.45	----	1.606	E
54.05	10.45	188.18	90.19	2.87	1.13	20.47	43.08	479.28	18.263	1.471	"
60.58	12.80	230.58	100.0	----	----	----	39.42	433.69	23.159	1.718	"

[a] These values were calculated by the compiler.

[b] The concentration units are: M = mol/1000 mol H_2O; c = mol/100 mol solute.

[c] The solid phases are: A = NaCl; B = NaCl + $NaH_2PO_4 \cdot 2H_2O$; C = $NaH_2PO_4 \cdot 2H_2O$; D = NaCl + $NaH_2PO_4 \cdot H_2O$; E = $NaH_2PO_4 \cdot H_2O$.

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Sodium dihydrogenphosphate; NaH_2PO_4; [7558-80-7] (2) Sodium nitrate; $NaNO_3$; [7631-99-4] (3) Water; H_2O; [7732-18-5]	Kol'ba, V.I.; Zhikharev, M.I.; Sukhanov, L.P. *Zh. Neorg. Khim.* 1981, *26*, 828-30.
VARIABLES: Composition at 50°C.	**PREPARED BY:** J. Eysseltová

EXPERIMENTAL VALUES:

Solubility isotherm in the NaH_2PO_4-$NaNO_3$-H_2O system at 50°C.

NaH_2PO_4			$NaNO_3$[a]		H_2O[a]		viscosity	solid
mass%	mol/kg	mol%[b]	mass%	mol/kg	mass%	d/kg m^{-3}	$10^6 m^2 s^{-1}$	phase
61.16	13.12	100	----	----	38.84	1.574	17.784	$NaH_2PO_4 \cdot H_2O$
56.70	12.19	89.93	4.56	1.38	38.74	1.575	15.786	"
54.16	11.41	85.91	6.29	1.88	39.55	1.575	14.172	"
52.69	11.22	82.01	8.19	2.46	39.12	1.574	12.421	"
43.92	9.29	65.10	16.68	4.98	39.40	1.578	9.850	"
37.21	7.79	53.40	23.00	6.80	39.79	1.578	9.810	"
32.75	6.88	45.63	27.60	8.18	39.65	1.579	9.795	eutonic pt.[c]
32.75	6.89	43.63	27.64	8.21	39.61	1.579	9.795	"
30.70	6.24	43.45	28.30	8.12	41.00	1.532	5.499	$NaNO_3$
25.37	4.97	35.89	32.10	8.88	42.53	1.513	4.213	"
19.15	3.55	27.39	35.96	9.42	44.89	1.486	2.982	"
17.88	3.31	25.47	37.06	9.68	45.06	1.482	2.873	"
11.60	2.11	16.19	42.51	10.90	45.89	1.445	1.778	"
4.10	0.72	5.62	48.67	12.12	47.23	1.437	1.571	"
-----	-----	-----	46.80	13.37	46.80	1.429	1.436	"

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

[b] These values are actually mol/100 mol solute values (compiler).

[c] Isothermal invariant point.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The isothermal method was used. The mixtures were allowed to equilibrate for 7-8 hours with constant agitation. The $H_2PO_4^-$ content was determined colorimetrically, the sum of the salt content was determined by evaporation to dryness, and the nitrate content was determined by the difference. The composition of the solid phases was determined by the Schreinemakers' method. The viscosity was measured with the aid of an Ostwald viscometer. The density was measured by the use of calibrated 10ml pycnometers.

SOURCE AND PURITY OF MATERIALS:

A pure form of $NaNO_3$ was used and the NaH_2PO_4 was of reagent grade quality.

ESTIMATED ERROR:

No details are given.

REFERENCES: