COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium nitrate; KNO_3; [7757-79-1]	Hill, A.E.; Brown, S.F.
(2) Potassium iodate; KIO_3; [7758-05-6]	*J. Am. Chem. Soc.* 1931, 53, 4316-20.
(3) Water; H_2O; [7732-18-5]	
VARIABLES:	**PREPARED BY:**
T/K = 278, 298 and 323.6	Hiroshi Miyamoto
Composition	

EXPERIMENTAL VALUES: Composition of saturated solutions

t/°C	KIO_3 mass %	KIO_3 mol % (compiler)	KNO_3 mass %	KNO_3 mol % (compiler)	Density g cm^{-3}	Nature of the solid phase[a]
5	5.25[b]	0.464	0.00	0.000	1.043	A
	3.29	0.299	5.36	1.032	1.060	"
	2.93	0.278	10.53	2.116	1.090	"
	2.89	0.282	13.53	2.796	1.110	"
	2.87	0.282	14.14	2.938	1.120	A+B
	1.08	0.104	14.26	2.911	1.100	B
	0.00	0.000	14.43	2.917	1.097	"
25	8.46[b]	0.772	0.00	0.000	1.072	A
	5.92	0.553	5.48	1.084	1.084	"
	5.25	0.501	8.51	1.719	1.110	"
	4.57	0.469	16.77	3.643	1.156	"
	4.48	0.466	18.19	4.004	1.160	"
	4.21	0.478	26.84	6.455	1.232	A+B
	2.65	0.297	27.25	6.459	1.215	B
	2.06	0.229	27.30	6.428	1.210	"
	0.00	0.000	27.79	6.417	1.192	"
50.4	13.35	1.280	0.00	0.000	1.110	A
	7.32	0.780	17.42	3.930	1.167	"
	5.79	0.708	31.43	8.132	1.259	"
	5.30	0.697	37.83	10.52	1.31	"
	5.17	0.690	39.17	11.07	1.33	"
	4.91	0.682	42.42	12.46	1.35	"
	4.75	0.674	44.23	13.29	1.37	A+B
	2.44	0.340	45.44	13.40	1.34	B
	0.00	0.000	46.57	13.44	1.326	"

[a] A = KIO_3; B = KNO_3

[b] For the binary system the compiler computes the following:

soly of KIO_3 = 0.259 mol kg^{-1} at 5°C

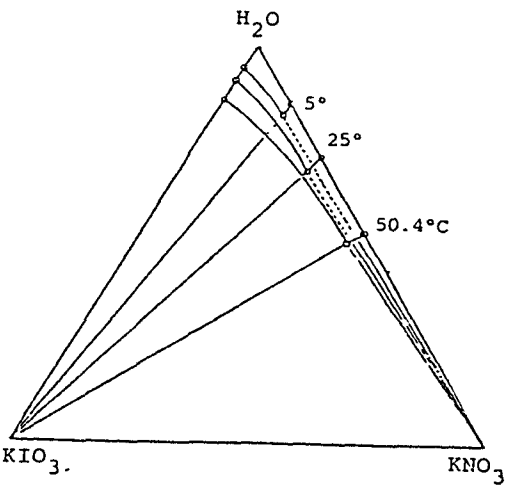
= 0.432 mol kg^{-1} at 25°C

= 0.7206 mol kg^{-1} at 50.4°C

continued.....

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium nitrate; KNO_3; [7757-79-1]	Hill, A.E.; Brown, S.F.
(2) Potassium iodate; KIO_3; [7758-05-6]	*J. Am. Chem. Soc.* 1931, *53*, 4316-20.
(3) Water; H_2O; [7732-18-5]	

COMMENTS AND/OR ADDITIONAL DATA: (Continued)



5°C, 25°C, 50.4°C Isotherms (mass % Units)

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The ternary mixtures were prepared by weight and were rotated in closed tubes for periods from one to two weeks (which time was shown by analysis of solutions to be sufficient for attainment of equilibrium).
After the solid settled, samples were withdrawn with a pipet. The iodate content was determined iodometrically, and water was determined by evaporation and heating to constant weight. Potassium nitrate was determined by difference.
The identity of the solid phases was established by the method of extrapolation of the tie-line passing through the points for the composition of the solutions and those of the original complexes.

SOURCE AND PURITY OF MATERIALS:

The salts used were commercial products of good quality, and purified by recrystalization from water.

ESTIMATED ERROR:

Soly: the compiler assumes that the precision of the solubility is within 0.3 %.
Temp: not given.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium sulfate; K_2SO_4; [7778-80-5] (2) Potassium iodate; KIO_3; [7758-05-6] (3) Water; H_2O; [7732-18-5]	Hill, A.E.; Ricci, J.E. *J. Am. Chem. Soc.* 1931, 53, 4305-15.
VARIABLES: Composition T/K = 278, 298, 323	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions

t/°C	KIO_3 mass %	KIO_3 mol % (compiler)	K_2SO_4 mass %	K_2SO_4 mol % (compiler)	Density g cm^{-3}	Nature of the solid phase[a]
5	5.16[b]	0.456	0.00	0.000	1.043	A
	3.14	0.283	4.07	0.450	1.060	"
	2.57	0.237	7.08	0.802	1.081	A+B
	1.80	0.165	7.25	0.816	1.077	B
	0.00	0.000	7.64	0.848	1.062	"
25	8.45[b]	0.771	0.00	0.000	1.071	A
	5.66	0.526	4.75	0.542	1.085	"
	4.72	0.448	7.74	0.902	1.103	"
	4.30	0.414	9.65	1.14	1.117	A+B
	2.44	0.232	10.10	1.177	1.103	B
	0.00	0.000	10.76	1.231	1.083	"
50	13.21[b]	1.265	0.00	0.000	-	A
	8.68	0.860	7.90	0.961	-	"
	7.39	0.750	11.43	1.424	-	"
	7.06	0.718	12.06	1.507	-	A+B
	3.78	0.375	13.00	1.583	-	B
	0.00	0.000	14.18	1.680	-	"

[a] A = KIO_3; B = K_2SO_4

[b] In the binary system, the solubilities of KIO_3 are (compiler): 0.254 mol kg^{-1} at 5°C; 0.431 mol kg^{-1} at 25°C; 0.7112 mol kg^{-1} at 50°C.

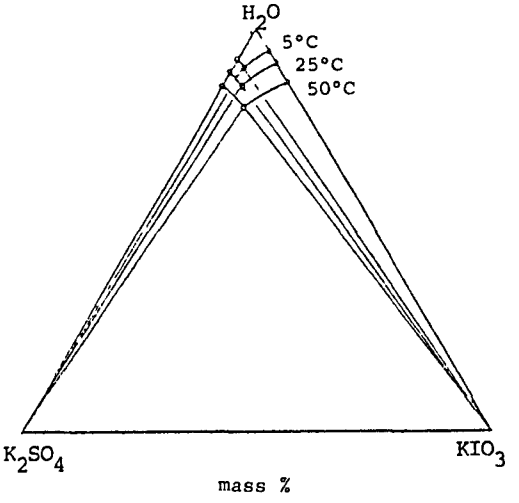
AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:
Ternary mixtures prepared by weight. For the 5°C isotherm, the solids were dissolved by heating, and the solutions were inoculated after cooling. The solutions were agitated in a thermostat at the desired temperature. Stirring times were about two weeks at 5°C, and about five days at 50°C. Iodate detd by iodometric titration, and total solids by evaporation to dryness and heating at 220°C for 2 h.

ESTIMATED ERROR:
Nothing specified, but the compiler assumes that the precision in analyses was 0.5 %.

SOURCE AND PURITY OF MATERIALS:
Nothing specified.

COMMENTS AND/OR ADDITIONAL DATA:



COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium chloride; KCl; [7447-40-7]	Hill, A.E.; Ricci, J.E.
(2) Potassium iodate; KIO_3; [7758-05-6]	*J. Am. Chem. Soc.* 1931, 53, 4305-15.
(3) Water; H_2O; [7732-18-5]	
VARIABLES:	**PREPARED BY:**
Composition	Hiroshi Miyamoto
T/K = 278, 298, 323	

EXPERIMENTAL VALUES: Composition of saturated solutions

t/°C	KIO_3 mass %	KIO_3 mol % (compiler)	KCl mass %	KCl mol % (compiler)	Density g cm^3	Nature of the solid phase[a]
5	5.16[b]	0.456	0.00	0.000	1.043	A
	2.91	0.258	3.03	0.770	1.044	"
	1.79	0.166	10.13	2.700	1.084	"
	1.50	0.151	19.56	5.641	1.147	"
	1.44	0.149	22.64	6.712	1.170	A+B
	0.00	0.000	22.84	6.675	1.155	B
25	8.45[b]	0.771	0.00	0.000	1.071	A
	5.83	0.530	2.78	0.726	1.066	"
	4.29	0.394	5.93	1.56	1.073	"
	3.01	0.288	12.37	3.402	1.109	"
	2.40	0.244	19.64	5.724	1.153	"
	2.10	0.225	25.82	7.949	1.197	A+B
	0.00	0.000	26.36	7.961	1.179	B
50	13.21[b]	1.265	0.00	0.000	-	A
	7.42	0.710	6.83	1.87	-	"
	4.71	0.473	15.64	4.509	-	"
	3.74	0.399	23.17	7.087	-	"
	3.07	0.344	29.08	9.353	-	A+B
	1.77	0.196	29.46	9.362	-	B
	0.00	0.000	30.03	9.397	-	"

[a] A = KIO_3; B = KCl

[b] Solubilities of KIO_3 in the binary systems are (compiler): 0.254 mol kg^{-1} at 5°C; 0.431 mol kg^{-1} at 25°C; 0.7112 mol kg^{-1} at 50°C.

METHOD/APPARATUS/PROCEDURE:

Ternary mixtures prepared by weight. For the 5°C isotherm, the solids were first dissolved by heating and the solutions were inoculated after cooling. Solutions were rotated in a thermostat at the desired temperature for periods of two or three days up to two weeks. Iodate detd by iodometric titration, and total solids by evaporation to dryness.

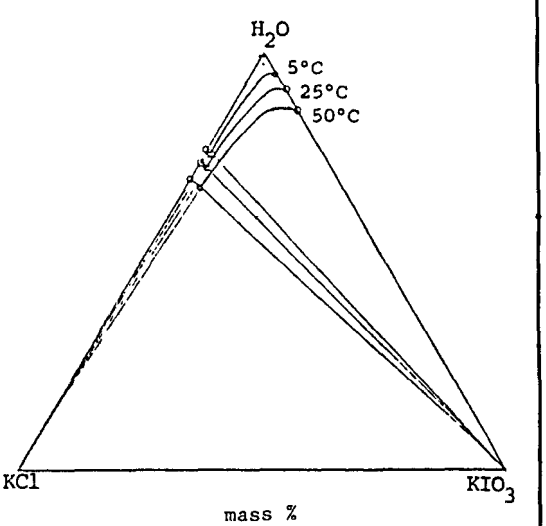
ESTIMATED ERROR:

Nothing specified, but the compiler assumes that the precision in analyses was 0.5 %.

SOURCE AND PURITY OF MATERIALS:

Nothing specified.

COMMENTS AND/OR ADDITIONAL DATA:



COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromide; KBr; [7758-02-3] (2) Potassium iodate; KIO_3; [7758-05-6] (3) Water; H_2O; [7732-18-5]	Ricci, J.E. *J. Am. Chem. Soc.* 1934, *56*, 290-5.
VARIABLES: T/K = 278, 298, 323 Composition	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions[a]

t/°C	KBr mass %	KBr mol %	KIO_3 mass %	KIO_3 mol %	Density g cm^{-3}	Nature of the solid phase[b]
5	36.26	7.929	0.00	0.00	1.333	A
	35.71	7.944	1.80	0.223	1.351	A+B
	35.72	7.948	1.80	0.223	1.352	"
	35.71	7.943	1.79	0.221	1.353	"
	35.71	7.944	1.80	0.223	1.352	"
	30.50	6.369	1.77	0.206	1.290	B
	22.59	4.319	1.80	0.191	1.208	"
	14.80	2.616	1.95	0.192	1.136	"
	7.58	1.257	2.45	0.226	1.080	"
	0.00	0.00	5.186[c]	0.458	1.043	"
25	40.62	9.384	0.00	0.00	1.381	A
	40.28	9.393	0.98	0.13	1.396	"
	39.75	9.387	2.36	0.310	1.407	A+B
	39.75	9.387	2.36	0.310	1.408	"
	39.76	9.389	2.35	0.309	1.407	"
	39.75	9.387	2.36	0.310	1.407	"
	34.38	7.591	2.47	0.303	1.341	B
	25.91	5.194	2.73	0.304	1.249	"
	17.40	3.203	3.26	0.334	1.168	"
	8.35	1.424	4.53	0.430	1.106	"
	0.00	0.00	8.452[c]	0.771	1.071	"

continued....

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

At 5°C and 25°C ternary complexes were stirred for one to two weeks, and for two to four days at 50°C. This length of time allowed for the attainment of equilibrium as determined in several cases by successive analyses.

In one sample of the saturated solution, the iodate was determined by titration with standard thiosulfate solution. In another sample, the total solid was determined by evaporation of the solution at 100°C followed by one to two hours at 250°C. The concentration of the bromide was then determined by difference.

For the determination of the composition of these solid phases, the method of algebraic extrapolation of tie-lines was used.

SOURCE AND PURITY OF MATERIALS:

KIO_3 and KBr were prepared by recrystalization from the best available c.p. grade materials, which, in the case of the bromide, usually contained from 0.5 to 1.0 % chloride. The purified salts were dried to the anhydrous state.

ESTIMATED ERROR:

Soly: average deviation in accuracy of analysis is 0.19 % (maximum 0.52 %).

Temp: not given.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromide; KBr; [7758-02-3]	Ricci, J.E.
(2) Potassium iodate; KIO_3; [7758-05-6]	*J. Am. Chem. Soc.* 1934, 56, 290-5.
(3) Water; H_2O; [7732-18-5]	

EXPERIMENTAL VALUES: (Continued)

Composition of saturated solutions[a]

t/°C	KBr mass %	KBr mol %	KIO_3 mass %	KIO_3 mol %	Density g cm^{-3}	Nature of the solid phase[b]
50	44.78	10.93	0.00	0.00	-	A
	43.88	10.94	2.22	0.308	-	"
	43.50	10.93	3.09	0.432	-	A+B
	43.50	10.92	3.06	0.427	-	"
	43.50	10.93	3.07	0.429	-	"
	38.03	8.900	3.32	0.432	-	B
	30.57	6.563	3.87	0.462	-	"
	23.19	4.616	4.66	0.516	-	"
	15.65	2.913	5.89	0.610	-	"
	8.18	1.45	8.16	0.803	-	"
	0.00	0.00	13.20[c]	1.264	-	"

[a] Mole percent data calculated by the compiler.

[b] A = KBr; B = KIO_3

[c] For the binary system the compiler computes the following:

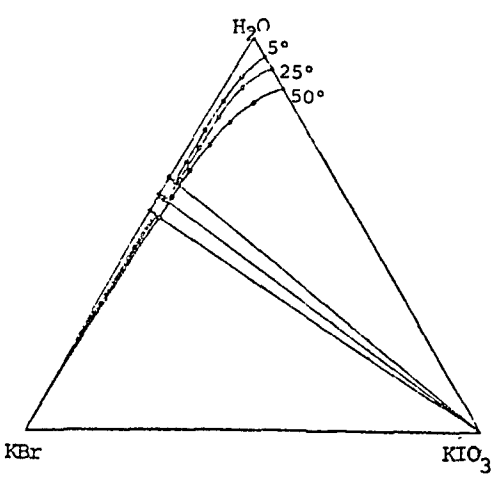
soly of KIO_3 = 0.2556 mol kg^{-1} at 5°C

= 0.4314 mol kg^{-1} at 25°C

= 0.7106 mol kg^{-1} at 50°C

COMMENTS AND/OR ADDITIONAL DATA:

The phase diagram is given below (based on mass % units).



COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium iodide; KI; [7681-11-0] (2) Potassium iodate; KIO_3; [7758-05-6] (3) Water; H_2O; [7732-18-5]	Ricci, J.E. *J. Am. Chem. Soc.* 1937, 59, 866-7.
VARIABLES: Composition at 298.15 K	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions at 25.00°C

KIO_3 mass %	KIO_3 mol % (compiler)	KI mass %	KI mol % (compiler)	Density g cm^{-3}	Nature of the solid phase[a]
8.449[b]	0.7709	0.00	0.00	1.071	A
7.15	0.659	2.40	0.285	1.053	"
4.33	0.427	12.04	1.532	-	"
3.27	0.357	22.38	3.152	1.227	"
2.54	0.350	41.10	7.308	1.451	"
2.35	0.421	57.02	13.16	1.722	"
2.36	0.435	58.54	13.92	1.749	A+B
2.36	0.435	58.54	13.92	1.754	"
2.35	0.433	58.47	13.88	1.749	"
2.35	0.433	58.51	13.90	1.751	"
2.25	0.415	58.62	13.93	-	B
1.10	0.200	59.14	13.87	1.731	"
0.00	0.000	59.76	13.88	1.718	"

[a] A = KIO_3; B = KI

[b] For the binary system the compiler computes the following:

soly of KIO_3 = 0.4312 mol kg^{-1}

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
Mixtures of KIO_3, KI and H_2O were stirred in a bath thermostatically controlled at 25°C for at least 2 days. KIO_3 was determined by adding excess KI, acidifying, and titrating the liberated iodine with standard sodium thiosulfate solution. The total solid was determined by evaporation at 100°C followed by 250°C. KI was then calculated by difference. The densities were calculated from the weight delivered by a volumetric pipet calibrated for delivery.	No information given.
	ESTIMATED ERROR: Soly: nothing specified. Temp: precision ± 0.02 K.
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium iodate; KIO_3; [7758-05-6] (2) Rubidium iodate; $RbIO_3$; [13446-76-9] (3) Water; H_2O; [7732-18-5]	Kirgintsev, A.N.; Shklovskaya, R.M.; Arkhipov, S.M. *Izv. Akad. Nauk SSSR, Ser. Khim.* 1971, 2631-4; *Bull. Acad. Sci. USSR, Div. Chem. Sci.* 1971, 2501-4.
VARIABLES: Composition at 298.2 K	PREPARED BY: Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions[c]

KIO_3		$RbIO_3$	
mass %	mol %[a]	mass %	mol %[a]
8.45[b]	0.771	0.0	0.0
7.51	0.682	0.40	0.030
6.51	0.587	0.69	0.051
4.57	0.405	0.97	0.071
3.79	0.334	1.05	0.076
2.77	0.242	1.23	0.088
2.11	0.184	1.51	0.108
1.40	0.121	1.69	0.120
0.89	0.077	1.88	0.134
0.41	0.035	2.05	0.145
0.0	0.0	2.31[b]	0.163

[a] Compiler's calculations using 1977 IUPAC recommended atomic masses.

[b] For binary systems the compiler computes the following:

soly of KIO_3 = 0.431 mol kg^{-1}

soly of $RbIO_3$ = 0.0908 mol kg^{-1}

[c] The compiler assumes that the heading $RbIO_3$-$CsIO_3$-H_2O in Table 2 in the original paper is a typographical error, and should be read as KIO_3-$RbIO_3$-H_2O.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
The solubility was studied by the method of isothermal removal of supersaturation with mixing for 24 hours. The iodate content was determined by iodometric titration. The contents of alkali metals were determined in the same sample by the method of flame photometry from three parallel analyses. The composition of the solid phase was determined by Schreinemakers' method of residues.	C.p. grade KIO_3 and $CsIO_3$ were recrystallized from double distilled water.
	ESTIMATED ERROR: Soly: precision within ± 3.5 % (compiler). Temp: precision ± 0.1 K.
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium iodate; KIO_3; [7758-05-6] (2) Cesium iodate; $CsIO_3$; [13454-81-4] (3) Water; H_2O; [7732-18-5]	Kirgintsev, A.I.; Yakobi, N.Y. *Zh. Neorg. Khim.* 1968, *13*, 2851-3; *Russ. J. Inorg. Chem. (Engl. Transl.)* 1968, *13*, 1467-8.
VARIABLES:	**PREPARED BY:**
Composition at 298.2 K	Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions at 25.0°C

KIO_3		$CsIO_3$		Nature of the solid phase[a]
mass %	mol % (compiler)	mass %	mol % (compiler)	
-	-	2.53[b]	0.152	A
0.38	0.033	2.29	0.137	"
1.01	0.0874	1.90	0.114	"
1.33	0.115	1.84	0.111	"
2.50	0.219	1.56	0.0949	"
3.52	0.310	1.24	0.0759	"
4.43	0.394	1.32	0.0816	"
6.53	0.590	0.94	0.059	"
8.29	0.764	1.12	0.0718	A+B
8.34	0.766	0.79	0.050	B
8.46	0.772	-	-	"

[a] A = $CsIO_3$; B = KIO_3

[b] For binary systems the compiler computes the following:

soly of KIO_3 = 0.432 mol kg^{-1}

soly of $CsIO_3$ = 0.0843 mol kg^{-1}

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The isothermal relief of supersaturation method was employed. The supersaturated slns were stirred for 7-8 hours.
To det the comp of the coexisting phases, the authors used a method of indirect analysis.
If p is the total mass of iodates, and b the total moles of iodates in it, then

$$p = bN_1M_1 + bN_2M_2 \quad (1)$$

where N_1 and N_2 are the mole fractions of the first and second componen*s, M_1 and M_2 their molecular masses. Solving eq (1) yields

$$N_1 = (p/b) - M_2/M_1 - M_2 \quad (2)$$

Eq. (2) was used to calculate the composition of the liquid.
After settling, samples of the liquid phase were removed for analysis. The parameters, p and b, were determined by an ion-exchange method.

SOURCE AND PURITY OF MATERIALS:

Analytical reagent grade KIO_3 and $CsIO_3$ were recrystallized from twice-distilled water.

ESTIMATED ERROR:

Soly: accuracy $\leq$ 5 %.
Temp: precision $\pm$ 0.1 K.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium iodate; KIO_3; [7758-05-6] (2) Barium iodate; $Ba(IO_3)_2$; [10567-69-8] (3) Water; H_2O; [7732-18-5]	Azarova, L.A.; Vinogradov, E.E. *Zh. Neorg. Khim.* 1982, *27*, 2967-70; *Russ. J. Inorg. Chem.* (*Engl. Transl.*) 1982, *27*, 1681-3.
VARIABLES: Composition at 298 K	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions at 25°C

$Ba(IO_3)_2$ mass %	$Ba(IO_3)_2$ mol % (compiler)	KIO_3 mass %	KIO_3 mol % (compiler)	Nature of the solid phase[a]
0.058[b]	0.0021	-	-	A
0.668	0.027	7.90	0.722	"
1.58	0.0615	3.73	0.330	"
0.28	0.011	7.96	0.725	"
0.032	0.0013	7.94	0.721	"
1.113	0.0447	7.44	0.680	A+B
-	-	8.39	0.765[b]	B

[a] A = $Ba(IO_3)_2$; B = KIO_3

[b] For binary systems the compiler computes the following:

soly of KIO_3 = 0.428 mol kg^{-1}

soly of $Ba(IO_3)_2$ = 1.2 x 10^{-3} mol kg^{-1}

AUXILIARY INFORMATION

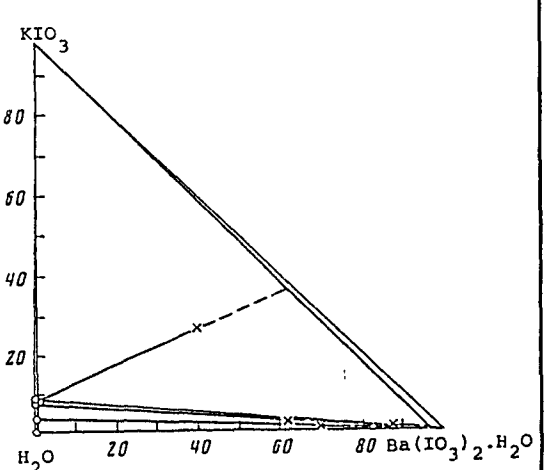
METHOD/APPARATUS/PROCEDURE:
Probably the isothermal method was used. Equilibrium was reached in 10-12 days.
The potassium content was determined gravimetrically with sodium tetraphenylborate.
The iodate concentration was determined by iodometric titration with sodium thiosulfate.
The barium content was determined by precipitation as $BaSO_4$ using H_2SO_4.
The composition of the solid phases were determined by Schreinemakers' method of residues, and by X-ray diffraction.

SOURCE AND PURITY OF MATERIALS:
Analytical grade barium iodate and chemically pure grade potassium iodate were used.

ESTIMATED ERROR:

Nothing specified.

COMMENTS AND/OR ADDITIONAL DATA:
The phase diagram is given below (based on mass % units).



COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium iodate; KIO_3; [7758-05-6] (2) Aluminum iodate; $Al(IO_3)_3$; [15123-75-8] (3) Water; H_2O; [7732-18-5]	Vinogradov, E.E.; Tarasova, G.N. *Zh. Neorg. Khim.* 1978, *23*, 3161-4; *Russ. J. Inorg. Chem. (Engl. Transl.)* 1978, *23*, 1754-6.
VARIABLES: Composition at 298.2 K	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions at 25.0°C

$Al(IO_3)_3$ mass %	$Al(IO_3)_3$ mol % (compiler)	KIO_3 mass %	KIO_3 mol % (compiler)	Nature of the solid phase[a]
5.71[b]	0.197	-	-	A
5.05	0.174	0.31	0.028	"
4.09	0.142	2.15	0.192	"
3.54	0.123	2.71	0.242	"
3.09	0.108	3.69	0.332	"
2.40	0.0872	8.47	0.793	A+B
2.41	0.0876	8.55	0.801	"
2.40	0.0872	8.48	0.794	"
2.38	0.0864	8.51	0.797	"
-	-	8.40[b]	0.766	B

[a] A = $Al(IO_3)_3.6H_2O$; B = KIO_3

[b] For binary systems the compiler computes the following:

soly of KIO_3 = 0.429 mol kg^{-1}

soly of $Al(IO_3)_3$ = 0.110 mol kg^{-1}

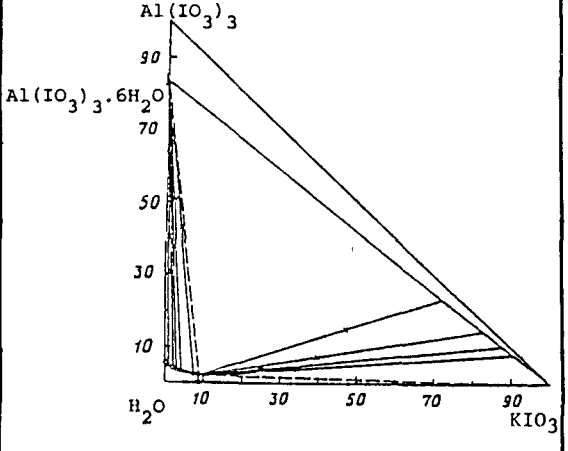
AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:
Ternary mixtures stirred and thermostated for 12-14 d. Liquid and solid phases analyzed for all ions. IO_3^- detd by iodometric titrn, K detd gravimetrically as the tetraphenylborate, and Al by EDTA titrn with Xylenol Orange indicator. Solid phase compositions detd by Schreinemakers' method of residues.

SOURCE AND PURITY OF MATERIALS:
C.p. grade KIO_3 used. Aluminum iodate prepd at 80-90°C by neut of satd HIO_3 solution with freshly prepared $Al(OH)_3$ in stoichiometric quantities. The salt was dried and analyzed: found, mass % Al 4.03; IO_3 78.7; H_2O 17.6. Calcd, mass %: Al 4.09; IO_3 79.53; H_2O 16.38 (by difference)

ESTIMATED ERROR:
Soly: nothing specified.
Temp: precision ± 0.1 K.

COMMENTS AND/OR ADDITIVE DATA:
The phase diagram based on mass % units is given below.



COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium iodate; KIO_3; [13446-17-8] (2) Manganese iodate; $Mn(IO_3)_2$; [25659-29-4] (3) Water; H_2O; [7732-18-5]	Vinogradov, E.E.; Karataeva, I.M.; Lepeshkov, I.N. *Zh. Neorg. Khim.* 1979, *24*, 223-7; *Russ. J. Inorg. Chem. (Engl. Transl.)* 1979, *24*, 124-7.
VARIABLES: Composition at 323 K	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions at 50°C

KIO_3		$Mn(IO_3)_2$		Nature of the solid phase[a]
mass %	mol % (compiler)	mass %	mol % (compiler)	
11.76[b]	1.109	-	-	A
11.76	1.109	trace	-	A+C
11.24	1.055	trace	-	"
11.35	1.066	trace	-	C
9.80	0.906	0.0021	0.00010	"
7.78	0.705	0.0080	0.00038	"
5.20	0.460	0.0065	0.00030	"
3.80	0.331	0.0072	0.00033	"
3.80	0.331	0.0063	0.00029	"
3.83	0.334	0.0086	0.00040	B
2.01	0.172	0.028	0.00127	"
0.83	0.071	0.187	0.00840	"
-	-	0.266[b]	0.0119	"

[a] A = KIO_3; B = $Mn(IO_3)_2$; C = $K_2[Mn(IO_3)_4(H_2O)_2]$

[b] For binary systems the compiler computes the following:

soly of KIO_3 = 0.6228 mol kg^{-1}

soly of $Mn(IO_3)_2$ = 0.00659 mol kg^{-1}

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

Equilibrium in KIO_3-$Mn(IO_3)_2$-H_2O system was reached after about a month.
The iodate content was determined iodometrically, potassium by flame photometry. Manganese was determined by titration with ammonium chloride at pH 9.5-10 using Methyl Thymol Blue as an indicator.
The solid phases were investigated by thermogravimetric, X-ray diffraction, and IR spectroscopic methods.

SOURCE AND PURITY OF MATERIALS:

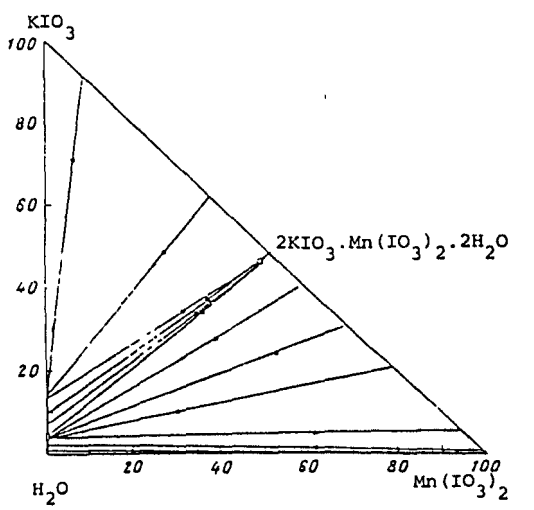
C.p. grade KIO_3 was used. Manganese iodate was made from manganese sulfate and iodic acid.

ESTIMATED ERROR:

Nothing specified.

COMMENTS AND/OR ADDITIONAL DATA:

The phase diagram is given below (based on mol % units).



COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium iodate; KIO_3; [7758-05-6] (2) Cobalt iodate; $Co(IO_3)_2$; [13455-28-2] (3) Water; H_2O; [7732-18-5]	Lepeshkov, I.N.; Vinogradov, E.E.; Karataeva, I.M. *Zh. Neorg. Khim.* 1977, *22*, 2277-8. *Russ. J. Inorg. Chem.* (*Engl. Transl.*) 1977, *22*, 1232-5.
VARIABLES: Composition at 323.2 K	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions at 50°C

KIO_3 mass %	KIO_3 mol % (compiler)	$Co(IO_3)_2$ mass %	$Co(IO_3)_2$ mol % (compiler)	Nature of the solid phase[a]
-	-	0.78[b]	0.035	A
1.23	0.105	0.49	0.022	"
2.41	0.208	0.27	0.012	A+C
2.45	0.212	0.36	0.016	"
2.27	0.196	0.31	0.014	C
2.56	0.221	0.24	0.011	"
5.46	0.485	0.29	0.013	"
8.18	0.746	0.17	0.0081	"
10.02	0.930	0.09	0.0044	"
11.20	1.051	traces	-	B+C
11.76[b]	1.109	-	-	B

[a] A = $Co(IO_3)_2.2H_2O$; B = KIO_3; C = $2KIO_3.Co(IO_3)_2.2H_2O$

[b] For binary systems the compiler computes the following:

soly of KIO_3 = 0.6228 mol kg^{-1}

soly of $Co(IO_3)_2$ = 0.019 mol kg^{-1}

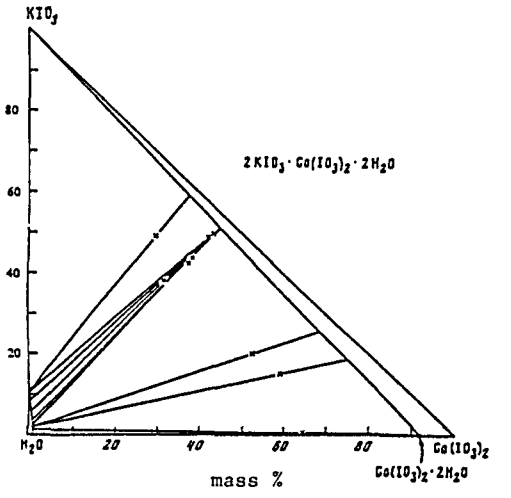
AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:
Approximately three weeks were needed to reach equilibrium.
Potassium content was determined gravimetrically by precipitation with sodium tetraphenylborate, cobalt by titration with EDTA, and iodate by titration with thiosulfate solution.
The composition of the double compound was proved by X-ray diffraction, derivatograms, and IR spectra.

SOURCE AND PURITY OF MATERIALS:
C.p. grade KIO_3 used. Cobalt iodate prepared by pptn from cobalt nitrate solution. No other details given.

ESTIMATED ERROR:
Nothing specified.

COMMENTS AND/OR ADDITIONAL DATA:



COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium iodate; KIO_3; [7758-05-6] (2) Nickel iodate; $Ni(IO_3)_2$; [13477-98-0] (3) Water; H_2O; [7732-18-5]	Lepeshkov, I.N.; Vinogradov, E.E.; Karataeva, I.M. *Zh. Neorg. Khim.* 1980, *25*, 823-4; *Russ. J. Inorg. Chem. (Engl. Transl.)* 1980, *25*, 463-4.
VARIABLES:	**PREPARED BY:**
Composition at 323 K	Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions at 50°C

KIO_3 mass %	KIO_3 mol % (compiler)	$Ni(IO_3)_2$ mass %	$Ni(IO_3)_2$ mol % (compiler)	Nature of the solid phase[a]
11.36[b]	1.067	-	-	A
10.41	0.9687	-	-	A+B
10.38	0.9656	-	-	B
9.68	0.894	-	-	"
7.16	0.645	0.018	8.5×10^{-4}	"
7.05	0.635	0.028	1.3×10^{-3}	"
3.66	0.319	0.139	6.35×10^{-3}	B+C
3.26	0.283	0.141	6.42×10^{-3}	"
3.55	0.309	0.160	7.30×10^{-3}	"
3.50	0.305	0.131	5.98×10^{-3}	"
2.49	0.215	0.394	1.78×10^{-2}	C
-	-	0.83[b]	3.7×10^{-2}	"

[a] A = KIO_3; B = $K_2[Ni(IO_3)_4(H_2O)_2]$; C = $Ni(IO_3)_2.2H_2O$

[b] For binary systems the compiler computes the following:

soly of KIO_3 = 0.5989 mol kg^{-1}

soly of $Ni(IO_3)_2$ = 0.020 mol kg^{-1}

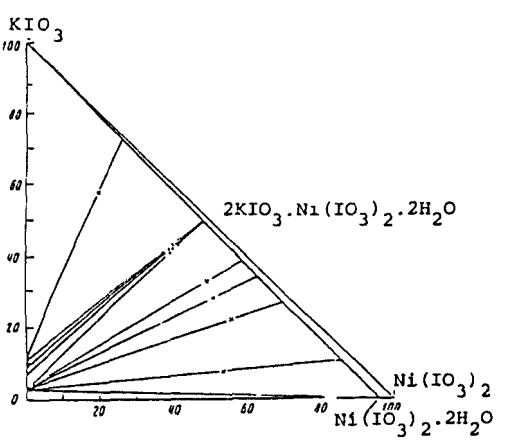
AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:
The compiler assumes that the isothermal method was used. The system reached equilibrium in about a month.
The liquid and solid phases were analyzed for all ions present. The nickel content was determined by titration with EDTA in the presence of Murexide as an indicator in strongly alkaline solution. Analysis for other ions were not described in the paper. The solid phases were investigated by thermal, thermogravimetric, X-ray diffraction, and infrared spectroscopic methods.

ESTIMATED ERROR:
Nothing specified.

SOURCE AND PURITY OF MATERIALS:
"Chemically pure" grade KIO_3 was used. Nickel iodate was made from iodic acid and nickel nitrate.

COMMENTS AND/OR ADDITIONAL DATA:
The phase diagram is given below (based on mass % units).



COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium iodate; KIO_3; [7758-05-6] (2) Zinc iodate; $Zn(IO_3)_2$; [7790-37-6] (3) Water; H_2O; [7732-18-5]	Lepeshkov, I.N.; Vinogradov, E.E.; Karataeva, I.M. *Zh. Neorg. Khim.* 1977, *22*, 2277-81; *Russ. J. Inorg. Chem.* (*Engl. Transl.*) 1977, *22*, 1232-5.
VARIABLES: Composition at 323 K	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions at 50°C

KIO_3		$Zn(IO_3)_2$		Nature of the solid phase[a]
mass %	mol % (compiler)	mass %	mol % (compiler)	
-	-	0.68[b]	0.030	A
1.20	0.102	0.54	0.045	"
1.70	0.146	0.18	0.0079	A+C
1.68	0.144	0.20	0.0088	"
1.83	0.157	0.10	0.0044	C
5.30	0.469	0.12	0.0055	"
8.40	0.767	0.11	0.0052	"
10.60	0.990	0.12	0.0058	"
13.02	1.245	0.06	0.0030	B+C
12.91	1.233	0.05	0.0025	"
11.76[b]	1.109	-	-	B

[a] A = $Zn(IO_3)_2.2H_2O$; B = KIO_3; C = $2KIO_3.Zn(IO_3)_2.2H_2O$

[b] For binary systems the compiler computes the following:

soly of KIO_3 = 0.6228 mol kg^{-1}

soly of $Zn(IO_3)_2$ = 0.016 mol kg^{-1}

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

Approximately three weeks were needed to reach equilibrium. Potassium content was determined gravimetrically by precipitation with sodium tetraphenylborate, zinc by titration with EDTA, and iodate by titration with thiosulfate solution.
The composition of the double compound was proved by X-ray diffraction, derivatograms, and IR spectra.

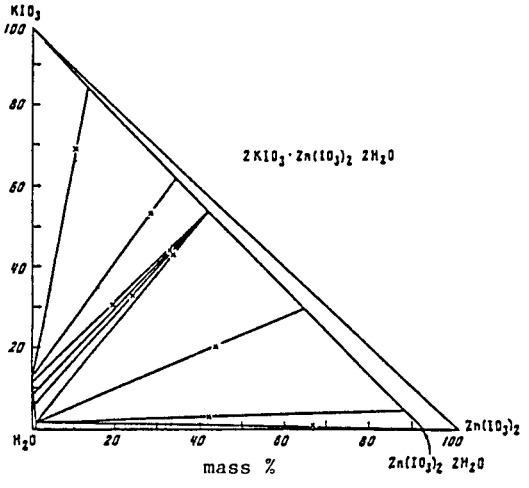
SOURCE AND PURITY OF MATERIALS:

C.p. grade KIO_3 was used. Zinc iodate was made by pptn from zinc nitrate: no other details given.

ESTIMATED ERROR:

Nothing specified.

COMMENTS AND/OR ADDITIONAL DATA:



COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium iodate; KIO_3; [7758-05-6] (2) Dipotassium (I-4)-tetraoxomolybdate (2-) (potassium molybdate); K_2MoO_4; [13446-49-6] (3) Water; H_2O; [7732-18-5]	Ricci, J.E.; Loprest, F.J. *J. Am. Chem. Soc.* 1953, 75, 1224-6.
VARIABLES: Composition at 298 K	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions at 25°C

K_2MoO_4 mass %	K_2MoO_4 mol % (compiler)	KIO_3 mass %	KIO_3 mol % (compiler)	Density g cm^{-3}	Nature of the solid phase[a]
64.57	12.12	0.00	0.00	1.800	A
63.94	12.14	1.15	0.243	1.822	A+B
63.97	12.15	1.15	0.243	1.823	"
63.93	12.15	1.20	0.254	1.818	"
63.95	12.15	1.17	0.247	1.821	"
60.52	10.64	1.13	0.221	-	B
56.57	9.169	1.13	0.204	1.683	"
51.08	7.490	1.30	0.212	1.600	"
43.86	5.724	1.63	0.237	1.484	"
38.10	4.573	1.92	0.256	1.406	"
30.97	3.384	2.33	0.283	1.331	"
21.75	2.131	2.92	0.318	1.225	"
13.93	1.258	3.69	0.371	1.151	"
10.00	0.872	4.37	0.424	1.115	"
0.00	0.000	8.45[b]	0.771	1.071	"

[a] A = K_2MoO_4; B = KIO_3

[b] For the binary system the compiler computes the following:

soly of KIO_3 = 0.431 mol kg^{-1}

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
Isothermal method used. Ternary complexes of known composition were stirred in Pyrex tubes. At equilibrium aliquots of saturated solution were drawn by means of calibrated pipets supplied with filtering tips. The analysis involved determination of total solid by evaporation and iodometric determination of iodate by treatment with iodide and acid, and titration with thiosulfate solution.	K_2MoO_4 used was about 99.9 % pure on the basis of volumetric determination of molybdate with standard $AgNO_3$ and standard KCNS in an adaptation of Volhard's method. The salt was recrystallized before use. The source of KIO_3 was not given.
	ESTIMATED ERROR: Nothing specified.
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium iodate; KIO_3; [7758-03-6] (2) Neodymium iodate; $Nd(IO_3)_3$; [14732-16-2] (3) Water; H_2O; [7732-18-5]	Tarasova, G.N.; Vinogradov, E.E.; Kudinov, I.B. *Zh. Neorg. Khim.* 1981, *26*, 2841-7; *Russ. J. Inorg. Chem.* (*Engl. Transl.*) 1981, *26*, 1520-3.
VARIABLES: Composition at 298.2 K	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions

$Nd(IO_3)_3$		KIO_3		Nature of the solid phase[a]
mass %	mol % (compiler)	mass %	mol % (compiler)	
0.15[b]	0.0040	--	--	A
0.12	0.0032	0.06	0.005	A+C
0.10	0.0027	0.06	0.005	"
0.10	0.0027	0.06	0.005	"
0.01	0.00027	2.10	0.180	C
0.01	0.00028	2.99	0.259	"
0.01	0.00028	2.87	0.248	"
0.01	0.00028	2.58	0.222	"
0.01	0.00028	5.21	0.461	"
0.01	0.00029	8.02	0.729	C+B
0.01	0.00029	8.00	0.727	"
0.01	0.00029	8.04	0.731	"
0.01	0.00029	8.40[b]	0.766	B

[a] A = $Nd(IO_3)_3.2H_2O$; B = KIO_3; C = $3Nd(IO_3)_3.2KIO_3.2H_2O$

[b] For the binary system the compiler computes the following:

soly of $Nd(IO_3)_3$ = 2.2×10^{-3} mol kg^{-1}

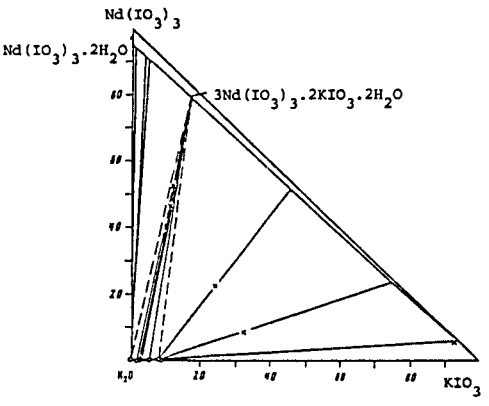
AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:
Isothermal method. Equilibrium reached in 30-35 d. Liq and solid phases analyzed for IO_3 by iodometric titrn and for Nd by complexometric titrn in the presence of hexamethylenetetramine with Methyl Thymol Blue indicator. Solid phase compositions detd by Schreinemakers' method of residues.

SOURCE AND PURITY OF MATERIALS:
$NdIO_3$ prepd by stoichiometric mixing of HIO_3 and neodymium oxide and stirring of the aqueous mixture for 20 h at 80-90°C. The ppt was filtered, washed repeatedly with hot water, and dried at 110-120°C. The authors state that the purity of the resulting neodymium iodate was checked by chemical analysis, but the results were not reported in the source publication.
"Chemically pure" grade KIO_3 was used.

ESTIMATED ERROR:
Soly: nothing specified.
Temp: precision ± 0.1 K.

COMMENTS AND/OR ADDITIONAL DATA:
The phase diagram based on mass % units is reproduced below.



COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium iodate; KIO_3; [7758-05-6] (2) Potassium hydroxide; KOH; [1310-58-3] (3) Water; H_2O; [7732-18-5]	Bronsted, J.N. *J. Am. Chem. Soc.* 1920, *40*, 1448-54.
VARIABLES:	**PREPARED BY:**
Concentration of KOH at 293 K	Hiroshi Miyamoto

EXPERIMENTAL VALUES:

Concn of KOH / mol dm^{-3}	Soly of KIO_3 / mol dm^{-3}
4.71	0.0390
5.06	0.0362
6.35	0.0256
7.95	0.0179
9.41	0.0144
10.95	0.0130
11.10	0.0128
12.19	0.0131
12.92	0.0135
14.02	0.0154
14.85	0.0194

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The details of the establishment of equilibrium and the analytical method were not given in the original paper.

SOURCE AND PURITY OF MATERIALS:

Nothing specified.

ESTIMATED ERROR:

Nothing specified.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium iodate; KIO_3; [7758-05-6] (2) Potassium hydroxide; KOH; [1310-58-3] (3) Water; H_2O; [7732-18-5]	Lepeshkov, I.N.; Vinogradov, E.E.; Tarasova, G.N. *Zh. Neorg. Khim.* 1976, *21*, 1353-6; *Russ. J. Inorg. Chem.* (*Engl. Transl.*) 1976, *21*, 739-41.
VARIABLES:	**PREPARED BY:**
Composition at 298.2 K	Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions

KIO_3		KOH		Nature of the solid phase[a]
mass %	mol % (compiler)	mass %	mol % (compiler)	
8.40[b]	0.766	0.00	0.00	A
4.35	0.393	4.10	1.41	"
3.13	0.284	6.45	2.23	"
2.04	0.189	10.37	3.656	"
1.42	0.135	14.70	5.321	"
0.98	0.097	20.16	7.579	"
0.76	0.078	25.03	9.765	"
0.33	0.036	34.30	14.41	"
0.31	0.036	39.18	17.21	"
0.30	0.036	44.15	20.33	"
0.26	0.033	49.02	23.68	A+B
0.26	0.033	49.01	23.67	"
0.24	0.030	49.02	23.67	"
-	-	54.23	27.56	B

[a] A = KIO_3; B = $KOH.2H_2O$

[b] For the binary system the compiler computes the following:

soly of KIO_3 = 0.429 mol kg^{-1}

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The solubility in the KIO_3-KOH-H_2O system was studied by the isothermal method. Mixtures were stirred in a water thermostat, and equilibrium was reached in 1-2 days. The concentration of hydroxide ion was found by titration with 0.1 mol dm^{-3} HCl in the presence of Methyl Orange. The IO_3 ion was determined by titration with sodium thiosulfate solution in the presence of sulfuric acid and KI. The concentration of K^+ ion was determined gravimetrically by precipitation with sodium tetraphenylborate. The composition of the solid phases was found by Schreinemakers' method of residues.

SOURCE AND PURITY OF MATERIALS:

"Chemically pure" grade KIO_3 was used. Commercial KOH contains considerable amounts of K_2CO_3 impurity which cannot be removed by recrystallization from water. The materials were purified by recrystallization in silver vessels in a stream of purified nitrogen as the temperature was gradually increased to 250°C.

ESTIMATED ERROR:

Soly: nothing specified.
Temp: precision ± 0.1 K.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium iodate; KIO_3; [7758-05-6] (2) Iodic acid; HIO_3; [7782-68-5] (3) Water; H_2O; [7732-18-5]	Meerburg, P.A. *Z. Anorg. Allg. Chem.* 1905, *45*, 324-44
VARIABLES. T/K = 303 Composition	PREPARED BY: Hiroshi Miyamoto

EXPERIMENTAL VALUES:

Composition of saturated solutions at 30°C

Iodic Acid mass %	Iodic Acid mol % (compiler)	Potassium Iodate mass %	Potassium Iodate mol % (compiler)	Nature of the solid phase[a]
0	0	9.51[b]	0.877	A
0.64	0.072	9.48	0.879	A+C
0.66	0.075	9.52	0.884	"
0.65	0.073	9.46	0.878	"
0.65	0.073	8.90	0.821	C
0.67	0.074	6.6	0.60	"
1.14	0.123	4.57	0.406	"
1.69	0.182	3.63	0.321	"
2.02	0.217	3.10	0.274	"
3.34	0.360	2.14	0.190	"
5.00	0.543	1.32	0.118	"
7.09	0.783	1.0	0.091	"
8.04	0.895	0.85	0.078	C+D
3.47	0.380	3.57	0.321	D(m)
4.80	0.528	2.90	0.262	"
6.45	0.710	1.35	0.122	"
9.35	1.05	0.64	0.059	D
12.04	1.389	0.44	0.042	"
17.50	2.133	0.30	0.030	"
31.20	4.468	0.52	0.061	"
53.64	10.72	0.68	0.11	"
62.52	14.81	0.72	0.14	"
76.40	25.49	0.80	0.22	D+B
76.70[b]	25.21	0	0	B

[a] A = KIO_3; B = HIO_3; C = $KIO_3.HIO_3$; D = $KIO_3.2HIO_3$; m = metastable.

[b] For binary systems the compiler computes the following

soly of HIO_3 = 18.71 mol kg^{-1}

soly of KIO_3 = 0.491 mol kg^{-1}

METHOD/APPARATUS/PROCEDURE:

A mixture of KIO_3, HIO_3 and water was placed in a bottle and the bottle agitated in a thermostat for a week or more at a desired temperature. Equilibrium was established from supersaturation.

The iodic acid and potassium iodate contents were detd as follows: an excess of KI was added to an aliquot of satd sln, and the HIO_3 content detd by titration of the iodine liberated with standard sodium thiosulfate. Dil sulfuric acid was then added to the solution and the iodine liberated was again titrated with sodium thiosulfate to obtain the total iodate concentration.

The potassium iodate concentration was calculated from the difference between the second and the first titration. Composition of solid phases was determined by the method of residues.

SOURCE AND PURITY OF MATERIAL:

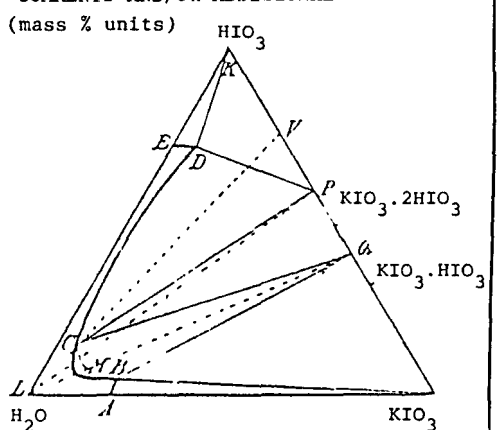
Nothing specified.

ESTIMATED ERROR:

Nothing specified.

COMMENTS AND/OR ADDITIONAL DATA:

(mass % units)



COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium iodate; KIO_3; [7790-32-1] (2) Iodic acid; HIO_3; [7782-68-5] (3) Water; H_2O; [7732-18-5]	Smith, S.B. *J. Am. Chem. Soc.* 1947, *69*, 2285-6.
VARIABLES: Composition and temperature T/K = 273-323	**PREPARED BY:** Hiroshi Miyamoto and Mark Salomon

EXPERIMENTAL VALUES: Composition of saturated solutions

t/°C	HIO_3 mass %	HIO_3 mol % (compiler)	KIO_3 mass %	KIO_3 mol % (compiler)	Nature of the solid phase[a]
0	-	-	4.51[b]	0.396	A
	0.35	0.0375	4.47	0.394	A+C
	1.30	0.137	1.68	0.145	C
	5.76	0.623	0.13	0.012	C+D
	73.69	22.53	0.39	0.098	B+D
	73.56	22.17	0.00	0.00	B
25	-	-	8.39[b]	0.765	A
	0.61	0.068	8.46	0.777	A+C
	0.77	0.083	4.90	0.435	C
	7.68	0.850	0.61	0.055	C+D
	75.51	24.29	0.42	0.111	B+D
	75.56	24.05	-	-	B
50	-	-	13.21[b]	].265	A
	1.34	0.159	13.58	1.324	A+C
	3.74	0.415	4.64	0.423	C
	11.02	1.276	1.85	0.176	C+D
	78.72	28.52	1.17	0.348	B+D
	78.78	27.55	-	-	B

[a] A = KIO_3; B = HIO_3; C = $KIO_3.HIO_3$; D = $KIO_3.2HIO_3$

[b] soly of KIO_3 = 0.221 mol kg^{-1} at 0°C; = 0.428 mol kg^{-1} at 25°C
= 0.7112 mol kg^{-1} at 50°C

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

Isothermal method used. Ternary mixtures were prepd using the same compounds which constitute the solid phases in the equilibrated systems. This reduced the time required to reach equil to 48 hours.
A sample of satd sln (or residue) was first titrd with standard alkali to det acid content. Total iodate in the same sample then detd by titrn with std thiosulfate in the presence of excess KI and HCl.
Not all the soly data were reported. Only those results for invariant points and points of congruent solubilities were given. The values at the invariant points are the results of 2 or more closely agreeing results (this may indicate that some data were rejected: compilers).

SOURCE AND PURITY OF MATERIALS:

Nothing specified.

ESTIMATED ERROR:

Soly: precision probably much better than ± 1 % (compilers).
Temp: nothing specified.

COMMENTS AND/OR ADDITIONAL DATA:

The 50°C isotherm is reproduced below. Concentration units are mass %.