COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$; [7758-01-2] (2) Sodium nitrate; $NaNO_3$; [7631-99-4] (3) Water; H_2O; [7732-18-5]	Geffcken, G. *Z. Physik. Chem.* 1904, *49*, 257-302.
VARIABLES: T/K = 298 Concentration of $NaNO_3$	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES:

Concn of $NaNO_3$ c_2/mol dm^{-3}	Soly of $KBrO_3$ c_1/mol dm^{-3}
0	0.4715
0.5	0.5745
1	0.6497
2	0.7680
3	0.9026
4	1.031

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

Mixtures of aqueous $NaNO_3$ solution and solid $KBrO_3$ were placed in bottles, and the bottles rotated in a thermostat. After equilibrium was established, the saturated solutions were allowed to settle in the thermostat. Samples were withdrawn with a pipet equipped with a cotton-wool filter. The determination of $KBrO_3$ was rapidly performed by iodometric titration.

SOURCE AND PURITY OF MATERIALS:

No information given.

ESTIMATED ERROR:

Nothing specified.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$; [7758-01-2] (2) Sodium chloride; NaCl; [7647-14-5] (3) Water; H_2O; [7732-18-5]	Geffcken, G. *Z. Physik. Chem.* 1904, *49*, 257-302.
VARIABLES: T/K = 298 Concentration of NaCl	PREPARED BY: Hiroshi Miyamoto

EXPERIMENTAL VALUES:

Concn of NaCl c_2/mol dm^{-3}	Soly of $KBrO_3$ c_1/mol dm^{-3}
0	0.4715
0.5	0.5220
1	0.5616
2	0.6042
3	0.6244
4	0.6400

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:
Mixtures of aqueous NaCl solution and solid $KBrO_3$ were placed in bottles, and the bottles rotated in a thermostat.
After equilibrium was established, the saturated solutions were allowed to settle in the thermostat. Samples were withdrawn with a pipet equipped with a cotton-wool filter. The determination of $KBrO_3$ was rapidly performed by iodometric titration.

SOURCE AND PURITY OF MATERIALS:
No information given.

ESTIMATED ERROR:
Nothing specified.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium nitrate; KNO_3; [7757-79-1] (2) Potassium bromate; $KBrO_3$; [7758-01-2] (3) Water; H_2O; [7732-18-5]	Ricci, J.E. *J. Am. Chem. Soc.* 1934, 56, 299-303.
VARIABLES: Composition at 298.15 K	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions at 25.00°C

Potassium Nitrate mass %	Potassium Nitrate mol % (compiler)	Potassium Bromate mass %	Potassium Bromate mol % (compiler)	Density g cm^{-3}	Nature of the solid phase[a]
27.71	6.393	0.00	0.00	1.193	A
27.27	6.459	2.64	0.379	1.211	"
27.01	6.475	3 90	0.566	1.228	A+B
27.01	6.475	3.90	0.566	1.225	"
27.01	6.475	3.90	0.566	1.223	"
(Av) 27.01	6.475	3.90	0.566	1.225	"
23.17	5.335	4.00	0.558	1.193	B
16.98	3.678	4.23	0.555	1.148	"
11.10	2.280	4.64	0.577	1.110	"
5.05	0.991	5.61	0.666	1.074	"
0.00	0.00	7.533[b]	0.871	1.054	"

[a] A = KNO_3; B = $KBrO_3$

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

soly of $KBrO_3$ = 0.4878 mol kg^{-1}

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:
The ternary complexes were prepared from weighed amounts of water and the two anhydrous salts: these complexes were rotated in a large thermostat for about two days, a time found to be sufficient to reach equilibrium.
Samples of the saturated solution were withdrawn with a calibrated pipet provided with a folded filter paper at the tip. The bromate was determined by titration with standard sodium thiosulfate solution, and the total solid by evaporation at 100°C and drying at 250°C. Potassium nitrate was found by difference.
For the determination of solid phases, the method of algebraic extrapolation of tie-lines was used.

SOURCE AND PURITY OF MATERIALS:
C.p. grade salts were recrystallized, dried to the anhydrous state, and stored in a 100°C oven.

ESTIMATED ERROR:
Soly: accuracy within 0.2 %.
Temp: precision ± 0.01 K.
Densities: precision about 0.1 %.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium sulfate; K_2SO_4; [7778-80-5] (2) Potassium bromate; $KBrO_3$; [7758-01-2] (3) Water; H_2O; [7732-18-5]	Ricci, J.E. *J. Am. Chem. Soc.* 1934, *56*, 299-303.
VARIABLES:	**PREPARED BY:**
Composition at 298.15 K	Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of Saturated Solutions at 25.00°C

Potassium Sulfate		Potassium Bromate		Density	Nature of the solid phase[a]
mass %	mol % (compiler)	mass %	mol % (compiler)	g cm^{-3}	
10.76	1.231	0.00	0.00	1.083	A
10.12	1.170	1.69	0.204	1.094	"
9.45	1.10	3.40	0.414	1.103	"
9.34	1.10	4.00	0.490	1.108	A+B
9.36	1.10	4.00	0.490	1.108	"
9.35	1.10	4.01	0.491	1.108	"
(Av) 9.35	1.10	4.00	0.490	1.108	"
8.20	0.954	4.27	0.519	1.100	B
5.44	0.620	5.02	0.597	1.083	"
2.67	0.299	6.08	0.712	1.066	"
0.00	0.00	7.53[b]	0.871	1.054	"

[a] A = K_2SO_4; B = $KBrO_3$

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

soly of $KBrO_3$ = 0.4876 mol kg^{-1}

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The ternary complexes were prepared from weighed amounts of water and the two anhydrous salts: these complexes were rotated in a large thermostat for about two days, a time found to be sufficient for attaining equilibrium.
Samples of the saturated solution were withdrawn by means of a calibrated pipet provided with a folded filter paper at the tip. The bromate was determined by titration with standard sodium thiosulfate solution, and the total solid by evaporation at 100°C and drying at 250°C. Potassium sulfate was found by difference.
For the determination of solid phases, the method of algebraic extrapolation of tie-lines was used.

SOURCE AND PURITY OF MATERIALS:

C.p. grade salts were recrystallized, dried to the anhydrous state, and stored in a 100°C oven.

ESTIMATED ERROR:

Soly: accuracy within 0.2 %.
Temp: precision ± 0.01 K.
Densities: precision about 0.1 %.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium chloride; KCl; [7447-40-7] (2) Potassium bromate; $KBrO_3$; [7758-01-2] (3) Water; H_2O; [7732-18-5]	Ricci, J.E. *J. Am. Chem. Soc.* 1934, *56*, 299-303.
VARIABLES: Composition at 298.15 K	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions at 25.00°C

Potassium Chloride mass %	Potassium Chloride mol % (compiler)	Potassium Bromate mass %	Potassium Bromate mol % (compiler)	Density g cm^{-3}	Nature of the solid phase[a]
26.36	7.961	0.00	0.00	1.179	A
25.93	7.930	1.48	0.202	1.187	"
25.90	7.930	1.61	0.220	1.197	A+B
25.89	7.926	1.60	0.219	1.189	"
25.88	7.923	1.61	0.220	1.190	"
(Av) 25.89	7.926	1.61	0.220	1.192	"
24.87	7.544	1.65	0.223	1.183	B
19.71	5.718	1.97	0.255	1.147	"
14.45	4.020	2.44	0.303	1.112	"
9.03	2.418	3.24	0.387	1.082	"
4.33	1.130	4.63	0.539	1.058	"
0.00	0.00	7.533[b]	0.8712	1.054	"

[a] A = KCl; B = $KBrO_3$

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

soly of $KBrO_3$ = 0.4878 mol kg^{-1}

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
The ternary complexes were prepared from weighed amounts of water and the two anhydrous salts: these complexes were rotated in a large thermostat for about two days, a time found to be sufficient for attaining equilibrium. Samples of the saturated solution were withdrawn by means of a calibrated pipet provided with a folded filter paper at the tip. The bromate was determined by titration with standard sodium thiosulfate solution, and the total solid by evaporation at 100°C and drying at 250°C. Potassium chloride was found by difference. For the determination of solid phases, the method of algebraic extrapolation of tie-lines was used.	C.p. grade salts were recrystallized, dried to the anhydrous state, and stored in a 100°C oven.
	ESTIMATED ERROR: Soly: accuracy within 0.2 %. Temp: precision ± 0.01 K. Densities: precision about 0.1 %.
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromide; KBr; [7758-02-3] (2) Potassium bromate; $KBrO_3$; [7758-01-2] (3) Water; H_2O; [7732-18-5]	Gerasimov, Ya. I. *Zh. Obshch. Khim.* 1934, *4*, 223-7.
VARIABLES: T/K = 273, 293, 313, 333 and 353 Composition	PREPARED BY: Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions

t/°C	Potassium Bromate mass %	Potassium Bromate mol % (compiler)	Potassium Bromide mass %	Potassium Bromide mol % (compiler)	Nature of the solid phase[a]
0	2.96[b]	0.328	-	-	
	0.646	0.100	35.16	7.649	
	0.665	0.103	35.16	7.651	
	0.57	0.088	35.08	7.617	
	-	-	35.30	7.629	
20	6.43[b]	0.736	-	-	
	2.73	0.336	11.80	2.040	
	1.85	0.251	22.20	4.227	
	1.22	0.201	39.26	9.061	
	-	-	39.4	8.96	
40	11.70[b]	1.409	-	-	A
	7.32	0.915	8.50	1.49	"
	4.32	0.594	20.845	4.022	"
	2.60	0.418	35.97	8.109	"
	2.19	0.380	42.34	10.32	A+B
	1.28	0.220	42.44	10.22	B
	0.34	0.058	42.97	10.29	"
	-	-	43.54	10.45	"

continued.....

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
The isothermal method was used. After complexes of salts and water were vigorously stirred for 1.5 to 2.0 hours, equilibrium was established. The bromate content was determined iodometrically. The bromide content was determined by Volhard's method: the solution containing bromide was treated with excess standard silver nitrate solution and the residual silver nitrate determined by titration with standard ammonium thiocynate solution. The determination of the composition of solid phases was not described in the original paper.	No information was given.
	ESTIMATED ERROR: Nothing specified.
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromide; KBr; [7758-02-3]	Gerasimov, Ya. I.
(2) Potassium bromate; $KBrO_3$; [7758-01-2]	*Zh. Obshch. Khim.* 1934, *4*, 223-7.
(3) Water; H_2O; [7732-18-5]	

EXPERIMENTAL VALUES: (Continued)

Composition of saturated solutions

t/°C	Potassium Bromate mass %	Potassium Bromate mol % (compiler)	Potassium Bromide mass %	Potassium Bromide mol % (compiler)	Nature of the solid phase[a]
60	18.21[b]	2.345	-	-	A
	16.43	2.161	3.94	0.727	"
	15.58	2.039	4.35	0.799	"
	14.92	1.942	4.48	0.818	"
	13.14	1.765	9.37	1.766	"
	12.83	1.720	9.52	1.791	"
	12.74	1.716	10.07	1.903	"
	12.09	1.663	12.69	2.449	"
	5.71	0.908	31.90	7.119	"
	3.73	0.684	44.56	11.46	"
	3.70	0.681	44.92	11.61	"
	3.75	0.745	49.93	13.92	"
	3.70	0.684	45.17	11.72	A+B
	-	-	46.2	11.50	B
80	25.53[b]	3.566	-	-	A
	20.74	2.976	7.45	1.50	"
	5.66	1.08	45.57	12.26	"
	5.62	1.09	46.5	12.7	A+B
	-	-	49.72	13.02	B

[a] A = $KBrO_3$; B = KBr

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

soly of $KBrO_3$ = 0.183 mol kg^{-1} at 0°C

= 0.411 mol kg^{-1} at 20°C

= 0.7934 mol kg^{-1} at 40°C

= 1.333 mol kg^{-1} at 60°C

= 2.053 mol kg^{-1} at 80°C

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromide; KBr; [7758-02-3] (2) Potassium bromate; $KBrO_3$; [7758-01-2] (3) Water; H_2O; [7732-18-5]	Ricci, J.E. *J. Am. Chem. Soc.* 1934, 56, 299-303.
VARIABLES: Composition at 298.15 K	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions at 25.00°C

Potassium Bromide mass %	Potassium Bromide mol % (compiler)	Potassium Bromate mass %	Potassium Bromate mol % (compiler)	Density g cm^{-3}	Nature of the solid phase[a]
40.62	9.384	0.00	0.00	1.381	A
40.08	9.347	1.20	0.199	1.389	"
40.00	9.348	1.43	0.238	1.392	A+B
39.99	9.344	1.43	0.238	1.393	"
39.99	9.344	1.43	0.238	1.392	"
(Av) 39.99	9.344	1.43	0.238	1.392	"
34.82	7.639	1.62	0.253	1.328	B
26.05	5.185	2.06	0.292	1.237	"
17.48	3.199	2.73	0.356	1.161	"
7.82	1.32	4.29	0.517	1.089	"
0.00	0.00	7.533[b]	0.8712	1.054	"

[a] A = KBr; B = $KBrO_3$

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

soly of $KBrO_3$ = 0.4878 mol kg^{-1}

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
The ternary complexes were prepared from weighed amounts of water and the two anhydrous salts: these complexes were rotated in a large thermostat for about two days, a time found to be sufficient for attaining equilibrium. Samples of the saturated solution were withdrawn by means of a calibrated pipet provided with a folded filter paper at the tip. The bromate was determined by titration with standard sodium thiosulfate solution, and the total solid by evaporation at 100°C and drying at 250°C. Potassium bromide was found by difference. For the determination of solid phases, the method of algebraic extrapolation of tie-lines was used.	C.p. grade salts were recrystallized, dried to the anhydrous state, and stored in a 100°C oven.
	ESTIMATED ERROR: Soly: accuracy within 0.2 %. Temp: precision ± 0.01 K. Densities: precision about 0.1 %.
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$; [7758-01-2] (2) Potassium iodide; KI; [7681-11-0] (3) Water; H_2O; [7732-18-5]	Ricci, J.E. *J. Am. Chem. Soc.* 1934, *56*, 299-303.
VARIABLES: Composition at 298.15 K	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of Saturated solutions at 25.00°C

Potassium Iodide mass %	Potassium Iodide mol % (compiler)	Potassium Bromate mass %	Potassium Bromate mol % (compiler)	Density g cm^{-3}	Nature of the solid phase[a]
59.76	13.88	0.00	0.00	1.718	A
59.15	13.83	0.96	0.22	1.728	A+B
59.22	13.87	0.96	0.22	1.727	"
59.22	13.87	0.96	0.22	1.730	"
(Av)59.20	13.86	0.96	0.22	1.729	"
58.14	13.34	0.99	0.23	1.707	B
50.06	10.01	1.21	0.240	1.565	"
38.99	6.634	1.63	0.276	1.402	"
28.60	4.277	2.17	0.323	1.278	"
18.85	2.539	2.96	0.396	1.182	"
8.77	1.080	4.54	0.556	1.103	"
0.00	0.00	7.533[b]	0.871	1.054	"

[a] A = KI; B = $KBrO_3$

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

soly of $KBrO_3$ = 0.4878 mol kg^{-1}.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
The ternary complexes were prepared from weighed amounts of water and the two anhydrous salts: these complexes were rotated in a large thermostat for about two days, a time found to be sufficient to reach equilibrium. Samples of the saturated solution were withdrawn with a calibrated pipet provided with a folded filter paper at the tip. The bromate was determined by titration with standard sodium thiosulfate solution, and the total solid by evaporation at 100°C and drying at 250°C. Potassium iodide was found by difference. For the determination of solid phases, the method of algebraic extrapolation of tie-lines was used.	C.p. grade salts were recrystallized, dried to the anhydrous state, and stored in a 100°C oven.
	ESTIMATED ERROR: Soly: accuracy within 0.2 %. Temp: precision ± 0.01 K. Densities: precision about 0.1 %.
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$; [7758-01-2] (2) Rubidium bromate; $RbBrO_3$; [13446-70-3] (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. (Engl. Transl.)* 1971, 2501-4.
VARIABLES: Composition at 298.2 K	PREPARED BY: Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions

t/°C	Potassium Bromate mass %	Potassium Bromate mol % (compiler)	Rubidium Bromate mass %	Rubidium Bromate mol % (compiler)	m[a] mol kg^{-1}	y_1[b]
25	7.53[c]	0.871	0.00	0.00	0.488	1.00
	6.68	0.769	0.43	0.039	0.452	0.95
	5.74	0.657	0.68	0.061	0.412	0.91
	4.94	0.563	0.97	0.086	0.362	0.87
	3.94	0.446	1.25	0.111	0.313	0.80
	2.88	0.324	1.69	0.149	0.262	0.69
	2.25	0.252	1.80	0.158	0.227	0.61
	1.54	0.172	1.99	0.174	0.198	0.50
	1.01	0.112	2.23	0.194	0.171	0.37
	0.49	0.054	2.46	0.213	0.151	0.20
	0.0	0.0	2.83[c]	0.245	0.136	0.0

[a] m = the total molality of the salts in liquid phase.

[b] y_1 = the mole fraction of $KBrO_3$ based on total bromate content.

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

soly of $KBrO_3$ = 0.488 mol kg^{-1}

soly of $RbBrO_3$ = 0.136 mol kg^{-1}

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:
The solubility was studied by the isothermal relief of supersaturation followed by mixing of the solid phase and mother liquor for 24 hours at 25°C. To verify the solubility of the method used to establish equilibrium, the solubilities for several points were detd by the method of isothermal saturation with mixing for 30 days.
The number of moles of the anion (n_1) were detd by iodometric titrn. Alkali metal contents were determined in the same samples by flame photometry from three parallel analyses. In each analysis the authors calculated the sum of the moles of the cations (n_2).
The composition of the solid phase was detd by the Schreinemakers' method of residues. A phase diagram indicating the existence of a hydrate was not given in the original paper. Densities of the saturated solutions at 25°C were determined, but the data were not given.

SOURCE AND PURITY OF MATERIALS:
C.p. grade $KBrO_3$ and $RbBrO_3$ were recrystallized from double distilled water.

ESTIMATED ERROR:

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$; [7758-01-2] (2) Cesium bromate; $CsBrO_3$; [13454-75-6] (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

t/°C	Potassium Bromate mass %	Potassium Bromate mol % (compiler)	Cesium Bromate mass %	Cesium Bromate mol % (compiler)	y_1[a]	m[b]	Nature of the solid phase[c]
25	0.00	0.0	3.66[d]	0.262	0.0	0.146	A
	0.33	0.037	3.44	0.246	0.13	0.153	"
	0.68	0.076	3.21	0.230	0.25	0.170	"
	1.19	0.135	3.92	0.284	0.39	0.191	"
	1.70	0.191	2.64	0.190	0.50	0.212	"
	2.36	0.266	2.37	0.171	0.61	0.244	"
	4.04	0.461	1.98	0.145	0.76	0.338	"
	5.28	0.608	1.80	0.133	0.82	0.414	"
	6.04	0.700	1.71	0.127	0.85	0.464	"
	7.03	0.822	1.60	0.120	0.87	0.528	"
	7.12	0.834	1.61	0.121	0.87	0.535	"
	7.22	0.845	1.53	0.115	0.88	0.538	A+B
	7.38	0.861	1.02	0.0762	0.92	0.525	B
	7.49[d]	0.866	0.0	0.0	1.00	0.485	"

[a] y_1 = the mole fraction of $KBrO_3$ based only on total bromate composition.

[b] m = the total molality of the salts in liquid phase.

[c] A = $CsBrO_3$; B = $KBrO_3$

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

soly of $KBrO_3$ = 0.485 mol kg^{-1}; soly of $CsBrO_3$ = 0.146 mol kg^{-1}.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The isothermal relief of supersaturation method was employed. The supersaturated solutions were stirred for 7-8 hours. The composition of the coexisting phases was determined by the method of indirect analyses (ref 1 and 2), the parameters measured being the sum of the salts and the total number of moles of salt determined by an ion-exchange method.

SOURCE AND PURITY OF MATERIALS:

Analytical reagent grade $KBrO_3$ and $CsBrO_3$ were recrystallized from double-distilled water.

ESTIMATED ERROR:

Soly: the accuracy in determining y_1 was within 5 %.

Temp: precision ± 0.1 K.

REFERENCES:

1. Kirgintsev, A.I.; Kashina, N.I.; Vulikh, A.I.; Korotkevich, B.I. *Zh. Neorg. Khim.* 1965, *10*, 1225; *Russ. J. Inorg. Chem. (Engl. Transl.)* 1965, *10*, 662.
2. Kirgintsev, A.I.; Trushnikova, L.N. *Zh. Neorg. Khim.* 1963, *13*, 2843; *Russ. J. Inorg. Chem. (Engl. Transl.)* 1963, *13*, 1591.

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$; [7758-01-2] (2) Barium bromate; $Ba(BrO_3)_2$; [13967-90-3] (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:	PREPARED BY:
Composition at 298 K	Hiroshi Miyamoto

EXPERIMENTAL VALUES:

Composition of saturated solutions

Barium Bromate mass %	Barium Bromate mol % (compiler)	Potassium Bromate mass %	Potassium Bromate mol % (compiler)	Nature of the solid phase[a]
0.79[b]	0.036	--	--	A
0.098	0.0046	1.52	0.166	"
0.33	0.016	3.88	0.435	"
trace	-	4.90	-	"
trace	-	7.09	-	"
0.57	0.028	6.96	0.805	A+B
0.37	0.018	7.44	0.863	"
0.023	0.0011	7.62	0.882	"
0.47	0.023	7.49	0.870	"
--	--	7.49[b]	0.866	B

[a] A = $Ba(BrO_3)_2.H_2O$; B = $KBrO_3$

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

soly of $KBrO_3$ = 0.485 mol kg^{-1}

soly of $Ba(BrO_3)_2$ = 0.020 mol kg^{-1}

AUXILIARY INFORMATION

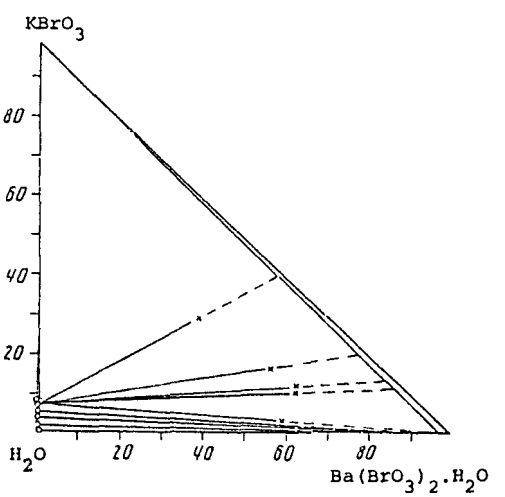
METHOD/APPARATUS/PROCEDURE:
Probably the isothermal method was used. Equilibrium was reached in 10-12 days. The potassium content was detd gravimetrically with sodium tetraphenylborate. The bromate concentration was detd by iodometric titrn using sodium thiosulfate.
The barium content was detd gravimetrically as the sulfate. The compositionsof the solid phases were determined by Schreinemakers' method of residues, and by X-ray diffraction.

SOURCE AND PURITY OF MATERIALS:
"Analytical grade" potassium bromate was used. Barium bromate monohydrate was prepd by mixing solns of $KBrO_3$ and $BaCl_2$. The formula of the salt obtained was determined by chemical analysis and checked by X-ray diffraction.

ESTIMATED ERROR:

Nothing specified.

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



COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$; [7758-01-2] (2) Yttrium bromate; $Y(BrO_3)_3$; [15162-95-5] (3) Water; H_2O; [7732-18-5]	Serebrennikov, V.V.; Batyreva, V.A.; Larionova, I.S. *Zh. Neorg. Khim.* 1982, 27, 2959-61; *Russ. J. Inorg. Chem.* (*Engl. Transl.*) 1982, 27, 1677-9.
VARIABLES:	PREPARED BY:
Composition at 298 K	Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions

Yttrium Bromate mass %	Yttrium Bromate mol % (compiler)	Potassium Bromate mass %	Potassium Bromate mol % (compiler)	Nature of the solid phase[a]
45.5[b]	3.08	0.0	0.00	A
48.6	3.52	0.7	0.14	A+B
49.3	3.62	0.7	0.15	"
47.3	3.36	0.9	0.18	"
48.7	3.55	1.0	0.21	"
48.6	3.54	1.0	0.21	"
48.6	3.53	0.9	0.19	"
47.3	3.37	1.1	0.22	"
45.1	3.09	1.2	0.23	B
42.4	2.88	3.4	0.65	"
37.7	2.33	2.3	0.40	"
23.4	1.27	7.9	1.21	"
2.3	0.097	8.1	0.96	"
0.0	0.00	7.7[b]	0.89	"

[a] A = $Y(BrO_3)_3.9H_2O$; B = $KBrO_3$

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

soly of $KBrO_3$ = 1.77 mol kg^{-1}

soly of $Y(BrO_3)_3$ = 0.50 mol kg^{-1}

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:
The solubility was probably studied by the isothermal method. Mixtures of the salts and water were continuously stirred in glass bottles for seven days. The potassium bromate content in the liquid phase was determined by flame photometry, and yttrium bromate was determined complexometrically. The composition of the solid phase was determined by X-ray analysis.

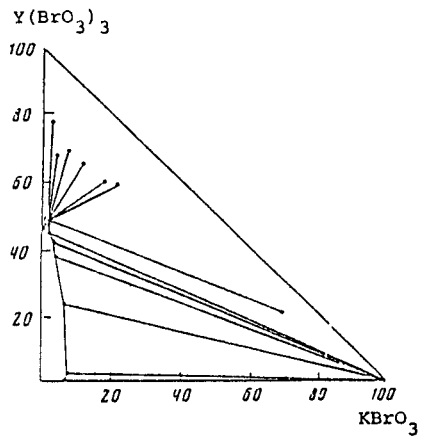
SOURCE AND PURITY OF MATERIALS:

Nothing specified.

ESTIMATED ERROR:

Nothing specified.

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



COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$; [7758-01-2] (2) Samarium bromate; $Sm(BrO_3)_3$; [28958-26-1] (3) Water; H_2O; [7732-18-5]	Serebrennikov, V.V.; Batyreva, V.A.; Larionova, I.S. *Zh. Neorg. Khim.* 1982 27, 2959-61; *Russ. J. Inorg. Chem.* (*Engl. Transl.*) 1982, 27, 1677-9.
VARIABLES:	**PREPARED BY:**
Composition at 298 K	Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions at 25°C

Samarium Bromate mass %	Samarium Bromate mol % (compiler)	Potassium Bromate mass %	Potassium Bromate mol % (compiler)	Nature of the solid phase[a]
41.4[b]	2.33	0.0	0.00	A
40.3	2.25	0.6	0.11	A+B
40.0	2.23	1.1	0.20	"
39.9	2.24	1.4	0.25	"
39.9	2.24	1.6	0.29	"
40.3	2.29	1.9	0.35	"
38.3	2.10	1.7	0.30	"
38.9	2.15	1.7	0.30	"
42.6	2.62	4.4	0.86	"
39.6	2.22	1.8	0.32	"
39.4	2.20	1.7	0.30	"
40.3	2.29	1.8	0.33	"
44.8	2.75	2.0	0.39	"
40.0	2.26	1.9	0.34	B
38.3	2.11	2.1	0.37	"
28.7	1.39	2.7	0.42	"
19.3	0.83	3.6	0.50	"
12.5	0.50	4.1	0.52	"
4.7	0.18	5.7	0.68	"
0.0	0.00	7.7[b]	0.89	"

[a] A = $Sm(BrO_3)_3.9H_2O$; B = $KBrO_3$

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

soly of $KBrO_3$ = 1.77 mol kg^{-1}

soly of $Sm(BrO_3)_3$ = 1.32 mol kg^{-1}

METHOD/APPARATUS/PROCEDURE:

The solubility was probably studied by the isothermal method. Mixtures of the salts and water were continuously stirred in glass bottles for seven days.

The potassium bromate content in the liquid phase was determined by flame photometry, and samarium bromate was determined spectrophotometrically. The composition of the solid phases were determined by X-ray analysis.

SOURCE AND PURITY OF MATERIALS:

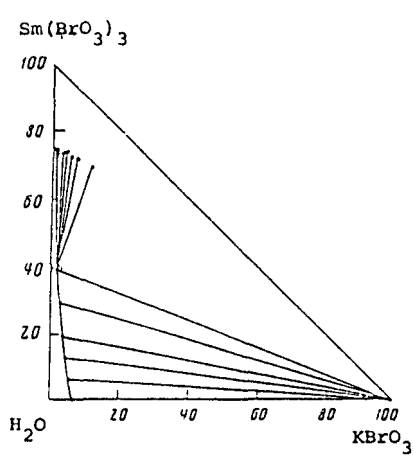
Nothing specified.

ESTIMATED ERROR:

Nothing specified.

COMMENTS AND/OR ADDITIONAL DATA:

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



COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$ [7758-01-2] (2) Silver bromate; $AgBrO_3$; [7783-89-3] (3) Water; H_2O; [7732-18-5]	Ricci, J. E.; Offenbach, J. A. *J. Am. Chem. Soc.* 1951, 73, 1597-9.
VARIABLES: Composition T/K = 298	**PREPARED BY:** H. Miyamoto and M. Salomon

EXPERIMENTAL VALUES:

Composition of Saturation Solutions at 25°C[a]

$KBrO_3$ mass %	$KBrO_3$ mol %	$AgBrO_3$ mass %	$AgBrO_3$ mole %	Density g/cm^3	Solid Phase
0	0	0.193[c]	0.01477	0.9983	$AgBrO_3$
3.21		Not given	Not given	1.022	"
5.70		Not given	Not given	1.049	"
7.03		Not given	Not given	1.050	"
7.52		Not given	Not given	1.054	$AgBrO_3$ + $KBrO_3$
7.57		Not given	Not given	1.052	"
7.56		Not given	Not given	1.053	"
7.55		Not given	Not given	1.054	"
7.52[b]	0.8696			1.053	$KBrO_3$

[a] Mole % calculated by compilers.

[b] Solubility of $KBrO_3$ = 0.4869 mol kg^{-1}

[c] Solubility of $AgBrO_3$ = 0.008202 mol kg^{-1}

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

Ternary mixtures, $AgBrO_3$-$KBrO_3$-H_2O, of known composition were made to come to come to equilibrium at 25°C. The mixture was stirred for 2 weeks. The solution was simply evaporated to dryness for its $KBrO_3$ content since the solubility of $AgBrO_3$ in the presence of $KBrO_3$ was found to be negligible. The determination method of $AgBrO_3$ in solution was not given, but it was probably by Volhard titration with KSCN since this was the method used for $AgClO_3$-$NaClO_3$-H_2O system reported in the same paper.

SOURCE AND PURITY OF MATERIALS:

$AgBrO_3$ was prepared by adding a dilute sln of bromic acid to Ag_2CO_3 in the presence of HNO_3. After some heating and digestion, the solid was washed with water, and finally dried at 110°C. The two batches prepared gave 99.93 and 99.75% $AgBrO_3$ by Br analysis. Ag_2CO_3 was made by addition of Na_2CO_3 to an excess of an aqueous $AgNO_3$ solution. Bromic acid solution was made from dilute H_2SO_4 and solid $Ba(BrO_3)_2.H_2O$. $KBrO_3$ purity was 99.97%.

ESTIMATED ERROR:

Nothing specified in original article.
Soly: ± .01 mass % (compiler)
Temp: precision probably better than 0.1 K (compiler).

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$; [7758-01-2] (2) Alcohols (3) Water; H_2O; [7732-18-5]	Rothmund, V. *Z. Physik. Chem.* 1909, *69*, 523-46.
VARIABLES: T/K = 298 Composition	**PREPARED BY:** Hiroshi Miyamoto and Mark Salomon

EXPERIMENTAL VALUES:

Composition of Solvent			soly of $KBrO_3$/mol dm^{-3}
pure water			0.478
binary mixtures containing 0.5 mol dm^{-3} of the following:			
methanol;	CH_4O;	[67-56-1]	0.444
ethanol;	C_2H_6O;	[64-17-5]	0.421
1,2-ethanediol; (ethylene glycol)	$C_2H_6O_2$;	[107-21-1]	0.448
1-propanol;	C_3H_8O;	[71-23-8]	0.409
1,2,3-propanetriol; (glycerol)	$C_3H_8O_3$;	[56-81-5]	0.451
2-methyl-2-butanol;	$C_5H_{12}O$;	[75-85-4]	0.383

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The salt and solvent were placed in a bottle sealed with a rubber stopper, and rotated in a thermostat for at least 14 hours. After the saturated solutions were allowed to settle, aliquots of saturated solution were withdrawn with a pipet fitted with a glass-wool or cotton-wool filter. The bromate content was determined by iodometric titration.

SOURCE AND PURITY OF MATERIALS:

Potassium bromate was repeatedly recrystallized.
No information of the source and purity of the solvents was given.

ESTIMATED ERROR:

Nothing specified.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$; [7758-01-2] (2) Ethyl ether; $C_4H_{10}O$; [60-29-7] (3) Water; H_2O; [7732-18-5]	Rothmund, V. *Z. Physik. Chem.* 1909, *69*, 523-46
VARIABLES: T/K = 298 Concentration of ethyl ether	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES:

Concn ethyl ether/mol dm^{-3}	soly of $KBrO_3$/mol dm^{-3}
0	0.478
0.5	0.395

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The salt and solvent were placed in a bottle, sealed with a rubber stopper, and rotated in a thermostat for at least 14 hours. After the saturated solution was allowed to settle, aliquots were withdrawn with a pipet fitted with a glass-wool or cotton-wool filter. The bromate content was determined by iodometric titration.

SOURCE AND PURITY OF MATERIALS:

Potassium bromate was repeatedly recrystallized.
No information of the source and purity of the solvents was given.

ESTIMATED ERROR:

Nothing specified.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$; [7758-01-2] (2) Sugars (3) Water; H_2O; [7732-18-5]	Rothmund, V. *Z. Physik. Chem.* 1909, *69*, 523-46.
VARIABLES: T/K = 298 Composition	**PREPARED BY:** Hiroshi Miyamoto and Mark Salomon

EXPERIMENTAL VALUES:

Composition of Solvent			Soly of $KBrO_3$/ mol dm^{-3}
pure water			0.478
binary mixtures containing 0.5 mol dm^{-3} of the following:			
D-glucose;	$C_6H_{12}O_6$;	[50-99-7]	0.463
D-mannitol;	$C_6H_{14}O_6$;	[69-65-8]	0.451

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The salt and solvent were placed in a bottle, sealed with a rubber stopper, and rotated in a thermostat for at least 14 hours. After the saturated solutions were allowed to settle, aliquots were withdrawn with a pipet fitted with a glass-wool or cotton-wool filter.
The bromate content was determined by iodometric titration.

SOURCE AND PURITY OF MATERIALS:

Potassium bromate was repeatedly recrystallized.
No information of the source and purity of the solvents was given.

ESTIMATED ERROR:

Nothing specified.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$; [7758-01-2] (2) Formaldehyde; CH_2O; [50-00-0] (3) Water; H_2O; [7732-18-5]	Rothmund, V. *Z. Physik. Chem.* 1909, *69*, 523-46.
VARIABLES: T/K = 298 Concentration of formaldehyde	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES:

Formaldehyde concn/mol dm^{-3}	soly of $KBrO_3$/mol dm^{-3}
0	0.478
0.5	0.397

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The salt and solvent were placed in a bottle, sealed with a rubber stopper, and rotated in a thermostat for at least 14 hours.
After the saturated solution was allowed to settle, aliquots of the saturated solution were withdrawn with a pipet fitted with a glass-wool or cotton-wool filter.
The bromate content was determined by iodometric titration.

SOURCE AND PURITY OF MATERIALS:

Potassium bromate was repeatedly recrystallized.
No information of the source and purity of the solvents was given.

ESTIMATED ERROR:

Nothing specified.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_4$; [7758-01-2] (2) 2-Propanone (acetone); C_3H_6O; [67-64-1] (3) Water; H_2O; [7732-18-5]	Rothmund, V. *Z. Physik. Chem.* 1909, *69*, 523-46.
VARIABLES: T/K = 298 Concentration of acetone	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES:

Concn acetone/mol dm^{-3}	soly of $KBrO_3$/mol dm^{-3}
0	0.478
0.5 mol dm^{-3} soln	0.425

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The salt and solvent were placed in a bottle, sealed with a rubber stopper, and rotated in a thermostat for at least 14 hours.
After the saturated solution was allowed to settle, aliquots were withdrawn with a pipet fitted with a glass-wool or cotton-wool filter.
The bromate content was determined by iodometric titration.

SOURCE AND PURITY OF MATERIALS:

Potassium bromate was repeatedly recrystallized.
No information of the source and purity of the solvents was given.

ESTIMATED ERROR:

Nothing specified.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$; [7758-01-2] (2) Acids (3) Water; H_2O; [7732-18-5]	Rothmund, V. Z. *Physik. Chem.* 1909, *69*, 523-46.
VARIABLES: T/K = 298 Composition	**PREPARED BY:** Hiroshi Miyamoto and Mark Salomon

EXPERIMENTAL VALUES:

Composition of Solvent			Soly of $KBrO_3$/mol dm^{-3}
pure water			0.478
binary mixtures containing 0.5 mol dm^{-3} of the following:			
acetic acid;	C_2H_2O;	[64-19-7]	0.456
glycine; (aminoacetic acid)	$C_2H_5NO_2$;	[56-40-6]	0.501

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
The salt and solvent were placed in a bottle, sealed with a rubber stopper, and rotated in a thermostat for at least 14 hours. After the saturated solutions were allowed to settle, aliquots were withdrawn with a pipet fitted with a glass-wool or cotton-wool filter. The bromate content was determined by iodometric titration.	Potassium bromate was repeatedly recrystallized. No information of the source and purity of the solvents was given.
	ESTIMATED ERROR: Nothing specified.
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$; [7758-01-2] (2) Phenol; C_6H_6O; [108-95-2] (3) Water; H_2O; [7732-18-5]	Rothmund, V. *Z. Physik. Chem.* 1909, *69*, 523-46.
VARIABLES:	**PREPARED BY:**
One temperature: 298 K Concentration of phenol	Hiroshi Miyamoto

EXPERIMENTAL VALUES:

Concn of phenol/mol dm^{-3}	soly of $KBrO_3$/mol dm^{-3}
0	0.478
0.5 mol dm^{-3}	0.426

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The salt and solvent were placed in a bottle, sealed with a rubber stopper, and rotated in a thermostat for at least 14 hours.
After the saturated solution was allowed to settle, aliquots of saturated solution were withdrawn with a pipet fitted with a glass-wool or cotton-wool filter.
The bromate content was determined by iodometric titration.

SOURCE AND PURITY OF MATERIALS:

Potassium bromate was repeatedly recrystallized.
No information of the source and purity of the solvent was given.

ESTIMATED ERROR:

Nothing specified.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$; [7758-01-2] (2) Acetic acid, methyl ester (methyl acetate); $C_3H_6O_2$; [79-20-9] (3) Water; H_2O; [7732-18-5]	Rothmund, V. *Z. Physik. Chem.* 1909, *69*, 523-46.
VARIABLES: T/K = 298 Concentration of methyl acetate	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES:

Concn methyl acetate/mol dm^{-3}	soly of $KBrO_3$/mol dm^{-3}
0	0.478
0.5	0.420

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
The salt and solvent were placed in a bottle, sealed with a rubber stopper, and rotated in a thermostat for at least 14 hours. After the saturated solution was allowed to settle, aliquots were withdrawn with a pipet fitted with a glass-wool or cotton-wool filter. The bromate content was determined by iodometric titration.	Potassium bromate was repeatedly recrystallized. No information of the source and purity of the solvents was given.
	ESTIMATED ERROR:
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$; [7758-01-2] (2) Amines (3) Water; H_2O; [7732-18-5]	Rothmund, V. *Z. Physik. Chem.* 1909, *69*, 523-46.
VARIABLES: T/K = 298 Composition	**PREPARED BY:** Hiroshi Miyamoto and Mark Salomon

EXPERIMENTAL VALUES:

Composition of Solvent			soly of $KBrO_3$/mol dm^{-3}
pure water			0.478
binary mixtures containing 0.5 mol dm^{-3} of the following:			
diethylamine;	C_4H_4N;	[109-89-7]	0.384
pyridine;	C_5H_5N;	[110-86-1]	0.415
piperidine;	$C_5H_{11}N$;	[110-89-4]	0.396

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The salt and solvent were placed in a bottle, sealed with a rubber stopper, and rotated in a thermostat for at least 14 hours.
After the saturated solutions were allowed to settle, aliquots were withdrawn with a pipet fitted with a glass-wool or cotton-wool filter.
The bromate content was determined by iodometric titration.

SOURCE AND PURITY OF MATERIALS:

Potassium bromate was repeatedly recrystallized.
No information of the source and purity of the solvents was given.

ESTIMATED ERROR:

Nothing specified.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$; [7758-01-2] (2) Dimethylpyrone; $C_7H_8O_2$; [?][a] (3) Water; H_2O; [7732-18-5]	Rothmund, V. *Z. Physik. Chem.* 1909, *69*, 523-46.
VARIABLES: T/K = 298 Concentration of dimethylpyrone	**PREPARED BY:** Hiroshi Miyamoto

EXPERIMENTAL VALUES:

concn of dimethylpyrone / mol dm^{-3}	soly of $KBrO_3$/mol dm^{-3}
0	0.478
0.5	0.478

[a] There are nine isomers of dimethylpyrone, and the author did not specify which isomer was used. The isomer listed in the Aldrich Catalog is 2,6-dimethyl-γ-pyrone (2,6-dimethyl-4H-pyran-4-one): [1004-36-0]. Other isomers are:

2,3-dimethyl-4H-pyran-4-one [73761-48-5]
2,5-dimethyl-4H-pyran-4-one [?]
3,5-dimethyl-4H-pyran-4-one [19083-61-5]
3,4-dimethyl-2H-pyran-2-one [62968-83-6]
3,5-dimethyl-2H-pyran-2-one [63233-31-8]
3,6-dimethyl-2H-pyrane-2-one [53034-20-1]
4,5-dimethyl-2H-pyran-2-one [61906-92-1]
4,6-dimethyl-2H-pyran-2-one [645-09-2]

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The salt and solvent were placed in a bottle, sealed with a rubber stopper, and rotated in a thermostat for at least 14 hours. After the saturated solution was allowed to settle, aliquots were withdrawn with a pipet fitted with a glass-wool or cotton-wool filter. The bromate content was determined by iodometric titration.

SOURCE AND PURITY OF MATERIALS:

Potassium bromate was repeatedly recrystallized.
No information of the source and purity of the solvents was given.

ESTIMATED ERROR:

Nothing specified.

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Potassium bromate; $KBrO_3$; [7758-01-2] (2) Ammonia and amides (3) Water; H_2O; [7732-18-5]	Rothmund, V. *Z. Physik. Chem.* 1909, *69*, 523-46.
VARIABLES: T/K = 298 Composition	**PREPARED BY:** Hiroshi Miyamoto and Mark Salomon

EXPERIMENTAL VALUES:

Composition of Solvent			Soly of $KBrO_3$/mol dm^{-3}
pure water			0.478
Binary mixtures containing 0.5 mol dm^{-3} of the following:			
ammonia;	NH_3;	[7664-41-7]	0.445
formamide;	CH_3NO;	[75-12-7]	0.473
acetamide;	C_2H_5NO;	[60-35-5]	0.445
urea;	CH_4N_2O;	[57-13-6]	0.477
ethyl carbamate; (urethane)	$C_3H_7NO_2$;	[51-79-6]	0.433

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
The salt and solvent were placed in a bottle sealed with a rubber stopper, and rotated in a thermostat for at least 14 hours. After the saturated solutions were allowed to settle, aliquots of saturated solution were withdrawn with a pipet fitted with a glass-wool or cotton-wool filter. The bromate content was determined by iodometric titration.	Potassium bromate was repeatedly recrystallized. No information of the source and purity of the solvents was given.
	ESTIMATED ERROR: Nothing specified.
	REFERENCES: