COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Rubidium bromate; $RbBrO_3$; [13446-70-3]	Kirgintsev, A.N.; Shklovskaya, R.M.; Arkhipov, S.M.
(2) Cesium bromate; $CsBrO_3$; [13454-75-6]	*Izv. Acad. Nauk SSSR Ser. Khim.* 1971, 2631-4; *Bull. Acad. Sci. USSR Div. Chem. Sci. (Engl. Transl.)* 1971, 2501-4.
(3) Water; H_2O; [7732-18-5]	

VARIABLES:	PREPARED BY:
Composition at 298.2 K	Hiroshi Miyamoto

EXPERIMENTAL VALUES: Composition of saturated solutions at 25.0°C

Rubidium Bromate		Cesium Bromate		m^a	y_1^b
mass %	mol % (compiler)	mass %	mol % (compiler)	mol kg^{-1}	
2.83[c]	0.245	0.00	0.00	0.136	1.00
2.56	0.222	0.50	0.036	0.148	0.86
2.52	0.220	1.06	0.0757	0.166	0.74
2.18	0.191	1.49	0.107	0.169	0.64
2.01	0.176	2.02	0.145	0.176	0.55
1.83	0.160	2.13	0.153	0.182	0.51
1.63	0.143	2.47	0.177	0.179	0.45
1.23	0.108	2.81	0.202	0.172	0.35
0.81	0.071	3.09	0.221	0.164	0.24
0.44	0.038	3.23	0.231	0.152	0.14
0.00	0.000	3.71[c]	0.265	0.148	0.00

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

[b] y_1 = the mole fraction of $RbBrO_3$ based on total salts.

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

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

soly of $CsBrO_3$ = 0.148 mol kg^{-1}

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
Isothermal relief of supersaturation method. Super saturated solutions were prepared, and the solid and liquid phases separated. The mother liquor was equilibrated at 25°C for 24 hours. The number of moles of the anion was determined by iodometric titration. Alkali metal contents were determined in the same sample by the method of flame photometry from three parallel analyses. In each analysis the authors calculated the sum of cations. The composition of the solid phases was established by the Schreinemakers' method of residues. The authors did not give a phase diagram.	C.p. grade $RbBrO_3$ and $CsBrO_3$ were recrystallized from double distilled water.
	ESTIMATED ERROR: Soly: precision within 2 %. Temp: precision ± 0.1 K.
	REFERENCES: