

COMPONENTS: 1. Potassium sulfite; K_2SO_3 ; [10117-38-1] 2. Potassium carbonate; K_2CO_3 ; [584-08-7] 3. Potassium sulfate; K_2SO_4 ; [7778-80-5] 4. Water; H_2O ; [7732-18-5]	ORIGINAL MEASUREMENTS: Kuznetsova, A.G.; Trukhanova, E.A. *VINITI Deposited Document <u>1983</u> , 6890-83.																																																																								
VARIABLES: Temperature: 293 K Composition	PREPARED BY: Mary R. Masson																																																																								
EXPERIMENTAL VALUES: <p style="text-align: center;"><u>Composition of saturated solutions</u></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>K_2SO_3</th> <th>K_2CO_3</th> <th>K_2SO_4</th> <th>$K_2SO_3^a$</th> <th>$K_2CO_3^a$</th> <th>$K_2SO_4^a$</th> </tr> <tr> <th>mass %</th> <th>mass %</th> <th>mass %</th> <th>mol/kg</th> <th>mol/kg</th> <th>mol/kg</th> </tr> </thead> <tbody> <tr><td>41.2</td><td>13.0</td><td>1.90</td><td>5.930</td><td>2.143</td><td>0.248</td></tr> <tr><td>32.4</td><td>15.1</td><td>2.17</td><td>4.068</td><td>2.171</td><td>0.247</td></tr> <tr><td>30.3</td><td>30.3</td><td>1.09</td><td>4.998</td><td>5.723</td><td>0.163</td></tr> <tr><td>25.5</td><td>30.0</td><td>1.27</td><td>3.727</td><td>5.021</td><td>0.169</td></tr> <tr><td>15.3</td><td>38.9</td><td>1.00</td><td>2.158</td><td>6.282</td><td>0.128</td></tr> <tr><td>13.9</td><td>41.4</td><td>1.63</td><td>2.039</td><td>6.955</td><td>0.217</td></tr> <tr><td>6.02</td><td>48.0</td><td>1.46</td><td>0.854</td><td>7.801</td><td>0.188</td></tr> <tr><td>40.9</td><td>0.</td><td>1.43</td><td>4.481</td><td>0.</td><td>0.142</td></tr> <tr><td>0.</td><td>53.2</td><td>0.023</td><td>0.</td><td>8.229</td><td>0.003</td></tr> <tr><td>6.16</td><td>51.0</td><td>0.</td><td>0.909</td><td>8.614</td><td>0.</td></tr> </tbody> </table> <p>^a Molalities calculated by the compiler.</p> <p>Note: compositions of "wet residues" are also given in the original paper.</p>		K_2SO_3	K_2CO_3	K_2SO_4	$K_2SO_3^a$	$K_2CO_3^a$	$K_2SO_4^a$	mass %	mass %	mass %	mol/kg	mol/kg	mol/kg	41.2	13.0	1.90	5.930	2.143	0.248	32.4	15.1	2.17	4.068	2.171	0.247	30.3	30.3	1.09	4.998	5.723	0.163	25.5	30.0	1.27	3.727	5.021	0.169	15.3	38.9	1.00	2.158	6.282	0.128	13.9	41.4	1.63	2.039	6.955	0.217	6.02	48.0	1.46	0.854	7.801	0.188	40.9	0.	1.43	4.481	0.	0.142	0.	53.2	0.023	0.	8.229	0.003	6.16	51.0	0.	0.909	8.614	0.
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METHOD APPARATUS/PROCEDURE: Isothermal method. <div style="text-align: center; margin-top: 20px;"> </div>	SOURCE AND PURITY OF MATERIALS: ESTIMATED ERROR: No estimates possible. REFERENCES:																																																																								