

COMPONENTS: (1) Benzoic acid, 4-[[4-(aminosulfonyl)-phenyl]azo]-2-hydroxy-, monopotassium salt; $C_{13}H_{10}KN_3O_5S$; [77400-72-7] (2) 2-Propanone (acetone); C_3H_6O ; [67-64-1]				ORIGINAL MEASUREMENTS: Gutierrez, F. H. <i>Anales fis. quim. (Madrid)</i> <u>1945</u> , <u>41</u> , 537-60.			
VARIABLES: Temperature				PREPARED BY: R. Piekos			
EXPERIMENTAL VALUES:							
$t/^\circ C$	G^a	E^b	$X_g/1^c$	mol/l ^d acetone	mmol/mol acetone	$1:X_g^e$	$1 + X_{cc}^f$
0	0.265	0.264	2.159	6.07	0.38	377.36	462.96
5	0.272	0.271	2.200	6.12	0.39	367.65	454.55
10	0.286	0.285	2.297	6.39	0.42	349.63	434.83
15	0.301	0.300	2.399	6.67	0.44	332.22	416.66
20	0.315	0.314	2.492	6.93	0.46	317.46	405.29
25	0.344	0.343	2.701	7.51	0.51	290.69	370.23
30	0.365	0.364	2.842	7.91	0.53	273.97	351.87
35	0.376	0.374	2.908	8.74	0.55	265.95	343.88
40	0.421	0.419	3.231	8.98	0.62	237.22	309.50
45	0.444	0.442	3.381	9.41	0.65	225.22	295.77
50	0.479	0.477	3.619	10.04	0.70	208.75	276.32
<p>^a $G = \frac{p \cdot 100}{P - p}$, where p and P are the weights of solute and solution, resp.</p> <p>^b $E = \frac{G \cdot 100}{B + 100}$; ^c g/l acetone/ ^d Should be mmol/l acetone (compiler);</p> <p>^e g of acetone required to dissolve 1 g of solute;</p> <p>^f volume (cm³) of acetone required to dissolve 1 g of solute.</p>							
AUXILIARY INFORMATION							
METHOD/APPARATUS/PROCEDURE: A special all-glass app was constructed enabling the prepn of satd solns, agitation by bubbling a stream of acetone-satd N, filtration, and distn off the solvent without contact with air. Two exchangeable dissoln vessels of 15 and 8 cm ³ working capacity were used depending on the soly of solute. The app was immersed in a thermostat. The vols of acetone used were 15 or 8 cm ³ , and the equilibration time was 2-2.5 h. The satd solns were filtered, weighed, the solvent was dist off, the residues were dried at 105 ^o C, weighed, and examd for the presence of solvated acetone.				SOURCE AND PURITY OF MATERIALS: The source of the materials was not specified. Pure, anhyd acetone was used. The absence of impurities and water in it was confirmed by procedures of the German Pharmacopeia VI and Spanish Pharmacopeia VIII. The purity of the solute was not specified.			
				ESTIMATED ERROR: Soly: measurements were repeated until 2 values not differing in the second decimal were obtained (author). Temp: $\pm 0.1^\circ C$ (author).			
				REFERENCES:			