COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Benzenesulfonamide, 4-[(2,4-diamino-phenyl)azo]- (Prontosil); $C_{12}H_{13}N_5O_2S$; [103-12-8] (2) 2-Propanone (acetone); C_3H_6O; [67-64-1]	Gutierrez, F. H. *Anales fis. quim. (Madrid)* 1945, 41, 537-60.

VARIABLES:	PREPARED BY:
Temperature	R. Piekos

EXPERIMENTAL VALUES:

$t/°C$	G^a	E^b	x_g/l^c	mol/l^d acetone	mmol/mol acetone	$1:x_g^e$	$1 + x_{cc}^f$
0	8.046	7.428	65.543	222	16.0	12.43	15.26
5	8.227	7.601	66.540	225	16.4	12.15	15.03
10	8.599	7.918	69.550	238	17.1	11.63	14.38
15	8.899	8.171	70.934	243	17.7	11.23	14.09
20	9.205	8.429	72.828	250	18.3	10.87	13.73
25	9.705	8.846	76.204	262	19.3	10.30	13.12
30	10.214	9.267	79.528	273	20.3	9.79	12.57
35	10.617	9.598	82.101	281	21.1	9.43	12.18
40	11.141	10.024	85.496	293	22.2	8.97	11.69
45	11.516	10.326	87.683	301	22.9	8.68	11.41
50	12.101	10.794	91.423	313	24.1	8.26	10.93

a $G = \dfrac{p\ 100}{P - p}$, where p and P are the weights of solute and solution, resp.

b $E = \dfrac{G\ 100}{G + 100}$; $\quad c$ g/l acetone; $\quad d$ should be mmol/l (compiler);

e g of acetone required to dissolve 1 g of solute;

f volume (cm^3) of acetone required to dissolve 1 g of solute.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
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 5 cm^3, and the equilibration time was 2-2.5 h. The satd solns were filtered, weighed, the solvent was distd off, the residues were dried at 105°C, weighed, and examd for the presence of solvated acetone.	The source of the materials was not specified. Pure, anhyd acetone was used. The absence of impurities and water was confirmed by procedures of the German Pharmacopeia VI and Spanish Pharmacopeia VIII. The purity of Prontosil was not specified.

REFERENCES: