COMPONENTS:
(1) Benzenesulfonamide, 4-amino-N-[5-(2-propyl)-1,3,4-thiadiazol-2-yl]- $C_{11}H_{14}N_4O_2S_2$; [80-34-2]
(2) Phosphoric acid, disodium salt; Na_2HPO_4; [7558-94-4]
(3) 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (citric acid); $C_6H_8O_7$; [77-92-9]
(4) Water; H_2O; [7732-18-5]

VARIABLES:
One temperature: 37°C; one pH: 4

ORIGINAL MEASUREMENTS:
Alric, R.; Puech, R.
J. Pharmacol. (Paris) 1971, *2(2)*, 141-54.

PREPARED BY:
R. Piekos

EXPERIMENTAL VALUES:

Intrinsic solubility[a] of 4-amino-N-[5-(2-propyl)-1,3,4-thiadiazol-2-yl]benzenesulfonamide in a solution 0.025M in Na_2HPO_4 and 0.05M in citric acid, of pH 4, at 37°C is (7.33 ± 0.20) x 10^{-4} mol $liter^{-1}$.

[a]Under "intrinsic solubility" a minimum on the solubility - pH curve is meant which corresponds to the limiting concentration of the undissociated form of the sulfonamide.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:
The soln was equilibrated for 48 h in a thermostat under occassional stirring. Samples were withdrawn through a 1-μ membrane filter, dild with 0.155M NaOH soln to ensure total dissocn of the sulfonamide, and its content was detd by UV spectrophotometry.

SOURCE AND PURITY OF MATERIALS:
Nothing specified.

ESTIMATED ERROR:
Soly: std error of 8 measurements was ±0.20 x 10^{-4} mol $liter^{-1}$ (authors).
pH : accuracy ±0.5 pH unit (authors).
Temp: ±0.1°C (authors).

REFERENCES: