COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Acetamide, N-[(4-aminophenyl)sulfonyl]-N-(5-methyl-3-isoxazolyl)-(N^1-acetylsulfamethoxazole); $C_{12}H_{13}N_3O_4S$; [18607-98-2] (2) Sodium chloride; NaCl; [7647-14-5] (3) Water; H_2O ; [7732-18-5]	Hirano, H.; Ichihashi, T.; Yamada, H. *Chem. Pharm. Bull.* 1981, *29(3)*, 817-27.
VARIABLES: One temperature: 37°C	**PREPARED BY:** R. Piekos

EXPERIMENTAL VALUES:

Solubility of N^1-acetylsulfamethoxazole in a 0.9% NaCl solution at 37°C is 0.076 mg/ml (2.6×10^{-4} mol dm^{-3}, compiler).

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

An excess of powdered N^1-acetylsulfamethoxazole was shaken well at 37°C with a 0.9% NaCl soln until attaining satn. The undissolved crystals were removed by filtration through a G5 glass filter or by centrifugation, and the concn of the solute was assayed spectrophotometrically at 289 nm, after diln with EtOH - H_2O (1:1, v/v) using a Perkin Elmer UV-VIS spectrophotometer (Hitachi Co., Ltd., Tokyo).

SOURCE AND PURITY OF MATERIALS:

N^1-Acetylsulfamethoxazole was synthesized by the authors and was of medical grade. The remaining materials were of anal or reagent grade.

ESTIMATED ERROR:

Nothing specified

REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Acetamide, N-[(4-aminophenyl)sulfonyl]-N-(5-methyl-3-isoxazolyl)-(N^1-acetylsulfamethoxazole); $C_{12}H_{13}N_3O_4S$; [18607-98-2] (2) Phosphoric acid, disodium salt; Na_2HPO_4; [7558-94-4] (3) Phosphoric acid, monopotassium salt; KH_2PO_4; [7778-77-0] (4) Water; H_2O; [7732-18-5]	Hekster, Ch. A.; Vree, T. B. *Antibiotics Chemother.* 1982, *31*, 22-118.
VARIABLES: pH	PREPARED BY: R. Piekos

EXPERIMENTAL VALUES:

pH	Solubility at 25°C	
	mg/l	10^4 mol dm^{-3} [a]
5.5	66	2.2
7.5[b]	66	2.2

[a] Calculated by compiler

[b] Erroneous pH value of 7.0 is given in the article

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The earlier developed method (1) was used (personal communication). Satd solns of N^1-acetylsulfamethoxazole were prepd in phosphate buffers of pH 5.5 and 7.5 at 25°C. The concn of the solute was measured by means of a Spectra Physics 3500B high-performance liquid chromatograph equipped with a Model 748 column oven and a Pye-Unicam LC-UV spectrophotometric detector.

SOURCE AND PURITY OF MATERIALS:

Neither source nor the purity of the materials was specified.

ESTIMATED ERROR:

Soly: the detection limit of the solute by HPLC was 0.5 mg/l (authors). The errors in temp and pH were not specified.

REFERENCES:

Hekster, Y. A.; Vree, T.B.; Damsma, J. E.; Friesen, W. T. *J. Antimicrob. Chemother.* 1981, *8*, 133.