COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Benzenesulfonamide, 4-amino-N-[imino-(methylthio)methyl]-; $C_8H_{11}N_3O_2S$; [2651-18-5] (2) Pectinic acid, sodium salt; $(C_{13}H_{17}NaO_{12})_n$; [9049-37-0] (3) Water; H_2O; [7732-18-5]	Becher, R.; Leya, S., *Experientia* 1946, *2*, 459-60.
VARIABLES:	**PREPARED BY:**
One temperature: 18-19°C	R. Piekos

EXPERIMENTAL VALUES:

Solubility of 4-amino-N-[imino(methylthio)methyl]benzenesulfonamide in a 2.6% neutral sodium pectinate solution ([sodium pectinate] = 6.7×10^{-2} mol kg^{-1} (n = 1), compiler) at room temperature (18-19°C) is 32 mg% (1.5×10^{-3} mol dm^{-3}, compiler).

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
The soln was allowed to stand for more than two days at room temp. The soln was then filtered, and the sulfonamide was assayed in the filtrate colorimetrically by the method of Druey and Oesterheld (1).	Nothing specified.
	ESTIMATED ERROR: Nothing specified.
	REFERENCES: 1. Druey, J.; Oesterheld, G., *Helv. Chim. Acta* 1942, *25*, 753.

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Benzenesulfonamide, 4-amino-N-[imino-(methylthio)methyl]-; $C_8H_{11}N_3O_2S$; [2651-18-5] (2) Pectin; $(C_{13}H_{18}O_{12})_n$; [9000-69-5] (3) Water; H_2O [7732-18-5]	Becher, R.; Leya, S., *Experientia* 1946, *2*, 459-60.
VARIABLES: One temperature: 18-19°C	**PREPARED BY:** R. Piekos

EXPERIMENTAL VALUES:

Solubility of 4-amino-N-[imino(methylthio)methyl] benzenesulfonamide in a 2.5% pectin solution ([pectin] = 6.8×10^{-2} mol kg^{-1}, compiler), of pH about 2.6, at room temperature (18-19°C) is 28 mg% (1.3×10^{-3} mol dm^{-3}, compiler).

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The soln was allowed to stand for more than 2 days at room temp. The soln was then filtered, and the sulfonamide was assayed in the filtrate colorimetrically by the method of Druey and Oesterheld (1).

SOURCE AND PURITY OF MATERIALS:

A high quality apple pectin was used; the rel viscosity of a 0.5% soln was 6.2, and for neutralization of 1 g of the pectin, 1.67 cm^3 of a 1 mol dm^{-3} NaOH soln was used.

The source and purity of the sulfonamide and water were not specified.

ESTIMATED ERROR:

Nothing specified.

REFERENCES:

1. Druey, J.; Oesterheld, G. *Helv. Chim Acta* 1942, *25*, 753.

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Benzenesulfonamide, 4-amino-N-[imino-(methylthio)methyl]- (sulfamethylisothiourea); $C_8H_{11}N_3O_2S_2$; [2651-18-5] (2) D-Glucose; $C_6H_{12}O_6$; [50-99-7] (3) Water; H_2O; [7732-18-5]	Becher, R.; Leya, S. *Experientia* 1946, *2*, 459-60.
VARIABLES:	**PREPARED BY:**
One temperature: 18-19°C	R. Piekos

EXPERIMENTAL VALUES:

Solubility of sulfamethylisothiourea in a 10% D-glucose solution at room temperature (18-19°C) is 23 mg% (9.4×10^{-4} mol dm^{-3}, compiler).

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

After standing for more than two days the soln of sulfamethylisothiourea was filtered and the sulfonamide was assayed in the filtrate colorimetrically by the method of Druey and Oesterheld (1).

SOURCE AND PURITY OF MATERIALS:

Nothing specified.

ESTIMATED ERROR:

Nothing specified.

REFERENCES:

1. Druey, J.; Oesterheld, G. *Helv. Chim. Acta* 1942, *25*, 753.

COMPONENTS:	EVALUATOR:
(1) Benzenesulfonamide, 4-amino-N-(amino-iminomethyl)- (sulfaguanidine); $C_7H_{10}N_4O_2S$; [57-67-0]	Anthony N. Paruta Department of Pharmaceutics University of Rhode Island Kingston, Rhode Island, USA and Ryszard Piekos Faculty of Pharmacy, University of Gdansk Gdansk, Poland 1986
(2) Water	

CRITICAL EVALUATION:

The Solubility values are summarized in Table I.

Table I: Solubility of Sulfaguanidine in water 293K and 310K

	10^3 mol dm^{-3} (*indicates mol kg^{-1})	
Reference	293K	310K
1	-	8.87
2	35.8*@	9.2*
3	3.0 (291-293K)	-
4	5.191*	-

@ = obvious error in original data

Roblin el al. (1) determined the solubility of sulfaguanidine using an equilibration time of 24 hours, and a colorimetric analytical technique. Sapozhnikova (2) used what appears to be a rather limited length of time for saturation to be reached, but the value reported agrees with that of Roblin et al. (1). The concurrence of these two values therefore allows for an assignments of a tentative value for sulfaguanidine at body temperature of 9.04 x 10^{-3} mol dm^{-3}. Becher and Leya (3) report a value at 291-292K which does not agree with that given by Gerencsér-Németh and Horváth (4). The solubility at 293K as given by Sapozhnikova et al. (2) has apparently a decimal error. It is reasonable to assume that the value should be about 3.575 x 10^{-3} mol kg^{-1}, concurring approximately with other references (3,4). The temperature range in Becher and Leya (3) and the very high value in Gerencsér-Németh and Horváth (4) mitigate against making even a tentative assignment.

REFERENCES:

(1) Roblin, R.O., Jr.; Williams, J.H.; Winnek, P.S.; English, J.P. *J. Am. Chem. Soc.* 1940, *62*, 2002-5.
(2) Sapozhnikova, N.V.; Postovskii, I.Ya. *Zh. Prikl. Khim.* 1944, *17*, 427-34.
(3) Becher, R.; Leya, S. *Experientia* 1946, *2*, 459-60.
(4) Gerencsér-Németh, M.; Horváth, M. *Gyógyszerészet* 1973, *17*, 417-21.