COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) 1,1,3-Trimethylcyclopentane; C_8H_{16}; [4516-69-2] (2) Water; H_2O; [7732-18-5]	Price, L.C. *Am. Assoc. Petrol. Geol. Bull.* 1976, *60*, 213-44.
VARIABLES:	**PREPARED BY:**
One temperature: 25°C	M.C. Haulait-Pirson

EXPERIMENTAL VALUES:

The solubility of 1,1,3-trimethylcyclopentane in water at 25°C and at system pressure was reported to be 3.73 mg(1)/kg(2).

The corresponding mass percent and mole fraction, x_1, calculated by the compiler are 3.73×10^{-4} g(1)/100 g sln and 5.99×10^{-7}.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
The solubility was determined at laboratory temperatures by use of screw-cap test tubes. The (1) phase floated on top of the water and insured saturation of the (2) phase in 2 to 4 days. Analyses were carried out by GLC using a Hewlett-Packard model 5751 gas chromatograph with dual-flame ionization detectors. Many details are given in the paper.	(1) Phillips Petroleum Company; Chemical Samples Company or or Aldrich Chemical Company; 99+%. (2) Distilled.
	ESTIMATED ERROR: Temp. ±1°C Soly. ±0.17 mg(1)/kg(2)
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) 1,1,3-Trimethylcyclopentane; C_8H_{16}; [4516-69-2] (2) Water; H_2O; [7732-18-5]	Krzyzanowska, T.; Szeliga, J. *Nafta (Katowice)*, 1978, *12*, 413-7.
VARIABLES:	**PREPARED BY:**
One temperature: 25°C	M.C. Haulait-Pirson

EXPERIMENTAL VALUES:

The solubility of 1,1,3-trimethylcyclopentane in water at 25°C was reported to be 2.04 mg(1)/kg(2).

The corresponding mass percent and mole fraction, x_1, calculated by compiler are 2.04×10^{-4} g(1)/100 g sln and 3.27×10^{-7}.

Editor's Note: Based on the results for this and other hydrocarbon-water systems, uncertainity exists about whether the datum compiled here is independent of that of Price for the same system (see previous page). Consequently, this system has not been evaluated.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
The saturated solutions of (1) in (2) were prepared in two ways. First, 200 µL of (1) was injected into 20 mL of (2) and thermostatted at 25°C. Second, the mixture of (1) and (2) as above was thermostatted at 70°C and then cooled to 25°C. The time required to obtain equilibrium was three weeks. The solubility of (1) in (2) was measured by glc. A Perkin-Elmer model F-11 gas chromatograph equipped with a 100-150 mesh Porasil column (70°C) and a flame ionization detector was used. Saturated solutions of heptane in (2) were used as standard solutions.	(1) not specified. (2) not specified.
	ESTIMATED ERROR: soly. 0.10 mg(1)/kg(2) (standard deviation from 7-9 determinations).
	REFERENCES: