COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) 1-Octene; C_8H_{16}; [111-66-0] (2) Water; H_2O; [7732-18-5]	McAuliffe, C. *J. Phys. Chem.* 1966, *70*, 1267-75.
VARIABLES:	**PREPARED BY:**
One temperature: 25°C	A. Maczynski, Z. Maczynska, and A. Szafranski

EXPERIMENTAL VALUES:

The solubility of 1-octene in water at 25°C was reported to be 2.7 g(1)/10^6 g(2).
The corresponding mass percent and mole fraction, x_1, calculated by the compilers are 0.00027 g(1)/100 g sln and 4 x 10^{-7}.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
In a 250-mL bottle, 10-20 mL of (1) was vigorously shaken for 1 hr, or magnetically stirred for 1 day, with 200 mL of (2) at 25°C. The bottle was set aside for 2 days to allow droplets of undissolved (1) to separate. Absence of emulsion was checked microscopically. A sample of the hydrocarbon-saturated water was withdrawn with a Hamilton syringe and gas liquid chromatographed in conjunction with a flame-ionization detector.	(1) Phillips Petroleum or Columbia Chemical; used as received. (2) distilled.
	ESTIMATED ERROR: temp. ± 1.5°C soly. 0.2 g(1)/10^6 g(2) (standard deviation of mean)
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) 1-Octene; C_8H_{16}; [111-66-0] (2) Water; H_2O [7732-18-5]	Natarajan, G.S.; Venkatachalam, K.A. *J. Chem. Eng. Data* 1972, *17*, 328-9
VARIABLES:	PREPARED BY:
One temperature: 25°C	M.C. Haulait-Pirson, G.T. Hefter

EXPERIMENTAL VALUES:

The solubility of 1-octene in water was reported to be 1.979×10^{-4} mol L^{-1} at 25°C.[a] Assuming a solution density of 1.00 g mL^{-1} the corresponding mass percent and mole fraction (x_1) solubilities calculated by the compilers are respectively, 0.00222 g(1)/100 g sln and 3.63×10^{-6}.

Solubility data are also presented as a function of temperature in various salt solutions.

[a] It should be noted that although the authors state that the solubility refers to "water" the context in the paper is ambiguous and the data were probably obtained in 0.001 mol L^{-1} HNO_3 solution.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
15 mL of the aqueous medium was equilibrated with 1 mL of (1) by mechanical shaking in a thermostatted glass burette. After settling (judged visually), 5 mL of the aqueous layer was withdrawn and the olefin content determined by titration with bromine using standard procedures.	(1) Matheson, Coleman and Bell; 99% (2) Not specified
	ESTIMATED ERROR: Temp. ± 0.05K Soly. not specified.
	REFERENCES: