COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) 2-Pentene; C_5H_{10}; [109-68-2] (2) Water; H_2O; [7732-18-5]	McAuliffe, C. *J. Phys. Chem.* 1966, *70*, 1267-75.
VARIABLES: One temperature: 25°C	**PREPARED BY:** A. Maczynski, Z. Maczynska, and A. Szafranski

EXPERIMENTAL VALUES:

The solubility of 2-pentene in water at 25°C was reported to be 203 g(1)/10^6 g(2).
The corresponding mass percent and mole fraction, x_1, calculated by the compilers are 0.0203 g(1)/100 g sln and 5.21×10^{-5}.

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 A sample of the hydrocarbon-saturated water was withdrawn with a Hamilton syringe and gas liquid chromatographed in conjunction with a flame-ionization detector.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 K soly. 8 g(1)/10^6 g(2) (standard deviation of mean)
	REFERENCES: