

COMPONENTS: (1) Cycloheptane; C_7H_{14} ; [291-64-5] (2) Water; H_2O ; [7732-18-5]	ORIGINAL MEASUREMENTS: McAuliffe, C. <i>J. Phys. Chem.</i> <u>1966</u> , <i>70</i> , 1267-75.
VARIABLES: One temperature: 25°C	PREPARED BY: M.C. Haulait-Pirson
EXPERIMENTAL VALUES: <p>The solubility of cycloheptane in water at 25°C was reported to be 30 mg (l)/kg sln (0.0030 g(l)/100 g sln). The corresponding mole fraction, x_1, calculated by the compiler, is 5.5×10^{-6}. The same value is also reported in ref 1.</p>	
AUXILIARY INFORMATION	
METHOD/APPARATUS/PROCEDURE: <p>In a 250 mL glass 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. In the case of shaking, the solution was allowed to stand for 2 days to permit separation of small (1) droplets. Absence of emulsion was checked microscopically. A 50 μL sample of the (1) saturated water was withdrawn with a Hamilton Syringe and injected into the fractionator of the gas chromatograph. A hydrogen-flame ionization detector was used. Many details are given in the paper.</p>	SOURCE AND PURITY OF MATERIALS: (1) Phillips Petroleum Co.; 99+ $\%$ purity; used as received. (2) distilled. ESTIMATED ERROR: temp. \pm 1.5 K soly. 1.0 mg (l)/kg sln (standard deviation from mean) REFERENCES: 1. McAuliffe, C. <i>Am. Chem. Soc. Div. Petrol. Chem.</i> <u>1964</u> , <i>9</i> , 275.