

<b>COMPONENTS:</b> (1) 1-Heptyne; $C_7H_{12}$ ; [628-71-7] (2) Water; $H_2O$ ; [7732-18-5]	<b>ORIGINAL MEASUREMENTS:</b> McAuliffe, C. <i>J. Phys. Chem.</i> <u>1966</u> , 70, 1267-75.
<b>VARIABLES:</b> One temperature: 25°C	<b>PREPARED BY:</b> A. Maczynski, Z. Maczynska, and A. Szafranski
<b>EXPERIMENTAL VALUES:</b> <p>The solubility of 1-heptyne in water at 25°C was reported to be 94 g(1)/10<sup>6</sup> g(2).</p> <p>The corresponding mass percent and mole fraction, <math>x_1</math>, calculated by the compilers are 0.0094 g(1)/100 g sln and <math>1.76 \times 10^{-5}</math>.</p>	
<b>AUXILIARY INFORMATION</b>	
<b>METHOD/APPARATUS/PROCEDURE:</b> <p>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 A sample of the hydrocarbon-saturated water was withdrawn with a Hamilton syringe and gas liquid chromatographed in conjunction with a flame-ionization detector.</p>	<b>SOURCE AND PURITY OF MATERIALS:</b> (1) Phillips Petroleum or Columbia Chemical; used as received. (2) distilled.  <b>ESTIMATED ERROR:</b> temp. $\pm 1.5$ K soly. 3 g(1)/10 <sup>6</sup> g(2) (standard deviation of mean)  <b>REFERENCES:</b>