

<b>COMPONENTS:</b>  (1) Picene; C <sub>22</sub> H <sub>14</sub> ; [213-46-7] (2) Water; H <sub>2</sub> O; [7732-18-5]	<b>ORIGINAL MEASUREMENTS:</b>  Davis, W.W.; Krahl, M.E.; Cloves, G.H.A.  <i>J. Am. Chem. Soc.</i> <u>1942</u> , <i>64</i> , 108-10.
<b>VARIABLES:</b>  One temperature: 27°C	<b>PREPARED BY:</b>  M.C. Haulait-Pirson
<b>EXPERIMENTAL VALUES:</b>  The solubility of picene in water at 27°C was reported to be $2.5 \times 10^{-6} \text{ g(1) L}^{-1} \text{ (2)}$ . With the assumption that 1.00 L sln = 1.00 kg sln, the corresponding mass percent and mole fraction, $x_1$ , calculated by the compiler are $2.5 \times 10^{-7} \text{ g(1)/100 g sln}$ and $1.6 \times 10^{-10}$ .	
<b>AUXILIARY INFORMATION</b>	
<b>METHOD/APPARATUS/PROCEDURE:</b>  The method consisted of preparing serial dilutions of a suspension of (1) in (2) and determining nephelometrically the amount of (1) per unit volume beyond which further dilution caused no reduction in light scattering, which remained equal to that of pure (2). A Bausch and Lomb Dubosque colorimeter model 100-mm was employed. Many details are reported in ref 1.	<b>SOURCE AND PURITY OF MATERIALS:</b>  (1) prepared at the Ohio State University; m.p. range 363.5-364.5°C; (cf. ref 2).  (2) dust-free.
<b>ESTIMATED ERROR:</b>  temp. $\pm 3^\circ\text{C}$ soly. $\pm 0.5 \times 10^{-6} \text{ g(1) dm}^{-3} \text{ (2)}$	
<b>REFERENCES:</b>  1. Davis, W.W.; Parker, Jr., T.V. <i>J. Am. Chem. Soc.</i> <u>1942</u> , <i>64</i> , 101. 2. Davis, W.W.; Krahl, M.E.; Cloves, G.H.A. <i>J. Am. Chem. Soc.</i> <u>1940</u> , <i>62</i> , 3086.	