

<b>COMPONENTS:</b> (1) 7,12-Dimethylbenz[a]anthracene; $C_{20}H_{16}$ ; [57-97-6] (2) Water; $H_2O$ ; [7732-18-5]	<b>ORIGINAL MEASUREMENTS:</b> Mackay, D.; Shiu, W.Y. <i>J. Chem. Eng. Data</i> <u>1977</u> , <i>22</i> , 399-402.
<b>VARIABLES:</b> One temperature: 25°C	<b>PREPARED BY:</b> M.C. Haulait-Pirson
<b>EXPERIMENTAL VALUES:</b> <p>The solubility of 7,12-dimethylbenz[a]anthracene in water at 25°C was reported to be <math>0.061 \text{ mg(1) dm}^{-3} \text{ sln}</math> and <math>x_1 = 4.26 \times 10^{-9}</math>.</p> <p>The corresponding mass percent calculated by the compiler is <math>6.1 \times 10^{-6} \text{ g(1)/100 g sln}</math>.</p>	
<b>AUXILIARY INFORMATION</b>	
<b>METHOD/APPARATUS/PROCEDURE:</b> <p>A saturated solution of (1) in (2) was vigorously stirred in a 250 mL flask for 24 hrs. and subsequently settled at 25°C for at least 48 hrs. Then the saturated solution was decanted and filtered and 50-100 mL extracted with approximately 5 mL of cyclohexane in a separatory funnel. After shaking for 2 hrs. the cyclohexane extract was removed for analysis. An Aminco-Browman spectrophotofluorometer (American Instruments Ltd.) was used for analysis. Many details are given in the paper.</p>	<b>SOURCE AND PURITY OF MATERIALS:</b> (1) Aldrich Chemicals, Eastman Kodak, or K and K Laboratories, commercial highest grade; used as received. (2) doubly distilled. <b>ESTIMATED ERROR:</b> $\text{soly.} \pm 0.0006 \text{ mg(1) dm}^{-3} \text{ sln}$ (maximum deviation from several determinations). <b>REFERENCES:</b>