

COMPONENTS: (1) Perylene; C ₂₀ H ₁₂ ; [198-55-0] (2) Water; H ₂ O; [7732-18-5]	ORIGINAL MEASUREMENTS: Mackay, D.; Shiu, W.Y. <i>J. Chem. Eng. Data</i> <u>1977</u> , <i>22</i> , 399-402.
VARIABLES: One temperature: 25°C	PREPARED BY: M.C. Haulait-Pirson
EXPERIMENTAL VALUES: <p>The solubility of perylene in water at 25°C was reported to be 0.0004 mg(l) dm⁻³ sln and $x_1 = 2.83 \times 10^{-11}$.</p> <p>The corresponding mass percent calculated by the compiler is 4×10^{-8} g(l)/100 g sln.</p>	
AUXILIARY INFORMATION	
METHOD/APPARATUS/PROCEDURE: 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.	SOURCE AND PURITY OF MATERIALS: (1) Aldrich Chemicals, Eastman Kodak, or K and K Laboratories, commercial highest grade; used as received. (2) doubly distilled. ESTIMATED ERROR: soly. $\pm 2 \times 10^{-5}$ mg(l) dm ⁻³ sln (maximum deviation from several determinations). REFERENCES: