

COMPONENTS: (1) Cholanthrene; $C_{20}H_{14}$; [479-23-2] (2) Water; H_2O ; [7732-18-5]	ORIGINAL MEASUREMENTS: Davis, W.W.; Krahl, M.E.; Cloves, G.H.A. <i>J. Am. Chem. Soc.</i> <u>1942</u> , <i>64</i> , 108-10.
VARIABLES: One temperature: 27°C	PREPARED BY: M.C. Haulait-Pirson
EXPERIMENTAL VALUES: <p>The solubility of cholanthrene in water at 27°C was reported to be 3.5×10^{-6} g(1) L⁻¹ (2). (Two identical results were obtained). 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 3.5×10^{-7} g(1)/100 g sln and 2.5×10^{-10}.</p>	
AUXILIARY INFORMATION	
METHOD/APPARATUS/PROCEDURE: 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.	SOURCE AND PURITY OF MATERIALS: (1) prepared at Harvard University; m.p. range 170.1-170.6°C; (cf. ref 2). (2) dust-free.
	ESTIMATED ERROR: temp. $\pm 3^\circ C$ soly. $\pm 0.5 \times 10^{-6}$ g(1) dm ⁻³ (2)
	REFERENCES: 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.