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solvophobicity parameter, *Sp*

A solvent parameter defined by:

$$Sp = 1 - \frac{M}{M(\text{hexadecane})}$$

derived from the Gibbs energy of transfer ($\Delta_t G^\circ$) of a series of solutes from water to numerous aqueous-organic mixtures and to pure solvents:

$$\Delta_t G^\circ(\text{to solvent}) = M\,R_T + D$$

where R_T is a solute parameter, and M and D characterize the solvent. The M values are used to define a solvent solvophobic effect so that S_p values are scaled from unity (water) to zero (hexadecane).

Source:
PAC, 1994, *66*, 1077 *(Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994))* on page 1165

