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Solubility in Water of Normal C₉ and C₁₀, Alkane Hydrocarbons

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ABSTRACT

A new method for equilibrating water containing alkane hydrocarbons with a gas phase and analyzing the gas for hydrocarbon content by gas chromatography extends analytical sensitivity to better than 0.1 part per billion. The solubilities at 28°C of the normal C₉ (220 parts per billion) and C₁₀ (52 parts per billion) alkanes decrease with increasing carbon number. A discontinuity occurs at the normal C₁₁ alkane, probably because of a change from true solubility (molecular dispersion) to accommodation (aggregation).

THIS ARTICLE HAS BEEN CITED BY OTHER ARTICLES:

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