Study of the adsorption of n-heptane and 1-heptane by aerosil

Alzamora, Luis

Adsorption isotherms of 1-heptene and n-heptane were determined at three near-ambient temperatures on a nonporous silica (Aerosil 200 They appear to lend support to the hypothesis that the double bond of the olefins contributes to specific interactions with hydroxyl groups. In addition, the differential enthalpies and entropies of adsorption of each hydrocarbon were determined as a function of the amount adsorbed showing restricted mobility for 1-heptene and a high surface mobility for n-heptane.