

عنوان مقاله:

Solubility and diffusional coupling effects on mixed gas transport through glassy polymeric membranes

محل انتشار:

پنجمین کنگره بین المللی مهندسی شیمی (سال: 1386)

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خلاصه مقاله:

The presence of a second component in a two component penetrant system has been shown to affect the transport and separation properties of a glassy polymer. However, such coupling effects appear to be absent in the rubbery polymer. The estimation of gas solubility and diffusion coefficients for mixed gas under individual gases permeation conditions assists us in better understanding of the true transport phenomena involved. In this study, the equilibrium sorption of mixtures in various polymers was modeled using the experimental data available in the literature. The non-ideal effects arising from the presence of other gas is the objective of this research and is presented in this work

کلمات کلیدی:

membrane gas separation, glassy polymers, Henry-Langmuir dual mode model , Partial immobilization model

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