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Prediction and experimental studies of phase equilibria in the system cyclododecane - docosane

© Ivan K. Garkushin,* Alexander V. Kolyado, and Alexander A. Shamitov⁺

Department of General and Inorganic Chemistry. Samara State Technical University. Molodogyardeiskaya St., 244. Samara. 443100. Samara Region. Russia. Phone: +7 (846) 278-44-77. E-mail: baschem@samgtu.ru; kolyado@rambler.ru

*Supervising author; *Corresponding author

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Abstract

By differential thermal analysis we have researched the system n-docosane – cyclododocane. The studied system is related to the systems of eutectic type (melting point of the eutectic composition of alloy equals 31.9 °C, the content of n-docosane 55.0wt %), in which the liquidus complicated by the presence of the polymorphic transition at *n*-docosane. By the DSC method we determined temperature and melting enthalpy of cyclododocane. According to DSC data it has been ascertained that in the temperature range from -60 to +62.8 °C of cyclododocanes no transformations occur in the solid phase.