

镍系胶体催化丁二烯聚合反应的研究 II: 催化剂组分的电导率和紫外光谱

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收稿日期 修回日期 网络版发布日期 接受日期

摘要 在加氢汽油介质中Ni(naph)₂-Al(i-Bu)₃-(BF₃·OEt₂+n-C₈H₁₇OH)体系为胶体催化剂的基础上, 本文从电导率、UV-

Vis光谱对催化剂各组分之间的相互作用作进一步的分析。得出催化剂组分以离子对的形式参与反应; Ni⁰在Ni(naph)₂-Al(i-Bu)₃陈化液中以团簇粒子形式存在, 因吸附Ni⁺+naph⁻而稳定, 因加入BF₃·OEt₂而失去稳定性、聚结为胶粒, 活性中心位于胶粒表面的观点。

关键词 [胶体](#) [催化剂](#) [镍络合物](#) [铝络合物](#) [多组分体系](#) [电导率](#) [紫外分光光度法](#) [胶粒](#) [活性中心](#)

分类号 [0621.16](#) [0643](#)

Studies on the polymerization of butadiene catalyzed by colloidal nickel system II: The electric conductivity and UV-Vis spectrum of the catalyst

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Abstract Using electric conductivity and UV-Vis spectroscopy, the interaction between the catalyst components was further analyzed. The conclusions as follows were further verified: the catalyst components reacted with each other in the form of ionic pair. There existed Ni(0)-atom cluster (Ni⁰)_m in aged solution of (Ni)-(Al). The cluster was very stable because of absorption of Ni(naph) and became bigger to form colloidal particles while adding (B). The active centers were located on the surface of colloidal particles. Butadiene didn't take part in the formation of active centers.

Key words [COLLOID](#) [CATALYST](#) [NICKEL COMPLEX](#) [ALUMINIUM COMPLEX](#) [MULTICOMPONENT SYSTEM](#) [ELECTRICAL CONDUCTIVITY](#) [ULTRAVIOLET SPECTROPHOTOMETRY](#) [MICELLAE \(=MICELLE\)](#) [ACTIVE CENTER](#)

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