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PAM与月桂酸钠的相互作用

徐桂英,李干佐,李方,毛宏志,刘木辛,苏红梅

山东大学胶体与界面化学研究所

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摘要 通过PAM/月桂酸钠(R^1 COONa)混合溶液比浓粘度和紫外-可见吸收光谱的测定, 考察了两者之间的相互作用机理。 结果表明, 在中性或弱酸性溶液中, PAM大分子可与R^1 COOH发生氢键缔合, 而R^1 COOH则以疏水力与R^1 COO^-缔合成二聚体、预胶束或胶束, 从而使PA分子链上带有大量电荷, 混合溶液表现出聚电解质的粘度行为。

关键词 紫外分光光度法 聚丙烯酰胺 相互作用 月桂酸钠 八五国家攻关资助项目基金

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The interaction between polyacrylamide and sodium laurate

XU GUIYING,LI GANZUO,LI FANG,MAO HONGZHI,LIU MUXIN,SU HONGMEI

Abstract The interaction between polyacrylamide (PAM) and sodium laurate (R^1 COONa) have been studied by viscosity and UV-vis spectroscopy. The reduced viscosity measurements show that PAM/R^1 COONa mixed solution exhibits viscometric behavior of polyelectrolyte. UV-vis spectra indicated that hydrogen bond was formed between PAM and R^1 COOH. And R^1 COOH-R^1 COO^- premicelle or micelle was formed between PAM and R^1 COOH. And R^1 COOH-R^1 COO^- premicelle or micelle was bound to the macromolecule of PAM to form polymer-surfactant complex.

Key words ULTRAVIOLET SPECTROPHOTOMETRY POLYACRYLAMIDE INTERACTIONS

DOI:

通讯作者