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Interaction of L-lysine with sodium alkyl sulfates in aqueous solutions

© Iraida I. Germasheva,* Nadezhda A. Glukhareva,* Olga Y. Lebedeva, and Galina V. Prokhorova

Department of Chemistry and Biology. National Research University "Belgorod State University". Pobeda St., 8. Belgorod, 308015. Russia. Phone: +7 (4722) 30-11-51. E-mail: glukhareva@bsu.edu.ru

*Supervising author; +Corresponding author

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Abstract

The behavior of mixtures consisting of L-lysine and anionic surfactants sodium was studied by conductance-measuring method using dodecyl and hexadecyl sulfates in aqueous solutions. The formation of two types of alkyl sulfate and lysine associates of ionic type by amine group (N-complex) and of molecular type by carboxylic group (H-complex) has been revealed. The ability of the molecular complex formation is confirmed by the investigation of mixtures containing alkyl sulfates and caproic acid that is isostructural to lysine. Some colloid-chemical characteristics of the complexes are determined.