

Investigation of the interaction of molybdenum oxide(VI) with polyphenylsiloxane

© Victoria V. Vasilyeva,⁺ Alexander V. Alikovsky,* Svetlana G. Krasitskaya, Ekaterina V. Yurtaeva, and Mihail I. Balanov

Department of General, Inorganic and Organometallic Chemistry. School of Natural Science.

Far Eastern Federal University. Oktyabrskaya St., 27. Vladivostok, 692900. Russia.

Phone: +7 (914) 691-87-41. E-mail: vasilevavik@mail.ru

*Supervising author; ⁺Corresponding author

Keywords: molybdenum, polymers, synthesis, polygeterosiloxanes, siloxane bond.

Abstract

Interaction of polyphenylsiloxane (PPS) with molybdenum oxide(VI) in organic solvents has been studied. It has been shown that the interaction between the reagents takes place only in the presence of *n*-butanol. The process of polymer formation occurs due to the interaction of starting substances with butanol precursors, the determining reagent being molybdenum oxide(VI). The study of the interaction of agents allowed to develop an efficient method for obtaining polymolybdenumphenylsiloxanes (PMoPS) with adjustable ratio of silicon to molybdenum.