World Academy of Science, Engineering and Technology International Journal of Chemical and Materials Engineering Vol:9, No:04, 2015

Improvement of Reaction Technology of Decalin Halogenation

Authors: Dmitriy Yu. Korulkin, Ravshan M. Nuraliev, Raissa A. Muzychkina

Abstract : In this research paper, we investigated the main regularities of a radical bromination reaction of decalin. We studied the temperature effect, durations of reaction, frequency rate of process, ratio of initial components, type and number of the initiator on decalin bromination degree. We found specified optimum conditions of synthesis of a perbromodecalin by the method of a decalin bromination. We developed the technological flowchart of receiving a perbromodecalin and the mass balance of process on the first and the subsequent loadings of components. The results of the research of antibacterial and antifungal activity of synthesized bromoderivatives have been represented.

Keywords: decalin, optimum technology, perbromodecalin, radical bromination

Conference Title: ICACCE 2015: International Conference on Applied Chemistry and Chemical Engineering

Conference Location : Los Angeles, United States

Conference Dates: April 03-04, 2015