

Crosslinking of Unsaturated Elastomers in Presence of Aromatic Chlorine-Containing Compounds

Authors : Shiraz M. Mammadov, Elvin M. Aliyev, Adil A. Garibov

Abstract : The role of the disulfochloride benzene in unsaturated rubbers (SKIN, SKN-26) which is in the systems of SKIN+disulfochloride benzene and SKN-26+disulfochloride benzene was studied by the radiation exposure. By the usage of physical, chemical and spectral methods the changes in the molecular structure of the rubber were shown after irradiation by y-rays at 300 kGy. The outputs and the emergence of the crosslinking in the elastomers for each system depending on absorbed dose were defined. It is suggested that the mechanism of radiation occurs by the heterogeneous transformation of elastomers in the presence of disulfochloride benzene.

Keywords : acrylonitrile-butadiene rubber, crosslinking, polyfunctional monomers, radiation, sensitizier, vulcanization

Conference Title : ICMMPPE 2014 : International Conference on Materials, Minerals and Polymer Engineering

Conference Location : Prague, Czechia

Conference Dates : July 10-11, 2014