



Direct Fluorination of Polymers

By A.P. Kharitonov

Nova Science Publishers Inc. Paperback. Book Condition: new. BRAND NEW, Direct Fluorination of Polymers, A.P. Kharitonov, In this book fundamental features and industrial applications of the direct fluorination of polymers are reviewed. Direct fluorination of polymers (i.e. treatment of a polymer surface with gaseous fluorine and its mixtures) proceeds at room temperature spontaneously and can be considered as a surface modification process. The author of the current book and his coauthors have studied the direct fluorination of more than 20 polymers (polystyrene, polyethyleneterephthalate, poly(2,6dimethyl-1,4-phenylene oxide), polymethylmethacrylate, low density polyethylene (2 types), high density polyethylene (6 types), polyvinyltrimethylsilane, poly(4-methyl-pentene-1), polyimide Matrimid 5218, polysulfones, polyetheretherketone, polycarbonatesiloxane, polysulphone-polybuthadiene blockcopolymers, polypropylene, PVF, PVDF, etc.). A large variety of experimental methods, such as FTIR spectroscopy, visible and near UV spectroscopy, Electron Spin Resonance spectroscopy, laser interference spectroscopy, refractometry, electron microscopy, method of surface energy measurement, gaschromatography, method of measurement of permeability of liquids through polymer materials, etc. was applied. Fundamental features of the direct fluorination, such as influence of treatment conditions (composition of the fluorinating mixture, fluorine partial pressure, temperature and fluorination duration) on the rate of formation, chemical composition, density, refraction index and surface energy of the fluorinated layer, kinetics of formation of radicals...

Reviews

This book may be really worth a read through, and far better than other. it was actually writtern extremely completely and valuable. I am just very easily will get a satisfaction of looking at a published ebook.

-- Lillie Toy

It is easy in read through easier to fully grasp. it had been writtern very completely and useful. I am pleased to let you know that here is the greatest book we have read during my personal life and could be he very best book for possibly.

-- Miss Marge Jerde