Correlation between physico-chemical and physicomechanical methods of optimum compounding selection for oligomer-oligomer composition

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Abstract

The correlation between physico-chemical and physico-mechanical parameters of oligomer compositions and polymer composites on the base of these systems are revealed. The thiocolepoxy, laproxide-, and oxylin-epoxy systems are investigated in wide concentration range, and the values of chromatographic polarity factors characterizing the physico-chemical nature of oligomers, and their mixtures are determined. The mathematical model is constructed relating the final strength characteristics of a polymer material to the physico-chemical parameters of an oligomer-oligomer mixture described by conventional chromatographic polarity factors.