Thermal Degradation of Polysulfones. XI:
Evaluation of Thermal Pyrolysis of Acrylonitrile-Butadiene-Styrene Terpolymer

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ABSTRACT
The thermal degradation function of acrylonitrile-butadiene-styrene terpolymer has been investigated by thermogravimetric analysis (TGA) measurement. The study evaluated its thermal pyrolysis stability applying the invariant kinetic parameter (IKP) method. The kinetic parameters of thermal decomposition of acrylonitrile-butadiene-styrene terpolymer can be obtained by dynamic TGA measurement and the IKP method assumes that the kinetic parameters are independent of the experimental conditions. Invariant activation energy and pre-exponential factor of the degradation of acrylonitrile-butadiene-styrene terpolymer were calculated to be 179.3 kJ/mole and $3.07 \times 10^7 \text{ s}^{-1}$. 