

Polymer Degradation.

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Different modes of chemical and physical degradation in polymers are described. Examples drawn from degradation studies of rubbers and thermoplastics will be given. The basis for degradation prediction based on accelerated testing and identification of degradation pathways are described. Accelerated methods for studying degradation are described and the pitfalls are discussed. The opportunities offered by miniaturization of test specimens combined with precise mechanical measurements and modelling is presented.

Finally, the knowledge of the phenomenon of physical aging of polymer glasses is discussed in the perspective of long term development of degradation properties of polymer products.