

Abstract Submitted
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Evolution of Yield Stress during Structural Relaxation for the Epoxy 828DEA¹ GABRIEL ARECHEDERRA, JOHN MCCOY, New Mexico Tech, JAMIE KROPKA, Sandia National Laboratories — The evolution of yield stress from structural relaxation of diethanolamine cured diglycidyl ether of bisphenol-A, 828DEA, was tracked using uniaxial compression experiments. Samples were aged isothermally for up to 3 months at 5 temperatures ranging from deep in the glass to above T_g. Since 828DEA has remaining reactive potential, it is anticipated that the T_g will continue to evolve throughout the course of the study as new chemical crosslinks are formed. Consequently, it is important to track the evolution of T_g as well as the progression of the fictive temperature in order to interpret the evolution of yield stress.

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