

Abstract Submitted  
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**Enthalpy Relaxation of a DGEBA Epoxy as a function of Time, Temperature, and Cooling Rate** CAITLYN M. CLARKSON, JOHN D. MCCOY, New Mexico Tech, JAMIE M. KROPKA, Sandia National Laboratories — Enthalpy relaxation resulting from physical aging of a DGEBA epoxy, Epon 828, cross-linked with an amine curative, Jeffamine T-403, was studied for two isothermal aging temperatures at sequential aging times up to two weeks. Results were analyzed using the peak shift method to obtain the relaxation parameters  $\beta$ ,  $\delta$  ( $H^*$ ), and  $\chi$ . The individual effects of cooling rate from the equilibrated state, aging time, and aging temperature were isolated to understand the initial state of the glassy epoxy and its evolution during physical aging. [Sandia National Laboratories is a multi-program laboratory managed and operated by Sandia Corporation, a wholly subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.]

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