

Abstract Submitted
for the SHOCK05 Meeting of
The American Physical Society

Shock Compression in Organic Liquids GLENN GARRETT, Georgia Institute of Technology, LALIT CHHABILDAS, WILLIAM REINHART, Sandia National Laboratories — No comprehensive mechanistic study of the shock compression behavior of liquids currently exists. Consequently, the behavior trends of shock compressed liquids has been investigated. This paper reviews the literature data available on a variety of liquids. However, this study will focus on the literature data available on hydrocarbon liquids, C_xH_y . The results of this analysis will correlate the compressibility of the hydrocarbon to its bonding structure (ring vs straight chain) as well as the length of straight chains for the hydrocarbons. Sandia is a multiprogram laboratory operated by Sandia Corporation, a Lockheed Martin Company, for the United States Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.

Glenn Garrett
Georgia Institute of Technology

Date submitted: 08 Apr 2005

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