

Abstract Submitted  
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**Constitutive Response of S65 Beryllium** JAMES TURNER, JEREMY MILLETT, AWE Aldermaston, Reading, Berkshire, RG7 4PR, CARL CADY, SHUH-RONG CHEN, Los Alamos National Laboratory, Los Alamos, NM 87545, SIMON CASE, AWE Aldermaston, Reading, Berkshire, RG7 4PR — New data is presented on the constitutive response of S65 Be. Compressive strength tests and split-Hopkinson pressure bar testing were used to examine the response of the material at strain rates of 0.001, 1 and  $10^3 \text{ s}^{-1}$  over the temperature range 20-400°C. The extent to which this low and intermediate strain-rate data can be captured using a simple rate-dependent strength model will be examined and possible extensions to the model calibration to capture higher rate data will also be discussed.

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