

Abstract Submitted
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Thermal properties of a UK PBX and binder system STEWART PALMER, DAVID WILLIAMSON, WILLIAM PROUD, University of Cambridge — The thermal conductivity, diffusivity and heat capacity of a UK PBX and binder system have been measured over a temperature range of ambient to approximately 120 °C. Independent measurements of any two of the above, and knowledge of the density, allows the third to be calculated. Comparisons between the directly measured and calculated values give an indication of the reliability of such data. Thermal conductivity measurements were made using the Lee's disc method, thermal diffusivity via Ångström's method and heat capacity via Differential Scanning Calorimetry (DSC). Such data are required for the development and validation of PBX thermal models. This paper outlines the current state of research and details the important observations to date.

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