

Abstract Submitted
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Lagrangian analysis of velocity-gauge data to determine reaction-rate histories in EDC37 CAROLINE HANDLEY, AWE plc — The Lagrangian analysis technique was applied to EDC37, an HMX- based explosive. The method was tested against an analytic model before being used to analyse particle-velocity-gauge data from two sustained-shock gas-gun experiments. This work provides evidence that the first stages of reaction in EDC37 are endothermic, as well as indicating that reaction-rate histories in explosives are bell-shaped.

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