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Experimental Hugoniot Data of Porous Silica D.L.A. CROSS, D.J. CHAPMAN, PCS, Cavendish Laboratory, Madingley Road, Cambridge, B3 0HE, UK, J. BORG, Marquette University, Department of Mechanical Engineering,1515 W.Wisconsin, Milwaukee WI 53233, USA, J. COGAR, CORVID Technologies, 149 Plantation Ridge Drive, Suite 170, Mooresville, NC 28117, USA, I.G. CULLIS, QinetiQ plc, Fort Halstead, Sevenoaks, Kent UK, K. TSEMBELIS, W.G. PROUD, PCS, Cavendish Laboratory, Madingley Road, Cambridge, B3 0HE, UK — A series of impact experiments were conducted at Cambridge University, Cavendish Laboratory to experimentally determine the Hugoniot of various densities of porous silica dust. The densities investigated were 0.1, 0.25, and 0.77 g cm-3. The experiments were conducted up to ca. 2.3 GPa in the Silica. Individual experimental results and the resulting P-V and Us-up Hugoniot are discussed and presented.

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