

## CONDITIONS FOR SPHERICAL DETONATION IN HYDROGEN-OXYGEN MIXTURE

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### S u m m a r y

Initial detonation conditions required for fast chemical reactions to take place at the front of a spherical explosive wave have been determined. A simple relation describing the critical detonation temperature for various pressures in the hydrogen-oxygen mixture was obtained. Using the known formulas for a shock transition, the critical temperature was coupled with the initial conditions in a static environment, such as the pressure, temperature, and hydrogen content in the mixture.