Halogen Gas/Aerosol In-situ Generation by the Low-exothermic SHS Method

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ABSTRACT

This work presents an experimental study of self-sustained combustion resulting in generation of chlorine gas and iodine aerosol. Combustion-generated heat and oxygen are used to produce the desired halogen gas or aerosol from certain halogen precursors. A two-layer design for a chlorine generation system is proposed to increase the chlorine yield. Discussions of the reaction systems and experimental results are presented.