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Research and Development of Insensitive Solid Propellants

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Abstract: This paper describe several methods of developing insensitive propellants,such as by using insensitive energetic binder or energetic plasticizer,or ammonium nitrate compound,or new energetic oxidizer,and reducing the size or disfigurement of solid component of propellant,or changing the shape of particles,etc. Especially the insensitive properties of HTPE propellants,HTPB propellants,and NEPE propellants etc. are introduced.

Key words: applied chemistry; propellant; insensitive; hydroxy-terminated polyether(HTPE)propellant; hydroxy-terminated polybutadiene(HTPB)propellant; NEPE propellant; review

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