

- of AN and its mixtures with magnesium and carbon [J]. *Propellants, Explosives Pyrotechnics* 1992, 17: 99–105.
- [10] Brower K R, Oxley J C, Tewari M P. Evidence of hemolytic decomposition of AN at high temperature [J]. *J. Phys. Chem.* 1989, 93, 4029–4033.
- [11] Oxley J C, Kaushik S M, Gilson N S. Ammonium nitrate explosives-thermal stability and compatibility on small & large scale [J]. *Thermochimica Acta*, 1992, 212: 77–85.
- [12] Cook M A. The Science of Industrial Explosives [M]. Salt Lake City: IRECO Chemicals, 1974.

## 非爆炸且不可还原硝酸铵的研究综述

汪旭光<sup>1</sup>, 沈立晋<sup>1,2</sup>

(1. 北京矿冶研究总院, 北京 100044;  
2. 北京科技大学, 北京 100083)

**摘要:** 综述了非爆炸且不可还原硝酸铵的研究现状, 提出了钝化硝酸铵的要求并介绍了硝酸铵的热分解机理。同时, 对如何选择钝化剂以及钝化后的硝酸铵的爆炸性测试提出了见解。

**关键词:** 无机化学; 硝酸铵; 非爆炸性; 不可还原性; 钝化剂; 综述

中图分类号: O657; TQ441.12

文献标识码: A

## 《含能材料》2004 年第 3 期被 Ei page one 收录论文

题名	第一作者	出版年卷期页
Parameters of detonation in suspended aluminum dust	HONG Tao	(2004)12-03-0129-05
Experimental study on the explosion performance of SEFAE	CHEN Ying	(2004)12-03-0134-04
Synthesis and characterization of nitric acid ester of dihydroxypropyl cellulose	SHAO Zi-qiang	(2004)12-03-0138-05
Pre-ignition reaction mechanism of B/Pb <sub>3</sub> O <sub>4</sub> delay composition	YU Jin-liang	(2004)12-03-0143-04
Investigation of coating-desensitization of hexanitrohexaazaisowurtzitane (HNIW)	JIN Shao-hua	(2004)12-03-0147-04
Study on evaluation method of reliability growth for high coast initiating explosive devices	CAO Jian-hua	(2004)12-03-0151-04
Synthesis and properties of 3,6-bis (1H-1,2,3,4-tetrazol-5-yl-amino)-1,2,4,5-tetrazine	YUE Shou-ti	(2004)12-03-0155-03
Thermal decomposition mechanism and the quantum chemical calculation of [Mg(H <sub>2</sub> O) <sub>6</sub> ] (NTO) <sub>2</sub> · 2H <sub>2</sub> O	MA Hai-xia	(2004)12-03-0158-03
Preliminary study on environment-friendly colored smoke	SONG Zhi-min	(2004)12-03-0161-04
API-ESI-HPLC-MS analysis of the mixture of BTTN and NG	ZHANG Min	(2004)12-03-0165-03
Study on property of HAN hydrogel	QU Yan-bin	(2004)12-03-0168-03
Influence of the CsNO <sub>3</sub> on the radiant intensity of the near-infrared illuminant (0.7~1.1 μm) composed of KNO <sub>3</sub> -Mg-Si-C <sub>48</sub> H <sub>42</sub> O <sub>7</sub>	PAN Gong-pei	(2004)12-03-0171-03
Research on correlation of thermal shock damage of PBX JOB-9003	TIAN Yong	(2004)12-03-0174-04
Determination of the combustion gas radiance of solid rocket propellant by remote Fourier transform infrared spectroscopy	WANG Hong	(2004)12-03-0178-03
Explanation on K-I sensitivity curve of commercial electric detonator	HAO Jian-chun	(2004)12-03-0181-03