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Microwave Desiccation of TATB and RDX

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Abstract: Based on the fact that explosives are insensitive to microwave radiations under some conditions, microwave desiccation had been applied to all of the coarse-grained TATB, submicron TATB and fine RDX. The experimental results show that it is possible to substitute high temperature drying with microwave desiccation for coarse-grained TATB. In combination of low temperature drying and microwave desiccation, the specifications of the dried coarse-grained TATB could meet the requirements. For both of the submicron TATB and fine RDX, the microwave desiccation possesses advantages of high efficiency and high speed while without remarkable particle agglomeration.

Key words: physical chemistry; microwave desiccation; explosive; TATB; RDX



第三届全国爆炸力学实验技术学术会议

爆炸力学实验方法及测试技术专业组拟于2004年8月在合肥(黄山)召开第三届全国爆炸力学实验技术暨Hopkinson压杆实验技术学术交流会。会议将分两部分进行:前期举办Hopkinson压杆实验技术短训班(部分人员),后期进行爆炸力学实验技术学术交流(全体人员)。

征文内容

爆炸与冲击领域实验技术

1. 终点弹道效应实验测试技术；
2. 传感器测试技术；
3. 爆炸与冲击领域实验装置及其配套测试技术。

Hopkinson 压杆实验技术

1. Hopkinson 压杆装置及其基本假定;
2. Hopkinson 压杆实验的信号测试及数据处理;
3. 特种材料 Hopkinson 压杆实验技术及相关的研究工作。

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