



Home About Us Contact Us View Cart My Account FAQ

username

LOGIN

New Account »
Forgot Password?

aluminum barium

GO

Advanced Search »

Ads by Google

[US Army - Official Site](#)

Earn \$2,000 when you refer someone to the Army. Details inside!
www.army.mil

[Handgun Training](#)

Learn from the pros the first time Gunfights don't give second chances
www.FrontSight.com

[Military Career Training](#)

Prepare for a Post Military Career. 100% TA for Active Duty Personnel!
www.Education4Military.com

[NRA Instructor Training](#)

California, Arizona, Nevada NRA Instructor and basic courses
southwestfirearmstraining.com

Guns and Ordnance ▾ Pyrotechnics

Recovery of Pyrotechnic Ingredients Using Supercritical Fluids

Authors: [Glenn T. Hong](#); [APHIOS CORP WOBURN MA](#)

Abstract: Many pyrotechnics contain valuable resources which could be used in commercial applications, for example metals (e.g. magnesium, **aluminum**); metallic salts of copper, strontium, and **barium**; oxidizer (e.g. sodium nitrate, potassium perchlorate); binders such as viton, and dyes which have reclaimed value. The Navy is seeking technology that can recover the valuable ingredients from pyrotechnic flares and smoke munitions in an environmentally acceptable manner. This Phase I program studied the recovery of constituents from a Magnesium- Teflon-Viton (MTV) pyrotechnic material. The use of near critical liquid and supercritical carbon dioxide with acetone cosolvent to dissolve the Viton-A binder component was investigated. Viton-A was readily dissolved by carbon dioxide with acetone cosolvent. This key finding may form the basis for an environmentally friendly process for the recycling of pyrotechnic and other energetic materials.

Limitations: APPROVED FOR PUBLIC RELEASE

Description: Final rept. 16 May 96-31 Dec 97

Pages: 16

Report Date: 21 JAN 1998

Contract Number: N00164-96-C-0049

Report Number: A864343

Keywords relating to this report:

- [ACETONES](#)
- [ALUMINUM](#)
- [BARIUM](#)
- [BINDERS](#)
- [CARBON DIOXIDE](#)
- [COPPER](#)
- [DYES](#)
- [ENERGETIC PROPERTIES](#)
- [FLARES](#)
- [FLUIDS](#)
- [LIQUIDS](#)
- [MAGNESIUM](#)
- [METALS](#)
- [OXIDIZERS](#)
- [PERCHLORATES](#)
- [POTASSIUM COMPOUNDS](#)
- [PYROTECHNICS](#)
- [RECOVERY](#)
- [RECYCLED MATERIALS](#)
- [RESOURCES](#)
- [SALTS](#)
- [SMOKE MUNITIONS](#)
- [SODIUM NITRATES](#)
- [STRONTIUM](#)
- [SUPERCRITICAL FLOW](#)

Adobe PDF - \$8.95

Printed Format - \$29.95

ADD TO CART

Please check the box for the format you wish to order.

[Shipping Terms](#)
[About Electronic Delivery](#)

[Email This Abstract](#)

[« Back to search](#)

[Home](#) | [About Us](#) | [Contact Us](#) | [View Cart](#) | [Customer Service](#) | [Shipping Terms](#) | [Advanced Search](#) | [Privacy Policy](#) | [Restrictions on PDF Usage](#)

© 2001-2008 Storming Media LLC. All rights reserved.