



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

MAY 13 2003

Mr. Mike Lely
Innovative Solutions & Technologies, L.L.C.
2304 North 7th Avenue
Suite C 4
Bozeman, MT 59715

Ref. No. 03-0078

Dear Mr. Lely:

This responds to your March 5, 2003 letter requesting classification of your fire-starting product for outdoor emergency or recreational use under the Hazardous Materials Regulations (HMR; 49 CFR 171-180). Specifically, you are requesting assistance in classifying your new product under the HMR.

According to your letter, you are developing a fire-starting product for outdoor emergency or recreational use. The product consists of a small plastic container about 1" in diameter and 3/4" tall, filled with 0.38 cubic inches of combustible material and an electronic igniter enclosed with a heat sealed lid. You currently sell a small portable hand crank generator that is used for powering small electronic devices. This generator is used to supply the power to ignite this fire starter also. The igniter in the fire starter has two 6" wire leads that are coiled up under the lid seal. The seal is first opened and the leads are unwound and attached to the generator cable alligator clips. Power is then supplied from the generator to the igniter and the combustible material burns at about 3000 degrees F for about 30 seconds. The combustible material is a mixture of 0.19 cubic inches of Orion road flare material and 0.19 cubic inches of Hodgdon pyrodex. The mixture is saturated with nitrocellulose lacquer and air-dried to solidify the mixture. The tungsten filament igniter is placed on the top of the mixture before air-drying and is adhered to the mixture after it dries. A polyethylene lid is then heat sealed to the top to enclose the product prior to retail packaging.

Section 173.22 requires that the shipper properly class and describe the hazardous material in accordance with parts 172 and 173 of the HMR. This Office does not perform that function. Based on the information provided in your letter and enclosed material safety data sheets, your fire-starting product contains an explosive propellant with an igniter that may be a "new" explosive or pyrotechnic device under the HMR. New explosives must be examined by an approved person or agency and assigned a recommended shipping description, division and compatibility group based on the tests and criteria prescribed in §§ 173.52, 173.57 and 173.58. A list of agencies that are authorized to examine and test explosives is enclosed for your information.



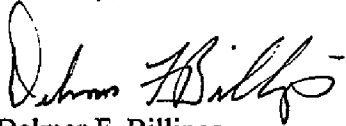
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In accordance with § 173.56, a person requesting approval of a new explosive must submit to the Associate Administrator a report of the examination and assignment of a recommended shipping description, division, and compatibility group. If the Associate Administrator finds the approval request meets the regulatory criteria, the new explosive will be approved in writing and assigned an EX number.

I hope this answers your inquiry.

Sincerely,

A handwritten signature in cursive script, appearing to read "Delmer F. Billings".

Delmer F. Billings
Chief, Standards Development
Office of Hazardous Materials Standards

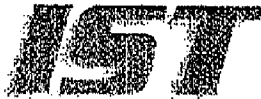
Enclosure

Agencies Authorized to Examine and Test Explosives

In accordance with the provisions of § 173.56(b)(1), the agencies listed below are authorized to examine and test explosives in accordance with §§ 173.52, 173.57 and 173.58 and to recommend a shipping description, division and compatibility group. In addition, the agencies listed may assign tentative classifications for samples of materials to authorize their shipment to designated test sites.

Agencies	Contact Person	Address and Phone
Explosives Bureau	Dr. W. S. Chang	407 Hartshorn Drive Short Hills, NJ 07078 Phone: 973-467-3237 Fax: 973-467-4648
Safety Consulting Engineers, Inc.	Mr. C. James Dahn	2131 Hammond Drive Schaumburg, IL 60173 Phone: 847-925-8100 Fax: 847-925-8120
Safety Management Services, Inc	Mr. Thaddeus C. Speed	1847 West 9000 South Suite 205 West Jordan, UT 84088 Phone: 801-567-0456 Fax: 801-567-0457
Energetic Materials Research and Testing Center (EMRTC)	Mr. Marvin Banks email: Marv@emrtc.nmt.edu	EMRTC New Mexico Tech, Campus Station Socorro, NM 87801 Phone: 505 835 5729 Fax: 505 835 5630

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Innovative Solutions & Technologies, LLC
2304 North 7th Avenue Suite C4, Bozeman, MT 59715
406.522.9300 voice 406.522.9855 fax www.insotech.biz

To: Edward Mazzullo
Director of the Office of Hazardous Materials Standards
Routing # DHM-10
Research and Special Programs Administration

From: Mike Lely
Innovative Solutions and Technologies

RE: Hazardous Material Classification for our product

Date: March 5, 2003

Boothe
§ 173.22
Shipper's Responsibility
03-0028

Dear Mr. Mazzullo,

My company is developing a fire-starting product for outdoor emergency or recreational use. We are currently in the late stages of production and seek your assistance in DOT hazardous material classification. Your direction of any procedures that we need to follow will be greatly appreciated.

Brief product description:

The product consists of a small plastic container about 1" Diameter and 3/4" tall, filled with .38 cubic inches of combustible material and an electronic igniter enclosed with a heat sealed lid. We currently sell a small portable hand crank generator that is used for powering small electronic devices. This generator is used to supply the power to ignite this fire starter also. The igniter in the fire starter has two 6" wire leads that are coiled up under the lid seal. The seal is first opened and the leads are unwound and attached to the generator cable alligator clips. Power is then supplied from the generator to the igniter and the combustible material burns at about 3000 degrees F for about 30 seconds. The idea is to easily start a campfire in less than ideal situations.

Combustible material details:

The combustible material is a mixture of .19 cubic inches of Orion road flare material and .19 cubic inches of Hodgdon pyrodex. I included the MSDS for each of these materials. The mixture is saturated with nitrocellulose lacquer and air-dried to solidify the mixture. The tungsten filament igniter is placed on the top of the mixture before air-drying and is adhered to the mixture after it dries. A polyethylene lid is then heat sealed to the top to enclose the product prior to retail packaging.

Please review this and let me know if you have any more questions or need more information. Your help will be greatly appreciated.

Sincerely,


Mike Lely

Manufacturers of the  Emergency cell phone charger