



U.S. Department  
of Transportation

**Research and  
Special Programs  
Administration**

APR 13 1999

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

Mr. Greg Dyben  
President  
Rocketflite  
836 Houston Drive  
New Haven, Indiana 46774

Ref. No. 98-0268

Dear Mr. Dyben:

This is in response to your letter dated August 1, 1998, requesting clarification on the proper classification of your igniter kit for use by model rocket and high power rocket consumers under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180).

Under § 173.22, it is the shipper's responsibility to properly classify and describe a hazardous material. This Office generally does not perform this function. However, we provide assistance when we have the information available. Based on the information contained in your material safety data sheets, photos, and in your letter, your igniter kit contains two products:

Bottle A

20 grams of plastic dip (plasticizer)

10 grams of magnesium powder 190-325 mesh. (Thoroughly mixed and suspended in plastic dip/plasticizer. This plasticizer is impervious to moisture, completely preventing the magnesium from coming into contact with moisture.)

Bottle B

20 grams of potassium perchlorate

Magnesium powder is listed as a Division 4.3 dangerous when wet material in the Hazardous Materials Table (HMT) under the HMR. According to your material safety data sheet, the plasticizer is a Class 3 flammable material. If the plasticizer is a liquid, the correct hazard class may be a Class 3 flammable liquid material. However, if the plasticizer is a paste, the correct hazard class may be a Division 4.1 flammable solid material. Potassium perchlorate is listed as a Division 5.1 oxidizing material in the HMT. If your materials meet any of the hazard class defining criteria in Part 173, they are subject to the HMR.



980268

173.22

Based on the quantities of hazardous materials described in your igniter kit, and provided all provisions are met, your product may be shipped under the small quantities exception in § 173.4 of the HMR. In order to ship as a consumer commodity, materials must meet the limited quantity provisions for that hazard class in Part 173 and the definition of a consumer commodity in § 171.8.

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



836 Houston Drive  
New Haven, Indiana 46774  
(319) 749-8719  
493-6400

Boothe  
\$ 173.22

98-0268

\* 9-16-98  
Per tel. call with  
Greg Dyben - he's  
over night waiting  
MSDS & Photos  
to me! DB\*

Copy 1

Director of the Office of Hazardous Materials Regulation  
Materials Transportation  
Research and Special Programs Administration  
U.S. Department of Transportation  
Washington, D.C., 20590

~~Attn: Exemption Branch~~

**NOTE:** Due to the very competitive nature of this market I would like to request that the chemical names and amounts listed below be kept confidential. Most of the following information contained in this document is exempt from the mandatory public disclosure requirements. A second copy has been included. Thank you.

Dear Mr. Roberts

Aug 1, 1998

My company would like to market an igniter kit for use by the model rocket and high power rocket consumers. A single kit will contain two bottles. The first bottle (bottle A) is a 2 ounce glass jar with a metal lid containing an airtight and chemically resistant plastisol seal that contains the chemicals listed below:

Bottle A.

1820 grams of plastic dip. (see enclosed MSDS for chemical breakdown of this product)  
10 grams of Magnesium powder 190-325 mesh. (thoroughly mixed and suspended in plastic dip listed above)

The second bottle (bottle B) is a 1 ounce plastic bottle that contains the chemical listed below:

Bottle B.

20 grams of Potassium Perchlorate

Potassium Perchlorate  
Div. 5.1  
UN 1489  
PG II  
5.1 label

\* Per Greg  
PG III  
Magnesium Powder  
Div. 4.3  
UN 1418  
PG I or II  
4.3 and 4.2 labels  
PG II Forbidden in Person  
Air

23.4

PG?

The Hazardous Materials Table does not list magnesium powder that has been suspended in a plasticizer. This plasticizer is impervious to moisture thereby it completely prevents the magnesium from ever coming in contact with moisture.

My question to you is what labeling, marking and packaging requirements would apply to this product so that it could be legally offered for shipment in the United States? Also could this product be shipped as an ORM-D? and are there any exemptions or party to exemptions that would allow regulatory relief for this product? and finally will this product require a 1-800 toll free chemical response number?

Your prompt assistance with these questions will be greatly appreciated.  
Thank you.

Greg Dyben



President