



U.S. Department
of Transportation

Pipeline and Hazardous Materials
Safety Administration

1200 New Jersey Ave., SE
Washington, DC 20590

JAN 28 2010

Mr. Erik Perrin, CSP
EHS Manager
Restek Corporation
110 Benner Circle
Bellefonte, PA 16823

Ref. No. 09-0044

Dear Mr. Perrin:

This responds to your letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) as applicable to the approval of desensitized explosives. You ask whether a change of diluent meeting the same hazard class and mass would be authorized without further examination. An example you cite in your letter is a previously examined, classed and approved desensitized explosive mixture containing 1% RDX and 99% acetone. Because the mixture exhibits characteristics of the solvent and not the explosive substance when examined and tested, you ask if an alternative diluent of the same hazard class, packing group and concentration, such as methanol, could be substituted for the acetone without obtaining approval from the Associate Administrator.

As specified in § 173.124(a), unless the mixture is specifically listed by name in the § 172.101 Hazardous Materials Table (HMT), all desensitized explosive mixtures are assigned a shipping name and hazard class by the Associate Administrator under the provisions of either a special permit or approval. Furthermore, most desensitized explosive mixtures specifically listed by name in the HMT also require approval before they may be offered for transportation. Thus, written approval must be issued by the Associate Administrator if an alteration is made to any constituent within a desensitized explosive mixture unless the alteration is specifically listed by name in the HMT or is authorized in an assigned § 172.102 special provision.

I hope this information is helpful. Please contact this office if you have additional questions.

Sincerely,

Hattie L. Mitchell
Chief, Regulatory Review and Reinvention
Office of Hazardous Materials Standards



Stevens
§173.56
Explosive
09-0044

January 4, 2008

Edward T. Mazzullo
Director
Office of Hazardous Materials Standards
1200 New Jersey Ave. SE
Washington, DC 20590-0001

Subject: Request for Interpretation (49CFR 173.56)

Dear Mr. Mazzullo,

My question pertains to the manufacture of Analytical Reference Materials (ARM) for the chromatography industry. ARM Standards contain extremely low percentages of explosive material completely dissolved in solvent. These mixes are packaged in glass ampules and are used in a variety of laboratory testing processes. These laboratory standard solutions are used to calibrate laboratory equipment or analyze and evaluate other chemical samples. ATF has determined that explosive materials used in laboratory standard solutions, such as the items outlined here, fall within the Federal regulation at 27CFR 555 Subpart – H Exemptions. 27CFR 555.141 (a) (9) allows for the use of these explosive materials as industrial and laboratory chemicals which are intended for use as reagents and which are packaged and shipped pursuant of DOT regulations.

Extensive testing has been completed on these products and results have indicated that that the solutions display the properties of the solvent and not the explosive. Due to these solutions not meeting the criteria for Class 1 Materials, would I be correct in concluding that the materials do not need to be classified as a new explosive?

If these items are considered new explosives and DOT classification approval is required, would a new approval be necessary each time a solvent is changed? Example; DOT Classifies 1% RDX combined with 99% Acetone as a desensitized explosive. Due to customer request, if the solvent were substituted to 99% Methanol, would this be considered a new explosive?

49CFR 173.56 defines a new explosive;

(a) Definition of new explosive. For the purposes of this subchapter a new explosive means an explosive produced by a person who: (1) Has not previously produced that explosive; or (2) Has previously produced that explosive but has made a change in the formulation, design or process so as to alter any of the properties of the explosive.

In the scenario above, while there has been a change in formulation, the change has not altered any of the properties of the explosive. Would I be correct in concluding that the material would not meet the definition of a new explosive?

I thank you for your interpretation and look forward to your response.

Sincerely

Erik Perrin, CSP
EHS Manager
Restek Corporation