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

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

JAN 30 2004

Mr. John G. Mayfield
Manager, Dangerous Goods Transportation
Fisher Scientific Company, LLC
2000 Park Lane
Pittsburgh, PA 15275-1126

Ref. No. 03-0321

Dear Mr. Mayfield:

This is in response to your letter dated December 17, 2003 requesting clarification on the classification of Bouin's Solution under the Hazardous Materials Regulations (HMR: 49 CFR Parts 171-180). Specifically, you would like a letter confirming your conclusions that a mixture consisting of 1.5% picric acid, 9% acetic acid, 19% formaldehyde, < 1% coloring agent, and approximately 79% water should be classified as "Corrosive liquid, acidic, organic, n.o.s. (formaldehyde, acetic acid), 8, UN3266, III."

Under § 173.22 of the HMR, it is the shipper's responsibility to properly classify a hazardous material. This office generally does not perform this function. The definition of a corrosive material is found in § 173.136 of the HMR and procedures for packing group selection are found in § 173.137. Assuming that you have reviewed those sections and determined that your Bouin's Solution meets the definition of a corrosive material in packing group III and is assigned to the Corrosive liquid hazard class then the proper shipping name "Corrosive liquid, acidic, organic, n.o.s. (formaldehyde, acetic acid)" would be appropriate. However, the identification number that you provided in your letter,UN3266, is not consistent with the proper shipping name that you selected. UN3266 is the identification number for the proper shipping name "Corrosive liquid, basic, inorganic, n.o.s.". If your conclusions are accurate, then it is our opinion that the actual description would be "Corrosive liquid, acidic, organic, n.o.s. (formaldehyde, acetic acid), 8, UN3265, III."

If you determine that a particular mixture of Bouin's Solution does not meet the definition of a corrosive material or any other hazard class, but it does present a risk during transportation, specifically air transportation, then it is our opinion that the basic description "Aviation regulated liquid, n.o.s. (formaldehyde), 9, UN3334, III" would be acceptable. However, if the acetic acid or picric acid contribute in any way to the hazards of the material they may be required to be included in basic

173.136

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description as part of the technical name (i.e., Aviation regulated liquid, n.o.s. (formaldehyde, acetic acid), 9, UN3334, III or Aviation regulated liquid, n.o.s. (formaldehyde, picric acid), 9, UN3334, III).

I hope this satisfies your request.

Sincerely,

Susan Gorsky
Senior Transportation Regulations Specialist
Office of Hazardous Materials Standards

Supko
§ 172.101
Classification
03-0321

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December 17, 2003

Dr. Charles Ke
Office of Hazardous Materials Technology
US Department of Transportation
Research and Special Programs Administration
400 Seventh Street S.W.
Washington, DC 20590

Re: Bouins Solution Classification

Dear Dr. Ke:

Thank you for taking our call of this morning. In response to our conversation regarding the classification for Bouins Solution, we offer the following information. Bouins Solution is a product used in the medical industry primarily as a tissue fixative. Fisher Scientific purchases this material from various vendors for resale. While the various producers' exact percentages and components may vary, the primary ingredients with their maximum percentages are picric acid (trinitrophenol) at 1.5%, acetic acid at 9%, formaldehyde at 19%, one coloring agent (which varies by supplier) at < 1% and water as the balance or approximately 79%. As requested, we have enclosed a copy of Mr. Mazzullo's Memorandum to Mr. William G. Wilkening dated June 2, 2000, which specifically states that mixtures of picric acid (1.3%) and water (98.7%) are not subject to the HMR.

We believe that the Bouins Solution mixtures should not be regulated as a 4.1, as is the classification for trinitrophenol wetted with not less than 30% water. We do not feel that the addition of the formaldehyde or acetic acid would contribute to the activity of the trinitrophenol. The final product should not be classified as either explosive or reactive. However, we do think that the materials would fall under the HMR. Due to the percentages of formaldehyde and acetic acid, we propose the classification for transportation as:

Corrosive Liquid, Acidic, Organic, N.O.S. (formaldehyde, acetic acid),
8, UN3266, III

Given the possibility that some of these Bouins Solutions may not contain enough acetic acid or formaldehyde to meet the definition of corrosive, we propose that the alternative classification for materials tested and found to be non-corrosive be:

Aviation Regulated Liquid, N.O.S. (formaldehyde), 9, UN3334, III

Do you agree with our classifications?

Thank you for your time. If you have any other questions, please do not hesitate to contact me.

Respectfully,

John G. Mayfield
Manager, Dangerous Goods Transportation

Enclosure: 1