



U.S. Department of Transportation
**Pipeline and Hazardous Materials
Safety Administration**

1200 New Jersey Ave, SE
Washington, D.C. 20590

MAR 17 2011

Mr. Clifford Croft
Director of Regulatory Compliance
Kajuligan Corp.
1533 Kirkwood Drive, Geneva, IL 60134

Ref. No. 11-0019

Dear Mr. Croft:

This responds to your letter requesting the proper classification of 10% buffered formalin under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). In your letter, you state your 10% Formalin solution contains 3.5-4% formaldehyde solution. You also state that based on the International Civil Aviation Organization entry, a formaldehyde solution that is less than 10% solution is not regulated as aviation regulated liquid, n.o.s. UN 3334. You ask whether a 10% buffered formalin with 3.5-9.9% formaldehyde solution is not regulated by any mode of transportation.

As provided by § 173.22 of the HMR, it is the shipper's responsibility to properly class a hazardous material. This Office generally does not perform this function. Manufacturers, generally have the knowledge to properly class the materials and products they produce, although it may be necessary to enlist an outside laboratory to assist in the classification process as testing may have to be conducted to determine how a product compares to the criteria for the various hazard classes. However, although you did not provide sufficient information, such as a Material Safety Data Sheet, the acute effects of Formaldehyde Solutions have been well documented. A 10% Formalin (3-5% formaldehyde solution), typically used to preserve biological samples, meets the definition for a Class 9 material in § 173.140 and is subject to regulation when transported domestically by air. The appropriate shipping description is "Other Regulated Substances, liquid, n.o.s. (formaldehyde), 9, NA3082, III." Generally, solutions of less than a 10% formalin mixed with non-hazardous materials are not subject to the HMR, provided they do not meet the definition of a class 9 hazardous material or any other hazard class.

I hope this satisfies your request.

Sincerely,

T. Glenn Foster
Chief, Regulatory Review and Reinvention Branch
Standards and Rulemaking Division



Andrews
\$ 171.1
\$ 172.101
Applicability
11-0019

December 28, 2010

U.S. DOT
PHMSA Office of Hazardous Materials Standards
Attn: PHH-10
East Building
1200 New Jersey Avenue, SE.
Washington, DC 20590-0001

There seems to be some confusion about the classification of a 10% Buffered Formalin. A 10% Formalin contains 3.5-4.0% Formaldehyde Solution. Based on the ICAO entry a formaldehyde solution less than 10% is not regulated as an Aviation regulated liquid, n.o.s. UN3334.

I am requesting a letter to take to suppliers that a 10% buffered formalin with 3.5-9.9% formaldehyde solution is not regulated by any mode of transportation.

If you require any additional information please let me know.

Sincerely,

Clifford Croft
Director of Regulatory Compliance
Kajuligan Corp.