U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue SE
Washington, DC 20590

AUG 12 2011

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

Reference No. 11-0141

Dear Mr. Croft:

This is in response to your March 22, 2011 letter, postmarked June 30, 2011, and subsequent July 13, 2011 telephone conversation on behalf of your client with a member of my staff concerning "Asepticare TB+II," a cleaner and disinfectant. You enclosed a material safety data sheet (MSDS) that states this product contains by volume: 73 percent water; 21 percent "Propan-2-ol" alcohol, 2 percent "2-butoxyethanol;" 0.154 percent "alkyl dimethyl benzyl ammonium chloride;" and 0.154 percent "quarternary ammonium compounds, benzyl-c12-18-alkyldimethyl, chlorides." The MSDS also states the product has a flash point of 30 °C (86 °F) and a boiling point greater than 35 °C (95 °F). Specifically, you ask if Asepticare TB+II is excepted from regulation in all modes of transportation under § 173.150(e) of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). We have paraphrased your questions and answered them in the order you provided.

Q1. Does the Pipeline and Hazardous Materials Safety Administration (PHMSA) agree that Asepticare TB+II is not subject to regulation under the HMR because the components in this product conform with the exceptions in § 173.150(e)? The MSDS you provided states the product is not regulated under the HMR. In addition, per a discussion with PHMSA staff, you state you discussed with your staff that undiluted propan-o-l may be described as a "UN 1219, Isopropanol, 3 (flammable liquid), Packing Group (PG) III" under the HMR, but 2-butoxyethanol has an oral toxicity LD50 value of 470 mg/kg (rat), which you state means it does not meet the definition for a Division 6.1 (poisonous) material under the HMR.

A1. The answer is no. Section 173.150(e) permits an aqueous solution containing 24 percent or less alcohol by volume and no other hazardous material to be either reclassed as a combustible liquid or excepted from regulation under the HMR if it contains 50 percent or more water. Although your client's solution contains 24 percent or less alcohol by volume and more than 50 percent water, based on the information you provided your client's solution also contains 1) 5 percent of "UN 2810, Toxic liquid, organic, n.o.s. (2-butoxyethanol), 6.1 (poisonous) PG III;" 2)

0.154 percent "UN 2922, Corrosive liquid, toxic, n.o.s. (alkyl dimethyl benzyl ammonium chloride), 8, 6.1, PG III; " and 3) 0.154 percent of "quarternary ammonium compounds, benzyl-c12-18-alkyldimethyl, chlorides," a substance that may be regulated as a pesticide under the Environmental Protection Agency's Toxic Substances and Control Act (TSCA). For more information on the EPA's TSCA regulations concerning pesticides, you may wish to contact its Office of Pollution Prevention and Toxics at telephone number (202) 564-3810, or their information service at telephone number (202) 554-1404.

Q2. Does the exception prescribed in § 173.150(e)(2) apply to domestic air transportation?

A2. The answer is yes. The HMR applies to the domestic transportation of hazardous materials by aircraft in commerce to, from and within the United States. However, most aircraft carriers prefer to comply with the International Civil Aviation Organization (ICAO) Technical Instructions for the Safe Transportation of Dangerous Goods by Air (Technical Instructions). The HMR authorizes compliance with these instructions provided the provisions prescribed in 49 CFR Part 171, Subpart C, are met. Further, the ICAO Technical Instructions also except from regulation aqueous solutions that contain 24 percent or less alcohol by volume (see Part 3, Chapter 3, Table 3-2 (Special Provisions)).

Q3. Is Asepticare TB+II excepted from regulation under the HMR because it is an aqueous solution of alcohol or because it is reclassed as a combustible liquid?

A3. Based on the information you provided, Asepticare TB+II is not excepted from regulation under the HMR. It does not meet the criteria for an aqueous solution containing 24 percent or less alcohol by volume because it contains other hazardous materials that are not alcohols. In addition, it does not meet the definition of a combustible liquid because it has a flash point of 86 °F and contains other hazardous materials. A "combustible liquid" is a material that has a flash point above 60 °C (140 °F) and below 93 °C (200 °F) that does not meet the definition of any other HMR hazard class (see § 173.120(b)(1)). A flammable liquid may be reclassed as a combustible liquid provided it has a flash point at or above 38 °C (100 °F) but not exceeding 60 °C (140 °F) and also does not meet the definition of any other HMR hazard class (see § 173.120(b)(2)).

Q4. If Asepticare TB+II is shipped by aircraft, does the packaging have to meet the general requirements for transportation by aircraft prescribed in § 173.27?

A4. The answer is yes. All hazardous materials transported by aircraft must conform to the general requirements for transporting hazardous materials by aircraft prescribed § 173.27, as well as all other applicable requirements under the HMR.

Q5. Does the flashpoint of Asepticare TB+II have anything to do with the exception for aqueous solutions of alcohol prescribed in § 173.150(e)(2)?

A5. The answer is no. See Answer A1.

I hope this satisfies your request.

Sincerely,

T. Glenn Foster

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

Edmonson
§173.150(e)
§173.27
Applicability
11-0141

Kajuligan Corporation
1533 Kirkwood Drive, Geneva, IL 60134

March 22, 2011

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

I am requesting a written formal interpretation for 49CFR 173.150(e). It is my understanding that if I have a product that is less than 24% alcohol with no other hazardous materials and more than 50% water it is not regulated domestically by all modes of transportation. The product Asepticare TB+II contains Isopropanol 21% and 73% water with no other hazardous materials. It is my understanding under 49CFR 173.150(e)(2) that an aqueous solution of alcohol with less than 24% is not regulated by all modes of transportation as long as it contains no less than 50% water regardless of the flashpoint. .

Based on the components of this product would you agree that it is excepted from the HMR under 173.150(e)?

Does the exception 173.150(e) apply to domestic air transportation?

Is the material excepted from the HMR because it is an aqueous solution of alcohol or because it is reclassed as combustible?

If we ship by air does the packaging have to meet 173.27?

Does the flashpoint have anything to do with the exception for aqueous solutions of alcohol?

I have seen other interpretations stating this type of product is not subject to the HMR but the flashpoint on the letter of interpretation is higher than the flashpoint of the product in question.

If you require any additional information please let me know.

Sincerely,

Clifford Croft
Director of Regulatory Compliance
Kajuligan Corp.

Phone: 630-215-4509
Phone: 913-522-1036
Fax: 913-339-9779

Material Safety Data Sheet

ASEPTICARE TB+II

Section 1. Chemical product and company identification

Trade name : ASEPTICARE TB+II
Product use : Cleaner and disinfectant
Supplier : Ecolab Inc. Professional Products Division
370 N. Wabasha St.
St. Paul, MN 55102
1-800-247-5362
Code : 938357
Date of issue : **08-March-2006**
EPA Registration No. : 1130-15-1677

EMERGENCY HEALTH INFORMATION: 1-800-328-0026
Outside United States and Canada CALL 1-651-222-5352 (in USA)

Section 2. Composition, information on ingredients

Name	CAS number	% by weight
propan-2-ol	67-63-0	21
2-butoxyethanol	111-76-2	5
alkyl dimethyl benzyl ammonium chloride	8001-54-5	0.154
quaternary ammonium compounds, benzyl-c12-18-alkyldimethyl, chlorides	68391-01-5	0.154

Section 3. Hazards identification

Physical state : Liquid. (Liquid.)
Emergency overview : CAUTION!

HARMFUL IF INHALED OR ABSORBED THROUGH SKIN.
CAUSES EYE IRRITATION.
FLAMMABLE LIQUID AND VAPOR.
VAPOR MAY CAUSE FLASH FIRE.
Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Potential acute health effects

Eyes : Moderately irritating to eyes.
Skin : Moderately irritating to the skin.
Inhalation : Moderately irritating to the respiratory system.
Ingestion : No known significant effects or critical hazards.

See toxicological information (section 11)

Section 4. First aid measures

Eye contact : In case of contact, immediately flush eyes with cool running water. Remove contact lenses and continue flushing with plenty of water for at least 15 minutes. Check for and remove any contact lenses. Get medical attention.
Skin contact : Remove contaminated clothing and shoes. Rinse with plenty of running water. Wash clothing before reuse. Get medical attention if irritation occurs.
Inhalation : If inhaled, remove to fresh air.
Ingestion : Do not induce vomiting. Never give anything by mouth to an unconscious person. If irritation persists, get medical attention.

Section 5. Fire fighting measures

Flash point : 30 °C (Closed cup)

Fire-fighting media and instructions : In case of fire, use water spray (fog), foam, dry chemical, or CO_2.

Dike liquid for later disposal.
Flammable liquid and vapor. Vapor may cause flash fire. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions : Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment. Do not touch or walk through spilled material.

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Methods for cleaning up : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion-proof means to transfer material to a sealable, appropriate container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

Section 7. Handling and storage

Handling : Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Avoid breathing vapor or mist. Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Wash thoroughly after handling.

Storage : Keep out of the reach of children. Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).
Do not store above 40°C

Section 8. Exposure controls, personal protection

Engineering controls : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.

Personal protection

Eyes : Eye protection recommended.

Hands : Use chemical-resistant, impervious gloves.

Skin : Wear suitable protective clothing.

Respiratory : Avoid breathing vapors, spray or mists.

Name	Exposure limits
propan-2-ol	**ACGIH TLV (United States, 1/2005).** STEL: 400 ppm 15 minute/minutes. Form: All forms TWA: 200 ppm 8 hour(s). Form: All forms **OSHA PEL (United States, 8/1997).** TWA: 980 mg/m^3 8 hour(s). Form: All forms TWA: 400 ppm 8 hour(s). Form: All forms **NIOSH REL (United States, 12/2001).** STEL: 1225 mg/m^3 15 minute/minutes. Form: All forms STEL: 500 ppm 15 minute/minutes. Form: All forms TWA: 980 mg/m^3 10 hour(s). Form: All forms TWA: 400 ppm 10 hour(s). Form: All forms
2-butoxyethanol	**ACGIH TLV (United States, 1/2005).** TWA: 20 ppm 8 hour(s). Form: All forms **OSHA PEL (United States, 8/1997). Skin**

TWA: 240 mg/m³ 8 hour(s). Form: All forms
TWA: 50 ppm 8 hour(s). Form: All forms

Section 9. Physical and chemical properties

Physical state : Liquid. (Liquid.)
Color : Clear.
Odor : Alcohol-like.
pH : 7 (100%)
Boiling/condensation point : >35 °C
Specific gravity : 0.96 (Water = 1)

Section 10. Stability and reactivity

Stability : The product is stable.

Section 11. Toxicological information

Potential acute health effects

Eyes : Moderately irritating to eyes.
Skin : Moderately irritating to the skin.
Inhalation : Moderately irritating to the respiratory system.
Ingestion : No known significant effects or critical hazards.
Chronic effects on humans : Contains material which causes damage to the following organs: blood, kidneys, liver, lymphatic system, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Section 12. Ecological information

Products of degradation : These products are carbon oxides (CO, CO_2) and water.

Section 13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Waste classification : Unused product is D001 (Ignitable)

Consult your local or regional authorities.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Additional information
DOT Classification	Not regulated.	-	-	-	-

APPLIES ONLY DURING ROAD TRANSPORT

Any variation of the shipping description based on the packaging is not addressed.

Section 15. Regulatory information

HCS Classification : Flammable liquid
Irritating material
Target organ effects

U.S. Federal regulations : SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.

TSCA 8(b) inventory : All materials are listed or exempt.

SARA 313	Product name	Concentration
Form R - Reporting requirements	2-butoxyethanol	5

California Prop. 65 : No products were found.

EPA Registration No. : 1130-15-1677

Section 16. Other information

Hazardous Material Information System (U.S.A.) :

Health *	1
Fire hazard	3
Reactivity	0
Personal protection	B

Date of issue : **08-March-2006.**

Responsible name : **Regulatory Affairs**

Date of previous issue : **08-March-2006.**

Notice to reader

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.