



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

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

JUL 11 2016

Brooke Baker
OR-CAL Inc.
29454 Meadowview Rd.
Junction City, OR 97448

Ref. No. 16-0064

Dear Ms. Baker:

This responds to your April 15, 2016 email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to a product you are considering for shipment (contains bifenthrin). Your questions and our responses are paraphrased below.

Q1. Based on the Safety Data Sheet (SDS) provided, is “UN3082, Environmentally hazardous substance, liquid, n.o.s. (bifenthrin), Class 9, Packing Group III,” the appropriate classification for this product?

A1. In accordance with § 173.22, it is the shipper's responsibility to properly classify a hazardous material. This Office does not generally perform that function. While the SDS you provided indicates the product is classified as “UN3082, Environmentally hazardous substance, liquid, n.o.s. (bifenthrin), Class 9, Packing Group III,” as a severe marine pollutant, it does not provide an indication on how that determination was made.

Although bifenthrin is not on the List of Marine Pollutants found in Appendix B to § 172.101, it may be classified as such by international standards. In accordance with introductory text of Appendix B of § 172.101, if a material is not listed in the appendix and meets the criteria for a marine pollutant as provided in Chapter 2.9 of the IMDG Code, (incorporated by reference; see § 171.7 of the HMR), the material may be transported as a marine pollutant in accordance with the HMR.

Q2. What are the regulations that specify packaging requirements for a Class 9 hazardous material?

A2. We reiterate that it is the shipper's responsibility to properly class and describe a hazardous material using the criteria in Subpart C of Part 173 of the HMR. Once a material is properly classified and described, shippers can locate the appropriate packaging sections through use of the Hazardous Materials Table (HMT) in

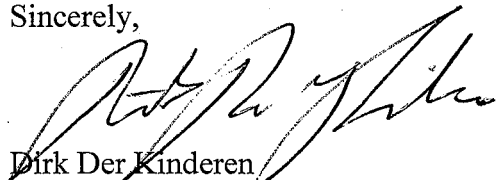
§ 172.101. While not all Class 9 materials are packaged in the same manner, authorized packagings for “UN3082, Environmentally hazardous substance, liquid, n.o.s, Class 9, PG III” are located in Column 8 of the HMT.

Q3. If your company offers this material for transportation in non-bulk packaging as described in your incoming letter, would your company be subject to the registration requirements found in the HMR?

A3. It is unclear based on the information provided. Please review the applicability of the requirement for registration found in § 107.601(a) of the 49 CFR.

I trust this satisfies your inquiry. Please contact us if we can be of further assistance.

Sincerely,



Dirk Der Kinderen
Chief, Standards Development Branch
Standards and Rulemaking Division

Goodall, Shante CTR (PHMSA)

Suchak
173.0
Shipping Requirements
16-0064

From: Geller, Shelby CTR (PHMSA)
Sent: Thursday, April 07, 2016 11:29 AM
To: Hazmat Interps
Subject: FW: DOT Shipping requirements question
Attachments: Permatek 100 Encaps Rev 040315.pdf

Dear Shante and Alice,

Forwarded is a request for a formal letter of interpretation. Isaac Taylor spoke with Ms Baker.

Thanks,
Shelby

From: Brooke Baker [<mailto:brooke@orcalinc.com>]
Sent: Tuesday, April 05, 2016 7:23 PM
To: INFOCNTR (PHMSA)
Subject: DOT Shipping requirements question

Hi,

My name is Brooke Baker and I'm trying to get some information on the shipping requirements and costs for a product one of our customers would like us to ship in the future. The product is PERMATEK 100 Encaps and the MSDS is attached.

It says that the product is not subject to DOT regulations as a hazardous material when shipped in non-bulk packages but I don't think this is correct. Can you tell me:

- If the company decides to sell this product would our business have to be registered as a hazardous materials shipper and pay a yearly fee? (This is the only hazmat product we would be shipping)
- Is this the correct shipping name: UN 3082, Environmentally Hazardous Substance, liquid, n.o.s. (Bifenthrin), Class 9, PG III?
- Can you direct me to the regulation that specifies packaging requirements for a class 9 substance?

Thank you,

Brooke Baker
Regulatory Specialist
OR-CAL Inc.
29454 Meadowview Rd.
Junction City, OR, 97448
541-689-4413



Material Safety Data Sheet

PERMATEK 100 ENCAPS.

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY:

PRODUCT NAME: **PERMATEK 100 ENCAPS.**
MANUFACTURER: Zelam Ltd
SUPPLIER NAME: Zelam Ltd
SUPPLIER ADDRESS: 13-15 Hudson Rd, Bell Block, New Plymouth, New Zealand
SUPPLIER PHONE: +64 6 7559234 SUPPLIER FAX: +64 6 7551174
EMERGENCY PHONE: 0800 243 622, 0800 CHEMCALL INTERNATIONAL EMERGENCY PHONE: +64 3 353 0199
CHEMICAL FAMILY: Synthetic pyrethroid USE: Timber Insecticide

2. HAZARDS IDENTIFICATION:

6.1D; Harmful - may be harmful if swallowed, inhaled or absorbed through the skin.
6.4A; Harmful - may cause eye irritation. Avoid contact with eyes.
6.9B; Harmful - may cause organ damage from repeated oral exposure at high doses.
9.1A; Very Toxic to fish with long lasting effects. Avoid contamination of any water supply with this product or empty container.
9.2C; Harmful to the soil environment
9.3B; Toxic to terrestrial vertebrates [birds]
9.4A; Very Toxic to terrestrial invertebrates [bees]
Refer to Section 15 for NZ EPA Requirements.

3. COMPOSITION / INFORMATION ON INGREDIENTS:

COMMON NAME:	CAS NUMBER:	CONCENTRATION %:	HAZARD CLASSIFICATIONS:
- Di-aryl ester		< 20%	
- Bifenthrin	82657-04-3	10%	
- Inerts		Balance	

4. FIRST - AID MEASURES:

EYE CONTACT: Immediately flush with flowing water for at least 15 minutes. Seek medical attention if irritation persists.
SKIN CONTACT: Immediately flush with plenty of water while removing contaminated clothing. DO NOT scrub the skin. Continue for at least 15 minutes. Wash clothing before reuse.
INHALATION: If inhaled, move the victim to fresh air immediately. Begin artificial respiration if breathing has stopped. Use mouth to nose rather than mouth to mouth. Obtain medical attention.
INGESTION: If swallowed, rinse mouth with water immediately. DO NOT induce vomiting. Seek medical attention.
NOTES TO DOCTOR: No specific antidote. Treat symptomatically.

5. FIRE FIGHTING MEASURES:

FLASHPOINT: HAZCHEM CODE: 2X
FLAMMABLE LIMITS: Not available
EXTINGUISHING MEDIA: Foam, Carbon dioxide, Dry chemical or Water spray (fog). Contain all runoff.
THERMAL DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, hydrogen chloride, chlorine, fluorine and hydrogen fluoride.
SPECIAL FIRE FIGHTING METHODS: Isolate fire area. Evacuate downwind residents. Wear full protective clothing and a self-contained breathing apparatus. Do not breathe smoke, gases or vapours generated.
UNUSUAL FIRE OR EXPLOSION HAZARDS: None

6. ACCIDENTAL RELEASE MEASURES:

Use appropriate protective equipment. Clear area of unnecessary personal. Spills may be slippery and should be cleaned up immediately.
Large spill: Dike and pump as much as possible to a salvage container. Absorb the remaining liquid and any small spills with clay granules, sand or other absorbent material and sweep to a waste container. Cover the spill area with water and absorb. Minimise runoff into waterways or drains.
Warning this substance is very toxic to aquatic organisms. Avoid contamination of any water supply.

7. HANDLING AND STORAGE:

Harmful - Keep out of reach of children.
Store in original container, tightly closed away from foodstuffs.
Wear personal protective equipment appropriate to the situation when handling product. Wash protective clothing daily after work.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

EXPOSURE LIMITS: No exposure limits (WES or TEL have been specifically assigned for this product. Environmental Exposure Limits [EEL] set: EELwater; 0.05 ng/L Bifenthrin
EYE PROTECTION: Chemical goggles or face shield where splash may occur.
RESPIRATORY PROTECTION: For splash, vapour or mist exposure wear a half face air purifying respirator which is approved for pesticides. Respirator selection is based on airborne concentrations.
PROTECTIVE CLOTHING: When handling wear waterproof gloves, overalls and boots. Avoid skin contact. Wash protective clothing daily after work.
VENTILATION: General (mechanical) room ventilation is considered satisfactory.
HYGIENE PRECAUTIONS: Do not eat drink or smoke while working with this product. Remove clothing that becomes soaked or contaminated and wash before re-use. Wash hands before breaks and after work. The use of a skin barrier cream is useful to give additional skin protection.

Material Safety Data Sheet

PERMATEK 100 ENCAPS.

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE / STATE / ODOUR: Viscous tan coloured suspension

BOILING POINT:	100°C	pH:	8 - 9.5
DENSITY:	1.01	SETTING POINT:	Not available.
DECOMPOSITION TEMP:	Not available.	AUTOIGNITION TEMP:	Not available.
FLASHPOINT:	>103°C closed cup	VAPOUR DENSITY:	Not available.
EXPLOSION PROPERTIES:	Not available.	VAPOUR PRESSURE:	Not available.
SOLUBILITY:	< 1 µg/L (bifenthrin)		
OTHER DATA:			
OCTANOL / WATER PARTITION COEFFICIENT:	Kow Logp >6 (bifenthrin)		

10. STABILITY AND REACTIVITY:

CONDITIONS TO AVOID: Stable under normal storage conditons. Keep in a cool place away from heat and away from open flames.

MATERIALS TO AVOID: Incomptable with strong acids and bases and strong oxidising agents.

HAZARDOUS DECOMPOSITION: Oxides of carbon and hydrogen fluoride and other componds of fluorine.

11. TOXICOLOGICAL INFORMATION:

ACUTE ORAL: >500 mg/kg by calculation

ACUTE DERMAL: 2880 mg/kg by calculation

ACUTE INHALATION: 11.0 mg/L by calculation

OTHER TOXICITY INFORMATION:

- Harmful - may be harmful if swallowed, inhaled or absorbed through the skin.
- Harmful - may cause eye irritation. Avoid contact with eyes.
- Harmful - may cause organ damage from repeated oral exposure at high doses.

12. ECOLOGICAL INFORMATION:

Aquatic Toxicity: Very toxic to fish. LC 50 (96 hr) for rainbow trout, 0.00015 mg/L.

Terrestrial Vertebrates - Birds: LD50 bobwhite quail, 1800 mg/kg.

Terrestrial Invertebrates - Bees: Very toxic to bees.

Very Toxic to fish/aquatic organisms with long lasting effects. Avoid contamination of any water supply with this product or empty container.

Harmful to the soil environment
Toxic to terrestrial vertebrates [birds]
Very Toxic to terrestrial invertebrates [bees]

13. DISPOSAL CONSIDERATIONS:

Empty containers must be triple rinsed before they are disposed of in any forms as mentioned below. Add rinsings to tank mix or dispose of rinsate in disposal pit. This pit must be away from aquatic areas and in suitable areas specifically marked and set up for the purpose. DO NOT dispose of undiluted chemicals on site.

If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, crush or puncture empty containers. Dispose of the containers at a local authority landfill that does not burn refuse. If there is no local authority landfill readily available in your area, bury the containers at a depth of 500mm or more at an approved disposal site.

DO NOT burn empty containers or product.

14. TRANSPORT INFORMATION:

U.S. SURFACE FREIGHT CLASS: This product is not subject to DOT regulations as a hazardous material when shipped in non-bulk packages.

OTHER SHIPPING INFORMATION: This product is not regulated for transport in the USA when shipped via highway or railroad in non-bulk packages. Describe using the "U.S. Surface Freight Class" above, which applies in all cases.

SPECIAL NOTE: The following applies to shipments over water, and shipments in bulk packages:

Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Bifenthrin)		
UN Number:	3082	UN Hazard Class:	9
Packing Group:	III	Hazchem Code:	2X
Additional Information:	Bifenthrin is a severe marine pollutant		

15. REGULATORY INFORMATION:

This product DOES NOT have Approved Handler, Tracking, or Record Keeping Requirements when used as a timber preservative.

Approved pursuant to the HSNO Act 1996. NZ EPA Approval Code: HSR002453 See <www.epa.govt.nz> for controls.

16. OTHER INFORMATION:

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the product's properties.