

# MATERIAL SAFETY DATA SHEET

## SECTION I – PRODUCT INFORMATION

**PRODUCT NAME:** Veterinary Biologicals (See List of Synonyms Below)  
**MSDS NUMBER:** 21403  
**PRODUCT CODE:** Various  
**CHEMICAL FAMILY:** Biological Vaccines with Thimerosal and Formaldehyde  
**SYNONYMS:** Vibralone L5; Vibralone H-L5; Mystique II; Herd Vac 3 S; Herd Vac 4; Herd Vac 4 L;  
Herd Vac 8; Herd Vac 9; Lepto 5; Premier 4; Premier 8; Premier 9; Premier 9 Somnu-Tech;  
TGE-Vac; Encevac T + VEE; Encevac TC4 + VEE; Encevac T; Encevac TC4  
**DOSAGE FORM:** Vaccines - Various

**MANUFACTURER/SUPPLIER:** Intervet, Inc.  
405 State Street  
P.O. Box 318  
Millsboro, DE 19966

**TELEPHONE:** 1-800-268-4257  
**EMERGENCY #:** 1-800-345-4735 (only to be used after hours between 4:30pm - 8:30am)  
**FAX:** 1-888-498-4444

## SECTION II – INGREDIENT INFORMATION

HAZARDOUS INGREDIENTS	CAS#	EXPOSURE LIMITS		CONCENTRATION (%)
		OSHA	ACGIH	
Formaldehyde	50-00-0	0.75ppm (TWA) 2.00ppm (STEL)	0.30ppm (Ceiling)	>0.1 - <0.5%
Formaldehyde is used in the above-listed products as a preservative.				
Adjuvant		Not Established	Not Established	5 - 10%
Specific chemical identity is withheld as a trade secret				

## SECTION III – PHYSICAL DATA

**BOILING POINT:** Not established  
**VAPOR PRESSURE:** Not established  
**SOLUBILITY IN WATER:** Soluble  
**PHYSICAL STATE:** Liquid  
**APPEARANCE AND ODOUR:** Clear or brown; not established

**MELTING/FREEZING POINT:** Not established  
**SPECIFIC GRAVITY:** Not established  
**MOLECULAR WEIGHT:** Not applicable  
**BULK DENSITY:** Not applicable

## SECTION IV - FIRE AND EXPLOSION DATA

**FLASH POINT:** Not Established  
**EXTINGUISHER MEDIA:** Water.

## SECTION V – HEALTH HAZARD DATA

**EMERGENCY OVERVIEW:** Colour: Clear or brown; Form: Liquid; Odour: Not established.  
**POTENTIAL HEALTH EFFECTS:**

ROUTE OF ENTRY: Dermal, Injection, Inhalation, Ingestion

## SECTION V – HEALTH HAZARD DATA (CONT.)

### HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE:

ACUTE EFFECTS OF EXPOSURE: Exposure during the end-use of these products is expected to be minimal. End users should refer to the packaging label for proper handling procedures.

EYE CONTACT: Sufficient exposure to formaldehyde, a preservative in these products, during manufacturing, spills, etc. may cause irritation. Eye irritation can include tearing, swelling, and reddening.

SKIN CONTACT: Sufficient exposure to formaldehyde, a preservative in these products, during manufacturing, spills, etc. may cause irritation.

RESPIRATORY TRACT: Sufficient exposure to formaldehyde, a preservative in these products, during manufacturing, spills, etc. may cause irritation. Respiratory tract irritation can include burning of the nose and throat, coughing, and in severe situations, pneumonitis, pulmonary edema, and even death.

OTHER (Specify): In addition, the adjuvant contained in these vaccines may cause localized swelling if injected.

CHRONIC EFFECTS OF EXPOSURE: No human health effects are known from chronic exposure to the vaccines listed in Section I; however, prolonged or repeated exposure to formaldehyde, a preservative in these products, may result in respiratory impairment such as asthma or bronchitis. Formaldehyde has the potential to cause cancer in humans. Repeated and prolonged exposure increases the risk. In humans, formaldehyde exposure has been associated with cancers of the lung, nasopharynx, oropharynx, and nasal passages.

### CARCINOGENICITY:

NTP: Formaldehyde has been classified as an NTP Anticipated Human Carcinogen - "Substances or groups of substances that may reasonably be anticipated to be carcinogens."

IARC: Formaldehyde has been classified as an IARC Probable Human Carcinogen (Group 2A) - "The chemical or group of chemicals is probably carcinogenic for humans."

OSHA: OSHA regulates formaldehyde as a carcinogen under 29 CFR 1910.1048 (the Formaldehyde Standard). The Standard should be consulted for specific details on the requirements for medical surveillance, personal protective equipment, recordkeeping, regulated areas, emergency procedures, housekeeping, employee exposure monitoring, training and hazard communication.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing respiratory tract conditions may be aggravated by exposure to formaldehyde, a preservative in these products.

### FIRST AID PROCEDURES:

In case of contact with eyes, flush with plenty of water for 15 minutes. Contact a physician.

In case of contact with skin, **IMMEDIATELY** wash exposed skin with antiseptic soap.

In case of inhalation, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Contact a physician.

In case of ingestion, contact physician.

OTHER: If accidentally injected with any of the products listed in Section I, wash wound with Betadine.

## SECTION VI – REACTIVITY DATA

STABILITY: Stable .  X  
Unstable:

CONDITIONS OF INSTABILITY: None known

INCOMPATIBILITY (Materials to Avoid): None known

DECOMPOSITION PRODUCTS: None known.

HAZARDOUS POLYMERIZATION:

May occur:

Will not occur:  X

## SECTION VII – SPILL OR LEAK PROCEDURE

STEPS TO BE TAKEN: Use absorbents on liquid spills.

DISPOSAL METHODS: Wastes should be burned in an EPA-approved incinerator.

## **SECTION VIII - SPECIAL PROTECTION INFORMATION**

**REQUIRED WORK/HYGIENE PROCEDURES:** Exposure during the end-use of these products is expected to be minimal. End-users should refer to the packaging label for proper handling procedures. However, sufficient exposure to any of these products may occur during manufacturing, spills, etc., in which case the following personal protection is recommended.

**RESPIRATORY PROTECTION:** Use NIOSH-approved respirator whenever exposure limits of formaldehyde are exceeded.

Consult respirator manufacturer to determine appropriate respirator for given application. If airborne formaldehyde concentration exceeds exposure limits, respiratory protection must be in compliance with the OSHA Formaldehyde Standard, 29 CFR 1910.1048.

**VENTILATION:** Maintain exposures below exposure limits through the use of general and local exhaust ventilation.

**EYE PROTECTION:** Wear splash protection when needed to prevent liquid contact.

**PROTECTIVE GLOVES:** Chemical resistant gloves.

**SKIN PROTECTION:** Avoid skin contact. Wear long sleeves and trousers to prevent dermal exposure.

**OTHER PROTECTIVE MEASURES:** Wash with soap and water after exposure to product. Launder clothes daily.

## **SECTION IX - STORAGE AND HANDLING PRECAUTIONS**

**STORAGE TEMPERATURE (MIN/MAX):** 2-7°C (35-45°F).

**SHELF LIFE:** See expiration date on product label.

**SPECIAL SENSITIVITY:** Avoid high temperatures and freezing of liquid.

**HANDLING/STORAGE PRECAUTIONS:** See product label.

**OTHER PRECAUTIONS:**

## **SECTION X - TOXICOLOGICAL INFORMATION**

**ACUTE TOXICITY:**

ORAL LD<sub>50</sub>: Not established

DERMAL LD<sub>50</sub>: Not established

INHALATION LC<sub>50</sub>: Not established

EYE EFFECTS: Not established

SKIN EFFECTS: Not established

SENSITIZATION: Not established

## **SECTION XI - ECOLOGICAL INFORMATION**

No ecological information available.

## **SECTION XII - TRANSPORTATION INFORMATION**

**TECHNICAL SHIPPING NAME:** Not applicable

**FREIGHT CLASS PACKAGE:** Drugs and Medicines

**PRODUCT LABEL:** Not noted

**DOT (DOMESTIC SURFACE)**

HAZARD CLASS OR DIVISION: Non-Regulated

**IMO/IMDG CODE (OCEAN)**

HAZARD CLASS DIVISION NUMBER: Non-Regulated

**ICAO/IATA (AIR)**

HAZARD CLASS DIVISION NUMBER: Non-Regulated

### SECTION XIII - REGULATORY INFORMATION

OSHA STATUS: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA STATUS: This product is a food, food additive, drug, cosmetic or device as defined by Section 201 of the Federal Food, Drug and Cosmetic Act and therefore is exempt from TSCA regulation under Section 3 (2) (B) (vi).

CERCLA REPORTABLE QUANTITY: Not applicable.

SARA TITLE III:

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: Formaldehyde

SECTION 311/312 HAZARD CATEGORIES: Immediate Health Hazard

SECTION 313 TOXIC CHEMICALS: Formaldehyde

RCRA STATUS: When discarded in its purchased form, this product meets the criteria of the Toxicity Characteristic Leaching Procedure (TCLP) for mercury (EPA Hazardous Waste Number D009), and should be managed as a hazardous waste.

### SECTION XIV - ADDITIONAL INFORMATION

NFPA 704M RATINGS	HEALTH	FLAMMABILITY	REACTIVITY	OTHER
	1	0	0	
	0= Insignificant	1=Slight	2=Moderate	3=High 4=Extreme

Bayer's method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. NFPA ratings are provided by Bayer as a customer service.

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SIGNED: \_\_\_\_\_

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