SAFETY DATA SHEETS

This SDS packet was issued with item:

078386401

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078386385 078386393

Attn: SAFETY DIRECTOR

EMERGENCY PHONE⁻ 573-443-5363 DATE_11/14/96

MATERIAL SAFETY DATA SHEET

IDENTIFICATION- Product Code: 7910.01

Name: Salmonella Typhimurium Bacterin Toxoid

ENDOVAC-DAIRY® ENDOVAC-BEEF® ENDOVAC-PORCI®

TOXICITY HAZARDS -No toxicity data available

HEALTH HAZARDS DATA-

ACUTE EFFECTS:

-May be harmful if swallowed as the toxicological properties have not been thoroughly investigated.

FIRSTAID- In case of skin contact, wash thoroughly with soap and water. If swallowed, call a physician.

F|RE AND EXPLOSION HAZARD DATA- No fire or explosion hazard exists

-PHYS|CAL DATA- Appearance and Odor: Opaque liquid

REACTIVITY and STABILITY DATA -Stable

SPILL OR LEAK PROCEDURES- No special requirements are necessary

PRECAUTIONS TO BE TAKEN REGARDING HANDLING & STORAGE-

- Store at $2^{\circ} - 7^{\circ}$ C.

The above information is believed to be correct, but does not purport to be all inclusive and shall only be used as a guide.

IMMVAC INC. shall not be held liable for any damage resulting from handling or from contact with the above product.

Attn: SAFETY DIRECTOR

EMERGENCY PHONE⁻ 573-443-5363 DATE-11/14/2012

MATERIAL SAFETY DATA SHEET

IDENTIFICATION- Product Code: 7910.01

Name: ENDOVAC-BEEF® Salmonella Typhimurium Bacterin Toxoid

Synonyms: ENDOVAC-DAIRY® ENDOVAC-PORCI®

TOXICITY HAZARDS -No toxicity data available

HEALTH HAZARDS DATA-

ACUTE EFFECTS:

-May be harmful if swallowed as the toxicological properties have not been thoroughly investigated.

FIRSTAID- In case of skin contact, wash thoroughly with soap and water. If swallowed, call a physician.

FIRE AND EXPLOSION HAZARD DATA- No fire or explosion hazard exists

-PHYS|CAL DATA- Appearance and Odor: Opaque liquid

REACTIVITY and STABILITY DATA -Stable

SPILL OR LEAK PROCEDURES- No special requirements are necessary

PRECAUTIONS TO BE TAKEN REGARDING HANDLING & STORAGE-

- Store at $2^\circ - 7^\circ$ C.

The above information is believed to be correct, but does not purport to be all inclusive and shall only be used as a guide.

IMMVAC INC. shall not be held liable for any damage resulting from handling or from contact with the above product.

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Trade name: Endovac-Dairy[®] / Endovac- Beef [®]/ Endovac- Porci[®] Product Code: 7910.01 Version: 1.0 Specification: Salmonella typhimurium Bacterin Toxoid Page **1** of **5**

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

Identification of the substance or preparation: Endovac-Dairy® / Endovac- Beef® / Endovac- Porci®

Other Means of Identification: Salmonella Typhimurium Bacterin Toxoid

Use of the substance/preparation: Medicinal Product - Vaccine.

This SDS was prepared in accordance with the hazard criteria and content requirements of the new Global Harmonized system standard expanded on the Hazard Communication standard (29 CFR1910.1200 (g). This safety data sheet is written to provide information about environmental, health and safety for people handling this formulated product. It is not intended to provide information relevant to medicinal use of the product. For health and safety information for individual ingredients used during manufacturing, refer to the appropriate safety data sheet for each ingredient.

Company/undertaking identification: IMMVAC Inc

6080 Bass Ln Columbia MO 65201 Telephone: 573 443 5363 Fax: 573 874 7108

E-Mail: Laboratory@immvac.com

EMERGENCY TELEPHONE: 1-800 944 7563

2. HAZARDS IDENTIFICATION

Classification: Exempt from requirements – The product is regulated as Veterinary Medicinal Product or medical device

Information pertaining to special dangers for human and environment: Exempt from requirements – The product is regulated as Veterinary Medicinal Product or medical device

Classification system

Exempt from requirements – The product is regulated as Veterinary Medicinal Product or medical device **Physical hazards**: Not classified as a physical hazard

Health hazard: Not classified as a health hazard

Environmental hazard: Not classified as environmental hazard

Precautionary statements: The chemical, physical and toxicological properties of this mixture have not been thoroughly characterized. Avoid contact with eyes and skin. Do not inhale or swallow. This material should be considered as a potential Biohazardous material and treated with caution.

Potential health effects

Inhalation: No data available.

Eyes: No data available. Eye exposure may cause irritation, redness and watering.

Skin: No data available.

Ingestion: No data available.

Chronic effects: No data available.

Target organs: No data available.



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IMMVAC Inc 6080 E Bass Ln

Print date: 2015-07-09 Revision date: 2015-07-08

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Print date: 2015-07-09 Revision date: 2015-07-08

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization (chemicals with exposure control limits):

Chemical name	Common Name & Synonyms	CAS-No.	%
Salmonella Typhimurium Bacterin Toxoid	Bacterin Toxoid	unassigned	< 3%
Mineral Oil	White oil	8042-47-5	20 %
Aluminum oxide	Activated alumina	11092-32-3	25 %
Formaldehyde	Formalin, Methanal	50-00-0	<0.1 %

Other components are below reportable levels the exact composition/percentage has been withheld as a trade secret.

Dangerous components according to EC criteria: None

4. FIRST AID MEASURES

In case of inhalation: Remove from source of exposure, move to fresh air. Seek medical attention if breathing becomes difficult or if cough or other symptoms develop.

In case of skin contact: Remove clothing that product has touched. Rinse skin for 15 minutes. Seek medical attention if irritation persists.

In case of eye contact: Immediately flush with tepid water for 15 minutes. Remove contact lenses if worn. Obtain medical attention if redness or irritation persists.

In case of ingestion: Rinse mouth with water. Seek medical attention if signs of toxicity occur.

Self-protection of the first aider: Follow company specific safety procedures.

Most important symptoms/effects, acute and delayed: None known

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use extinguishing media suitable for surrounding fire, such as carbon dioxide, chemical foam, dry chemical or water spray.

Extinguishing media which must not be used for safety reasons: Unknown

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases: Dilute aqueous solution not considered a fire hazard.

Special protective equipment for fire-fighters: Fire fighters should wear NIOSH-approved or self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: See Section 8 **Environmental precautions:** No environmental precautions are required for this product.





Safety Data SheetTrade name:Endovac-Dairy® / Endovac- Beef ®/ Endovac- Porci®Product Code:7910.01Version: 1.0Specification:Salmonella typhimurium Bacterin ToxoidPage 3 of 5

IMMVAC Inc 6080 E Bass Ln Columbia MO 65201 Telephone: 800 944 7563 Fax: 573 874 7108 Email: Laboratory@immvac.com www.immvac.com

Methods for cleaning up: Absorb spill with inert material/absorbent. Decontaminate the spill site following standard procedures. Dispose of waste in accordance with all applicable federal, state, local and provincial environmental regulations per Section 13.

7. HANDLING AND STORAGE

Handling: Follow good laboratory hygiene practices. See Section 8, Engineering Controls. Minimize contact and contamination of personal clothing and skin. Avoid prolonged exposure. Wash hands thoroughly after handling.

Storage: Store at 2-7°C. Store in original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit values:

No exposure limit values are required for this product.

Exposure controls: This product is not expected to require special ventilation controls. Facilities storing or using this product should be equipped with an eyewash fountain.

Personal protection equipment:

Respiratory Protection: A respirator is not expected to be required under normal conditions of use. Hand Protection: Wear chemical resistant protective gloves. Eye Protection: Wear appropriate protective safety eye glasses or goggles. Body Protection: Wear lab coat or other protective garments. Remove contaminated clothing promptly.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid
Physical state:	Liquid
Color:	Clear to opalescent solution
Odor:	Not available
рН (20°С):	7.5 ± 0.1
Melting point/range (°C):	Not Available
Boiling point/range (°C):	Not Available
Flash point (°C)	Not Available
Ignition temperature (°C)	Not Available
Vapor pressure (°C)	Not Available
Density (g/cm3):	Not Available
Bulk density (kg/m3):	Not Available
Water solubility (20°C in g/l):	Miscible
Partition coefficient	Not Available
n-Octanol/Water (log Po/w):	Not Available
Viscosity, dynamic (mPa s):	Not Available
Dust explosion hazard:	Not Applicable



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10. STABILITY AND REACTIVITY

Reactivity: Unknown Stability: Stable under ordinary conditions of storage and use. Conditions to avoid: No decomposition if used and stored according to specifications Materials to avoid: Avoid strong oxidizers, strong acids and bases, heavy metals and their salts. Hazardous decomposition products: None expected under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Routes of exposure may include inhalation, skin absorption, and eye and skin contact. Acute toxicity: No data available. Irritant and corrosive effects: No data available. Sensitization: No data available. Carcinogenicity: Carcinogenic effects are not expected as a result of occupational exposure. Mutagenicity: No data available. Reproductive effects: No data available. Teratogenicity: No data available. Additional toxicological information: This product is not subject to classification, according to the calculation

method of the General EC Classification Guidelines for preparations as issued in the latest version. When used and handled according to general laboratory safety regulations when handling chemicals, the product does not have any harmful effects according to our experience and information available to us.

12. Ecological information

Ecotoxicity: No data available. Mobility in environmental compartments: No data available. Adsorption/Desorption: No data available. Persistence and degradability: No data available. Physical- and photo-chemical elimination: No data available. Biodegradation: No data available. Bioaccumulative potential No data available.

13. DISPOSAL CONSIDERATIONS

Appropriate disposal / Product: Dispose of unused product, spilled substance and waste in accordance with all applicable federal, state, local and provincial environmental and waste regulations.

14. TRANSPORT INFORMATION

Land transport (ADR/RID/GGVSE): Not restricted. Not regulated as hazardous goods. Sea transport (IMDG-Code/GGVSee): Not restricted. Not regulated as hazardous goods. Air transport (ICAO-IATA/DGR): Not restricted. Not regulated as hazardous goods.





Trade name:Endovac-Dairy® / Endovac- Beef ®/ Endovac- Porci®Product Code:7910.01Specification:Salmonella typhimurium Bacterin ToxoidPage5 of 5

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15. REGULATORY INFORMATION

US federal regulations TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) Not listed. SARA 304 Emergency release notification Not regulated. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed. Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard -

16. OTHER INFORMATION

Exposure Scenarios:

Routes of exposure may include inhalation, skin absorption, and eye and skin contact.

Exposure controls:

Observe general laboratory safety regulations when handling chemicals. This product is not expected to require special ventilation controls. Facilities storing or using this product should be equipped with an eyewash fountain.

Personal protection equipment:

Respiratory Protection: A respirator is not expected to be required under normal conditions of use. Hand Protection: Wear chemical resistant protective gloves. Eye Protection: Wear appropriate protective safety eye glasses or goggles. Body Protection: Wear lab coat or other protective garments. Remove contaminated clothing promptly.

This SDS was prepared in accordance with the hazard criteria and content requirements of the new Global Harmonized system standard expanded on the Hazard Communication standard (29 CFR1910.1200 (g) and the EU Dangerous Substances Directive (67/548/EEC), Dangerous Preparations Directive (1999/45/EC), the Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) ((EC) No 1907/2006) and EC 1272/2008 Classification, Labeling, Packaging (CLP). These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. The information contained in this Material Safety Data Sheet is believed to be accurate but does not purport to be all-inclusive and should be used only as a guide for experienced personnel. It is the responsibility of the user or supplier to determine the applicability of the data to the formulation of necessary safety precautions. Immvac Inc. shall not be held liable for any damage resulting from the use of the above product or the information contained in this Material Safety Data Sheet.

Issue date: ____07/09/2015

