MATERIAL SAFETY DATA SHEET

Material Identity:
Salmonella Newport Bacterial Extract
USDA veterinary biologic product code 2811.00

SECTION I

Manufacturer's Name
Epitopix, LLC

Address
3735 County Rd 5 SW, W Hwy 12
Willmar, MN 56201

Emergency Telephone Number
(320) 235-8850

Telephone Number for Information
(320) 235-8850

Date Prepared
9/1/2004

SECTION II - Hazardous Ingredients / Identity Information

Hazardous Components	Percent
Formaldehyde (up to 0.15% of a 37% formaldehyde solution)	< 0.15%

General Description: Contains purified outer membrane protein of *Salmonella enterica,* serotype Newport, in an oil-in-water emulsion with surfactants. Contains up to 25% Emulsigen® (paraffin oil, emulsifiers, and water; www.mvplabs.com) in water.

The information in this material safety data sheet has been compiled from information believed to be accurate and from the experience of the manufacturer. While Epitopix believes that the data presented is factual, Epitopix makes no warranty or representation, nor assumes any responsibility in conjunction with the use of this information.

SECTION III - Physical / Chemical Characteristics

Boiling Point	N/A	**Specific Gravity (H2O = 1)**	N/A
Vapor Pressure (mm Hg)	N/A	**Melting Point**	N/A
Vapor Density (AIR = 1)	N/A	**Evaporation Rate (Butyl Acetate =1)**	N/A

Solubility in Water - Not soluble

Appearance and Odor - White, creamy appearance

SECTION IV - Fire and Explosion Hazard Data

Flash Point (Method Used) - N/A

Flammable Limits - N/A

Extinguishing Media - Use extinguishing media appropriate to surrounding conditions

Special Fire Fighting Procedures - None

Unusual Fire and Explosion Hazards - None known

SECTION V - Reactivity Data

Stability: **Unstable**
Stable X - Avoid direct sunlight and extreme temperatures

Incompatability (Materials to Avoid) - N/A

Hazardous Decomposition or Byproducts - N/A

Hazardous Polymerization: **May Occur**
Will Not Occur X

SECTION VI - Health Hazard Data

Route(s) of Entry: **Inhalation?** **Skin?** **Ingestion?**

Health Hazards (Acute and Chronic)
Accidental injection into human tissue may cause an allergic reaction or inflammatory response due to mineral oil (oil content <20%). Contact a physician immediately.

Carcinogenicity: **NTP?** yes **IARC?** yes
Formaldehyde is a known carcinogen. It is present at less than 0.15% by volume.

Signs and Symptoms of Exposure
Severe pain, redness and swelling within minutes, at site of accidental injection.

Medical Conditions Generally Aggravated by Exposure
Not Determined

Emergency and First Aid Procedures

For skin or eye contact, flush with water and consult with a physician if irritation persists.
If injested or accidentally injected, consult a physician immediately.

SECTION VII - Precautions for Safe Handling and Use

Steps to be taken in Case Material is Released or Spilled
If large, absorb on sand or vermiculite and place in a closed container for disposal. Take appropriate precaution to prevent contact with eyes, skin or respiratory tract. Clean the spill area with disinfectant solution.

Waste Disposal Method
Check federal, state and local regulations for quantities that cannot be exhausted by use.

Precautions to be Taken in Handling and Storing
Avoid extreme temperatures and direct sunlight - DO NOT FREEZE.
Store in the dark at 2-7 degrees C (35-45 degrees F)

Other Precautions
Read literature accompanying vaccinating equipment and vaccine carefully before use.

SECTION VIII - Control Measures

Respiratory Protection (Specify Type) - Not required for normal use

Ventillation: **Local Exhaust -** Preferrable **Special -** N/A
Mechanical (general) - Acceptable **Other -** N/A

Protective Gloves - Recommended **Eye Protection -** Recommended

Other Protective Clothing or Equipment -

Work / Hygienic Practices - Handle in a safe manner to avoid accidental injection.