



# SAFETY DATA SHEET

Creation Date: 05-FEB-2019

Revision Date: N/A

Version: 001

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## 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND THE MANUFACTURER

**Product Identifier** CLOSTRIDIUM CHAUVOEI-SEPTICUM-NOVYI-SORDELLII BACTERIN-TOXOID  
**Trade Name** ESSENTIAL 4  
**Recommended Use** Veterinary Vaccine  
**Manufacturer** Colorado Serum Company  
4950 York Street – P.O. Box 16428  
Denver, CO 80216  
**Emergency Phone No.** 303-295-7527

## 2. HAZARDS IDENTIFICATION

**Hazard Classification** Not Classified  
**Hazard Statements** Not Classified  
**Signal Word** Not Classified  
**Other Hazards** May cause allergic reaction with skin exposure.  
**Unknown acute toxicity** None known  
**Precautionary Statements** This is an inactivated vaccine containing no live organisms.  
For veterinary use. Use only as recommended.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

CATEGORY	COMMON NAME	CAS NO.	*
<b>CHEMICAL NAME</b>			
Yeast Extract	None	84604-16-0	*
Dextrose (C <sub>6</sub> H <sub>12</sub> O <sub>6</sub> )	None	50-99-7	*
Potassium Phosphate Dibasic (K <sub>2</sub> HPO <sub>4</sub> )	None	7758-11-4	*
L-Cysteine (C <sub>3</sub> H <sub>7</sub> NO <sub>2</sub> S)	None	52-90-4	*
Dihydrogen Monoxide (H <sub>2</sub> O)	Purified Water	7732-18-5	*
Sodium Hydroxide (NaOH)	Caustic Soda	1310-73-2	*
Boric Acid (H <sub>3</sub> BO <sub>3</sub> )	None	10043-35-3	*
Sodium Carbonate (Na <sub>2</sub> CO <sub>3</sub> )	Soda ash	497-19-8	*
Aluminum Hydroxide Al(OH <sub>3</sub> )	None	21645-51-2	*
Sodium Borate Decahydrate (Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub> · 10H <sub>2</sub> O)	Sodium Borate 10 hydrate	1303-96-4	*
Sodium Chloride (NaCl)	Salt	7647-14-5	*
Peptone	None	73049-73-7	*
Porcine Liver Powder	None	N/A	*
Enzymatic Digest of Casein	None	91079-40-2	*

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## 3. COMPOSITION / INFORMATION ON INGREDIENTS, Cont.

MIXTURE			
<i>Clostridium chauvoei</i> Bacterin	None	N/A	*
<i>Clostridium septicum</i> Bacterin	None	N/A	*
<i>Clostridium novyi</i> Bacterin-Toxoid	None	N/A	*
<i>Clostridium sordellii</i> Bacterin-Toxoid	None	N/A	*

\*The components are not hazardous or are below required disclosure limits. The percent of each ingredient is proprietary.

Product contains Thimerosal at  $\leq 0.0001$  g/mL and Formaldehyde at  $\leq 0.00185$  g/mL as preservatives.  
See Section 13 for disposal considerations.

## 4. FIRST AID MEASURES

### Necessary First-Aid Instructions:

This is an inactivated vaccine containing no live organisms. For veterinary use only. Accidental human exposure may result in an allergic reaction.

Accidental injection: Contact a physician. Local reaction at injection site (swelling) may occur. Infection at injection site may occur from contaminated equipment.

Eye Contact: Immediately flush eyes with water for at least 10 minutes.

Skin Contact: Wash skin with soap and water.

Ingestion: Contact a physician.

Inhalation: Contact a physician.

**Important Symptoms or Effects - Acute or Delayed:** Exposure has potential for allergic reaction.

**Recommendations for Immediate Care and Special Treatment:** Contact a physician if ingested. Treat symptomatically.

**General Information:** This is an animal product. NOT FOR HUMAN USE.

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Equipment:** Water, Carbon dioxide, Dry Chemical

**Unsuitable Extinguishing Equipment:** Not known

**Specific Hazards Arising from Substance or Mixture:** Avoid causing aerosol

**Fire Fighting: Special Protective Equipment:** Firefighters: Wear appropriate personal protective equipment as conditions warrant which may include self contained breathing apparatus. Avoid aerosols and environmental release.

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## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Use as directed. It is an aqueous suspension not expected to support combustion.

**Protective Equipment:** Use protective gloves and eye/face shield as indicated.

**Emergency Procedures:** None

**Containment Methods:** Isolate a spill and clean up by absorption and flush area with water.  
Product is not infective.

**Clean Up Procedures:** Utilize absorbent material to soak up spill. For product disposal, see Section 13 of this SDS. Avoid release to the environment.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling:** Avoid contact with skin, eyes and clothing. Use only with adequate ventilation. Wash hands thoroughly after handling. Avoid breathing mists or aerosols of this product. Use appropriate personal protective equipment and avoid accidental injection.

**Storage Conditions:** Store only in unopened containers. Store at 2 to 8° C.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**OSHA Permissible Exposure Limits (PEL):** Exposure limits for ingredients are not noted.

**American Conference of Governmental Industrial Hygienists (ACGIH):** Not known

**Threshold Limit Values (TLV):** Not known

**Engineering Controls:** Not known

**Personal Protective Measures:** Safety glasses with side shields, or face shield, rubber/latex/vinyl gloves.  
Wash hands after handling.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance / Physical State:</b>	Opaque tan liquid in sealed container
<b>Odor / Odor Threshold:</b>	No data available
<b>Vapor Density:</b>	No data available
<b>PH:</b>	No data available
<b>Melting/Freezing Points:</b>	No data available
<b>Solubility:</b>	No data available
<b>Initial Boiling Point &amp; Range:</b>	No data available
<b>Flash Point:</b>	No data available
<b>Evaporation Rate:</b>	No data available
<b>Flammability (solid, gas):</b>	No data available
<b>Flammability /Explosive limits:</b>	No data available
<b>Vapor Pressure:</b>	No data available
<b>Vapor Density:</b>	No data available
<b>Relative Density:</b>	No data available
<b>Solubility:</b>	No data available
<b>Partition Coefficient: n-octanol/water</b>	No data available
<b>Auto-ignition Temperature:</b>	No data available
<b>Decomposition Temperature:</b>	No data available
<b>Viscosity:</b>	No data available

## 10. STABILITY AND REACTIVITY

**Reactivity:** Product is stable and non-reactive when stored according to label instructions.  
No other data is available.

**Chemical Stability:** Product is stable under normal conditions.

**Oxidizing Properties:** No data available

**Conditions to Avoid:** Store at 2 to 8° C. Prolonged exposure to higher temperatures may adversely affect potency. Do not freeze.

**Incompatible Materials:** Do not combine with any other material. Use only as directed.

**Hazardous Decomposition Products:** None expected

## 11. TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure:** Accidental exposure is most likely to be topical or needle stick.

**Physical, Chemical and Toxicological Symptoms:** No data available

**Delayed and Immediate Effects of Exposure:** No data available

**Acute Toxicity Estimates:** No data available

**Carcinogenic Properties:** No data available

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## 12. ECOLOGICAL INFORMATION

Avoid product being introduced into the environment.

## 13. DISPOSAL CONSIDERATIONS

Return unused and/or outdated product to manufacturer for disposal.

## 14. TRANSPORT INFORMATION

Not required information

## 15. REGULATORY INFORMATION

Not required information

## 16. OTHER INFORMATION

**SDS Code:** Not applicable

**SDS Preparation Date:** 05-FEB-2019

**Latest Revision Date:** Not applicable

**Reasons for Revision:** Not applicable

**Data Sources:** Information included in this SDS may have been gathered from confidential internal sources, raw material suppliers, or from published literature.

**Prepared by:** Colorado Serum Company Regulatory Department

Colorado Serum Company believes that the information contained in this Safety Data Sheet is accurate and provided in good faith. It is without warranty of any kind, expressed or implied. If data for a hazard is not included in this document, there is no known information at this time.

**END OF SAFETY DATA SHEET**