



SAFETY DATA SHEET

Creation Date: 16-JAN-2019

Revision Date: N/A

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1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND THE MANUFACTURER

Product Identifier LEPTOSPIRA CANICOLA-GRIPPOTYPHOSA-HARDJO-
ICTEROHAEMORRHAGIAE-POMONA BACTERIN

Trade Name LEPTO - 5

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.	*
CHEMICAL NAME			
EMJH Medium	Ellinghausen's Medium	N/A	*
Bovine Albumin	None	9048-46-8	*
Polysorbate-80 (C ₆₄ H ₁₂₄ O ₂₆)	Tween-80	9005-65-6	*
Sodium Borate Decahydrate (Na ₂ B ₄ O ₇ ·10H ₂ O)	Sodium Borate 10 Hydrate	1303-96-4	*
Boric Acid (H ₃ BO ₃)	None	10043-35-3	*
Sodium Chloride (NaCl)	Salt	7647-14-5	*
Sodium Carbonate (Na ₂ CO ₃)	Soda ash	497-19-8	*
Aluminum Hydroxide Al(OH) ₃	None	21645-51-2	*
Dihydrogen Monoxide (H ₂ O)	Purified Water	7732-18-5	*
MIXTURE			
<i>Leptospira canicola</i> Bacterin	None	N/A	*
<i>Leptospira grippotyphosa</i> Bacterin	None	N/A	*
<i>Leptospira hardjo</i> Bacterin	None	N/A	*
<i>Leptospira icterohaemorrhagiae</i> Bacterin	None	N/A	*
<i>Leptospira pomona</i> Bacterin	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 $\geq 0.0001 \leq 0.0003$ g/mL as preservative. See Section 13 for disposal considerations.

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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.

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.

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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.

9. PHYSICAL AND CHEMICAL PROPERTIES

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

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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

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

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16. OTHER INFORMATION

SDS Code: Not applicable

SDS Preparation Date: 16-JAN-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