Section 1: Identification

Product Name: Iversol (Ivermectin 0.5%) Emulsion
Chemical Name/Synonyms: Iversol; Ivermectin

Company:
Veterinary Pharmaceutical Solutions
2008 North Sunrise Drive
Saint Peter MN, 56082
United States

Restrictions on Use: For veterinary use only. Not for human consumption.

In emergency call 911 or CHEMTREC (24hr): 1-800-424-9300
For information about this SDS, contact phone#: 1-877-931-8707

Section 2: Hazard(s) Identification

Hazard Classification:
Ivermectin (Iversol): GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Flammable Liquids (Category 4), H227
Acute Toxicity – Oral (Category 4), H302
Eye Irritation (Category 2A), H319
Reproductive Toxicity (Category 2), H361
Specific Target Organ Toxicity – Repeated Exposure (Category 2, Central Nervous System), H373
Hazardous to the Aquatic Environment – Acute (Category 3), H402

Signal Word(s): Warning

Hazard Statements:
H227 - Combustible liquid
H302 - Harmful if swallowed
H319 - Causes serious eye irritation
H361 - Suspected of damaging fertility or the unborn child (Category 2)
H373 - May cause damage to the central nervous system through prolonged or repeated exposure
H402 - Harmful to aquatic life

Pictograms:

Precautionary Statements:
P201 – Obtain special instructions before use.

P202 – Do not handle until all safety precautions have been read and understood.
P210 – Keep away from heat, hot surfaces, open flames, and sparks. – No smoking.
P260 – Do not breathe vapors, mist, or spray.
P264 – Wash hands, forearms, and exposed areas thoroughly after handling.
P270 – Do not eat, drink, or smoke when using this product.
P273 – Avoid release into the environment.
P280 – Wear eye protection, protective clothing, and protective gloves.
P301+P312 – IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 – If exposed or concerned: Get medical advice/attention.
P314 – Get medical advice/attention if you feel unwell.
P330 – Rinse mouth.
P337+P313 – If eye irritation persists: Get medical advice/attention.
P370+P378 – In case of fire: Use carbon dioxide (CO_2), dry extinguishing powder, or alcohol-resistant foam to extinguish.
P403+P235 – Store in a well-ventilated place. Keep cool.
P405 – Store locked up.
P501 – Dispose of contents/container in accordance with local, regional, national, and international regulations.

Description of other hazards: Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

Section 3: Composition/ Information on Ingredients

Chemical Name	Synonym	CAS#	Conc.
Ivermectin	Ivermectin 1% injection (Bimeda)	70288-86-7	50%
Trade Secret Emulsifier *	(N/A)	Trade secret *	50% *

Comments:	* = The composition of this ingredient is withheld as a trade secret in accordance with OSHA 29 CFR 1910.1200(i).

Section 4: First-Aid Measures

General Advice: If the exposed individual feels unwell, seek medical attention immediately. Never administer anything by mouth to an unconscious person.
After skin contact: Immediately remove any contaminated clothing. Rinse the affected area thoroughly with water for at least 15 minutes. If irritation persists or develops, obtain medical attention. Contaminated clothing should be washed before reuse.
After eye contact: Flush eyes cautiously with water for at least 15 minutes. Remove contact lenses if present and easy to do, then continue rinsing. If eye irritation persists, seek immediate medical attention.

After inhalation: Remove the affected individual to fresh air and allow them to rest in a position that facilitates breathing. Ensure adequate ventilation of the area. If respiratory symptoms develop or persist, seek medical attention.

After swallowing: Rinse mouth thoroughly with water. Do not induce vomiting unless directed by medical personnel. Seek immediate medical attention and provide information on the substance involved.

Most important symptoms and effects, both acute and delayed: Exposure may cause serious eye irritation, including redness and swelling. Ingestion may result in harmful effects, including nausea, vomiting, and central nervous system disturbances. Prolonged or repeated exposure may contribute to systemic toxicity, particularly affecting the nervous system. This product is suspected of causing reproductive harm.

Indication of any immediate medical attention and special treatment needed: If exposure has occurred and symptoms are present, obtain medical advice immediately. In cases of ingestion, inhalation of high concentrations, or eye exposure, immediate medical intervention may be necessary. If possible, provide the product label or safety data sheet to medical personnel for reference.

Section 5: Fire-Fighting Measures

Suitable extinguishing agents: Use extinguishing measures appropriate to local circumstances and the surrounding environment. Suitable extinguishing agents include dry chemical powder, alcohol-resistant foam, and carbon dioxide (CO_2). Water spray may be used to cool exposed containers but may be ineffective for extinguishing the fire.

Unsuitable extinguishing agents: Do not use a high-pressure water stream, as this may spread the burning liquid.

Special arising from the substance or mixture: This product is classified as a combustible liquid. Vapors may form explosive mixtures with air, especially in confined spaces or under high temperatures. Fire conditions may produce hazardous combustion products, including carbon oxides and toxic fumes. Reacts violently with strong oxidizers, increasing the risk of fire or explosion.

Fire-Fighting Precautions & Protective Equipment: Firefighters should use extreme caution when handling a chemical fire. Wear full protective gear, including self-contained breathing apparatus (SCBA) operated in pressure-demand mode. If safe, use water spray or fog to cool exposed containers and prevent pressurization or explosion.

Additional Considerations: Prevent firefighting runoff from entering drains, sewers, or natural water sources. Combustion of trade secret ingredients may produce carbon oxides.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures: Restrict access to the affected area until cleanup is complete. Avoid direct contact with the spilled material. Do not breathe vapor, mist, or spray. Eliminate all ignition sources, including open flames, hot surfaces, and static discharge. Ensure adequate ventilation. Appropriate personal protective equipment (PPE) should be worn, including chemical-resistant gloves, protective eyewear, and fire-resistant clothing. If airborne exposure levels are excessive, use an approved respirator.

Environmental Precautions: Prevent entry into drains, sewers, surface water, and soil to minimize environmental impact. Contain the spill using non-combustible, inert absorbent materials such as sand or clay. Do not use sawdust, cellulose-based materials, or other combustible absorbents.

Methods and Materials for Containment and Cleanup: For small spills, absorb with inert material and place in a suitable, labeled container for proper disposal. For large spills, dike the area to prevent further spreading. Use non-sparking tools for cleanup. Transfer collected material into sealed containers for disposal in accordance with local, state, and federal regulations. Thoroughly clean contaminated surfaces with water and detergent. Do not allow rinse water to enter drainage systems or waterways.

Section 7: Handling and Storage

Handling: Use in a well-ventilated area. Avoid inhaling vapors, mist, or spray. Prevent contact with skin, eyes, and clothing. Keep away from heat, hot surfaces, open flames, and ignition sources. Use non-sparking tools and properly ground containers when transferring material. Do not eat, drink, or smoke while handling. Wash hands and exposed skin after use. Remove contaminated clothing and launder before reuse.

Storage: Store in a cool, dry, well-ventilated area away from direct sunlight and incompatible materials such as strong acids, bases, and oxidizers. Keep containers tightly closed. For small quantities (≤25 gallons), general storage away from ignition sources is sufficient. For larger quantities (>25 gallons), use a designated flammable liquid storage area with secondary containment. Fire-resistant cabinets may be required based on local regulations. Do not store near food, beverages, or animal feed.

Section 8: Exposure Controls/Personal Protection

Exposure Limits: No established occupational exposure limits exist for this product under OSHA PEL, ACGIH TLV, or NIOSH REL.

Engineering Controls: Use in a well-ventilated area. If handling in an enclosed space, provide local exhaust ventilation or mechanical ventilation to maintain airborne concentrations below exposure limits. Ensure access to an eyewash station and safety shower.

Respiratory Protection: Not typically required under normal use conditions. If exposure limits are exceeded, use a NIOSH-approved respirator with an organic vapor cartridge.

Skin Protection: Wear chemical-resistant gloves (e.g., nitrile, neoprene) and long-sleeved protective clothing.

Eye Protection: Use safety goggles or a face shield when handling large quantities or where splashing may occur.

General Hygiene Measures: Wash hands and exposed skin thoroughly after handling. Do not eat, drink, or smoke while using this product.

Section 9: Physical and Chemical Properties

Appearance: Yellow, clear to cloudy emulsion
Odor: Mild
Odor Threshold: Not determined
pH: 5–8
Melting Point/Freezing Point: -66 to -25°C
Boiling Point/Range: 81.5°C
Flash Point: Not determined
Evaporation Rate: Not determined
Flammability (Solid, Gas): Not applicable
Upper/Lower Flammability or Explosive Limits: Not determined

Vapor Pressure: Not determined
Vapor Density: Not determined
Relative Density: Not determined
Solubility in Water: Miscible
Partition Coefficient (n-octanol/water): Not determined
Auto-Ignition Temperature: Not determined
Decomposition Temperature: Not determined
Viscosity: Not determined

Section 10: Stability and Reactivity

Reactivity: This product is stable under normal handling and storage conditions. Reacts with strong oxidizers, increasing the risk of fire or explosion.
Chemical stability: Stable under normal temperatures and pressures. May become unstable at elevated temperatures or in contact with incompatible materials.
Possibility of Hazardous Reactions: No hazardous polymerization is expected under normal conditions. Contact with strong oxidizers, acids, or bases may generate heat and hazardous decomposition products.
Conditions to avoid: Avoid excessive heat, direct sunlight, open flames, and ignition sources. Prevent prolonged exposure to elevated temperatures.
Incompatible materials: Strong oxidizing agents, acids, and bases. Contact may result in hazardous decomposition or violent reactions.
Hazardous decomposition products: Thermal decomposition may produce carbon oxides (CO, CO_2, etc.) and other toxic vapors or gases.

Section 11: Toxicological Information

Acute Toxicity:
Oral (Ingestion): Harmful if swallowed (H302).
Dermal (Skin Contact): Not classified as acutely toxic. Prolonged exposure may cause irritation.
Inhalation: Prolonged exposure may cause respiratory irritation, dizziness, or headache.

Substance	Oral LD50 (Rat)	Dermal LD50 (Rabbit)	Inhalation LC50	
Ivermectin (CAS 70288-86-7)	10 mg/kg	Not Determined	Not Determined	
1,2-Propylene Glycol (CAS 57-55-6)	20 g/kg	20.8 g/kg	Not Determined	

Sensitization: No data available to classify this product as a skin or respiratory sensitizer.

Carcinogenicity, Mutagenicity, and Reproductive Toxicity:
Carcinogenic Effects: Not classified as a carcinogen by OSHA, IARC, or NTP.
Mutagenic Effects: No known mutagenic effects.
Reproductive Toxicity: Suspected of damaging fertility or the unborn child (H361).

Specific Target Organ Toxicity (STOT):
Single Exposure: Not classified.
Repeated Exposure: May cause damage to the central nervous system through prolonged or repeated exposure (H373).

Section 12: Ecological Information (non-mandatory)

Ecotoxicity: This product is classified as harmful to aquatic life (H402). Spillage into waterways should be avoided.

Substance	Toxicity to Fish (LC50, 96hr)	Toxicity to Daphnia (EC50, 48hr)
Ivermectin (CAS 70288-86-7)	0.003 mg/L (Rainbow Trout, Oncorhynchus mykiss)	0.000025 mg/L (Daphnia magna)
1,2-Propylene Glycol (CAS 57-55-6)	51,600 mg/L (Oncorhynchus mykiss, static test)	10,000 mg/L (Daphnia magna)

Persistence and Degradability:
Ivermectin: Persistent in soil and water and can bioaccumulate in aquatic organisms.
Propylene Glycol: Readily biodegradable and does not bioaccumulate.

Bioaccumulative Potential:
Ivermectin: High bioaccumulation potential in aquatic organisms.
Propylene Glycol: Low bioaccumulation potential (BCF <1).

Mobility in Soil:
Ivermectin: Binds strongly to soil and is not highly mobile.
Propylene Glycol: Highly water-soluble and may leach into groundwater.

Other Adverse Effects: Avoid uncontrolled release into the environment. This product may be toxic to non-target aquatic and terrestrial organisms if large quantities are spilled.

Section 13: Disposal Considerations (non-mandatory)

Waste Treatment Methods: Dispose of this material and its container in compliance with all applicable federal, state, and local regulations.
Product Disposal: Dispose of in accordance with local, state, and federal regulations. Incineration may be required if deemed hazardous. Do not dispose of into sewage systems, storm drains, or natural waterways.
Container Disposal: Empty containers may contain residue and vapors. Do not cut, weld, or reuse containers. Dispose of in accordance with local regulations.
Regulatory Considerations: U.S. EPA RCRA Classification: Not classified as a hazardous waste under 40 CFR Part 261. Unused product should be evaluated for hazardous waste characteristics before disposal.

Section 14: Transport Information (non-mandatory)

Regulatory Body	Classification
U.S. DOT (49 CFR 172.101)	Not regulated as a hazardous material
IATA (Air Transport)	Not regulated as dangerous goods
IMDG (Maritime Transport)	Not regulated as dangerous goods
TDG (Canada Transport of Dangerous Goods)	Not regulated as dangerous goods

Special Precautions for Transport: Keep containers tightly sealed to prevent leaks. Avoid exposure to extreme temperatures and direct sunlight during transport. Store and transport in accordance with local and international regulations

Section 15: Regulatory Information (non-mandatory)

U.S. Federal Regulations:
TSCA (Toxic Substances Control Act): All components are listed or exempt.
SARA Title III (Superfund Amendments and Reauthorization Act):
Section 311/312 (Hazard Categories): Fire hazard, acute toxicity, reproductive toxicity, specific target organ toxicity.
Section 313 (Toxic Release Inventory): No components listed.
CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act): Not subject to CERCLA reporting requirements.
RCRA (Resource Conservation and Recovery Act): Not classified as hazardous waste under 40 CFR Part 261.

U.S. State Regulations:
California Proposition 65: This product is not known to contain substances listed under California Proposition 65 at reportable levels.
New Jersey RTK (Right-to-Know List): 1,2-Propylene glycol (CAS 57-55-6) is listed.
Pennsylvania RTK (Right-to-Know List): 1,2-Propylene glycol (CAS 57-55-6) is listed.

Section 16: Other Information

SDS Code: VPS Iversol
References: Data sourced from component SDSs, regulatory databases, and supplier information.
SDS Prepared By: Veterinary Pharmaceutical Solutions
Date of Last Revision: February 27th, 2025
For More Information: Contact VPS at 1-877-931-8707

Disclaimer: This SDS is intended to provide a summary of health, safety, and environmental information as required by OSHA 29 CFR 1910.1200 and GHS regulations. The information is believed to be accurate but is provided without warranty, express or implied. Users are responsible for compliance with all applicable regulations and safe handling practices.