



MATERIAL SAFETY DATA SHEET

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: Thiosulfate Blue
Product No. : Not applicable
GHS Product Identifier: Not applicable

Synonyms:

Molecular Formula: Mixture, not applicable
Molecular Weight: Not applicable
CAS Number: Mixture, not applicable
Chemical Family: Neutralizer

Manufacturer:
Boehringer Ingelheim Vetmedica, Inc.
2621 North Belt Hwy
St. Joseph, MO 64506-2002

Emergency Telephone:
Transportation Emergency: (800) 424-9300

Medical Emergency (24HR): (866) 638-2226

Non-emergency Telephone: (800) 821-7467

Intended Use: To aid in the administration of oral vaccines to swine by water delivery.

2 HAZARDS IDENTIFICATION

Emergency Overview

Physical State: Solid tablets dissolved into water supply, or ready to use liquid, to neutralize chlorine in order to protect vaccines

Color: Colorless to blue

Odor: No data available



CAUTION!

For use in swine only.

Not for human use.

May cause eye and skin irritation.

Precautionary Statements:

Keep only in original container.

Store out of direct sunlight.

Avoid contact with eyes, skin and clothing.

Wash thoroughly with soap and water after handling.

Wear suitable gloves and eye/face protection.

Spills: Cover with absorbent or contain. Collect and incinerate.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

If swallowed, seek medical advice immediately and show this container or label.

This material and its container must be disposed of in a safe way.

Keep out of reach of children.

Keep away from food, drink, and animal feedstuffs.

Acute effect: May cause eye and skin irritation.

Precautions/Contraindications: Avoid temperatures above 100°C (212°F). Releases toxic, irritating gases at high temperatures.

Overdosage: None known.

ADVERSE REACTIONS TO PRODUCT: May cause skin or membrane irritation in sensitive individuals or animals.

Potential Health Effects

Inhalation: Not expected to be an inhalation hazard with prescribed use.

Eye Contact: Not expected to be a hazard to the eye with prescribed use. Exposure may cause eye tearing, redness, and discomfort.

Skin Contact: Not expected to be a hazard to the skin with prescribed use. Prolonged or repeated contact may cause itching, redness, and rash in some individuals or animals.

Ingestion: Expected to be a low ingestion hazard. Exposure may cause vomiting, nausea, diarrhea or other systemic effects.

Chronic Health Effects: Possible hypersensitization (development of abnormal sensitivity).

Target Organ(s): Gastrointestinal System

OSHA Regulatory Status: Non-hazardous

Environment: No data available

3	COMPOSITION / INFORMATION ON INGREDIENTS
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Chemical Name	EC No.	CAS- No.	Concentration	Classification	Notes
Sodium thiosulfate pentahydrate	----	10102-17-7	proprietary	----	---

The full texts for all R-Phrases are displayed in Section 16, if applicable.

4 FIRST AID MEASURES

General: Animals or persons developing anaphylactic (life-threatening) reactions, such as difficulty in breathing or unconsciousness, must receive immediate medical attention.

Inhalation: Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.

Eye Contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if symptoms persist.

Skin Contact: Wash with soap and water. Get medical attention if symptoms occur.

Ingestion: Seek medical advice.

Note to Physician: Treat symptomatically.

5 FIRE-FIGHTING MEASURES

Extinguishing Media: Extinguish with foam, carbon dioxide, dry powder and water fog or material appropriate for surrounding fire.

Unsuitable Extinguishing Media: None known

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing.

Unusual Fire & Explosion Hazards: None known

Hazardous Combustion Products: Hydrogen sulfide, sulfur oxides, sodium oxides

Flammability Class: 0

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate personal protective equipment (See Section 8).

Spill Cleanup Methods: Solid spill: Sweep up and place in a clearly labeled container for chemical waste. Small liquid spill: Use a non-combustible material like vermiculite, earth or sand to soak up the product and place into container for later disposal. Incinerate. For large liquid spill: Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Incinerate.

Environmental Precautions: Prevent runoff from entering drains, sewers or streams. Dike for later disposal.

7 HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing dust or mist. Wash thoroughly with soap and water after handling. Use only with adequate ventilation.

Storage: Store in original container. Store out of direct sunlight to protect product integrity.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

For Industrial Exposures:

Exposure Limits: None

Engineering Controls: Not generally required when handling. Good ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Respiratory Protection: Not generally required when handling. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA standard 63 FR 1152, January 8, 1998. Respirator type: N95 particulate filter or a NIOSH approved organic vapor respirator.

Europe: Wear appropriate personal protective equipment according to the Council Directive 89/686/EEC (4) and the appropriate CEN standards.

PERSONAL PROTECTIVE EQUIPMENT: Not generally required when handling containers. If containers are compromised or exposure to the active ingredient or mixture is likely wear:

Eye Protection: Wear safety glasses with side shields (or goggles).

Hand Protection: Wear suitable gloves.

Skin Protection: Wear protective clothing appropriate for the risk of exposure.

Hygiene Measures: Eye bath, washing facilities, shower

9 PHYSICAL AND CHEMICAL PROPERTIES

Color: Colorless to blue

Odor: No data available

Odor Threshold: No data available

Physical State: Solid tablets dissolved into water supply, or ready to use liquid, to neutralize chlorine in order to protect vaccines

pH: No data available

Melting Point: No data available

Freezing Point: No data available

Boiling Point: No data available

Flash Point: No data available

Flammability Limit – Upper (%): No data available

Flammability Limit – Lower (%): No data available

Evaporation rate: No data available

Vapor Pressure: No data available

Vapor Density (Air=1): No data available

Specific Gravity: No data available

Solubility: No data available

Partition Coefficient (n-Octanol/water): No data available

Autoignition Temperature: Not applicable

Decomposition Temperature: No data available

10 STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: Temperatures above 100°C (212°F), direct sunlight

Incompatible Materials: Strong oxidizing agents, strong acids, strong bases

Hazardous Decomposition Products: Hydrogen sulfide, sulfur oxides, sodium oxides

Possibility of Hazardous Reactions: Will not occur.

11 TOXICOLOGICAL INFORMATION

Specified Substances

Acute Toxicity: No test data available

Listed Carcinogens: None

12 ECOLOGICAL INFORMATION

Ecotoxicity: No data available

Persistence and degradability: No data available

Mobility in soil: No data available

Other adverse effects: No data available

Germany WGK: 1 – Slightly water-endangering

13 DISPOSAL CONSIDERATIONS

General Information: Dispose of in accordance with local, state, federal, national or international regulations.

Disposal Methods: Incinerate containers and unused contents. Do not empty into drains; dispose of this material and its container in a safe way. Do not contaminate water, food, or feed by disposal.

RCRA Information: Not applicable

Container: Since emptied containers retain product residue, follow label warnings even after container is emptied.

14	TRANSPORT INFORMATION
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DOT: Not regulated

TDG: Not regulated

ADR/RID: Not regulated

IATA: Not regulated

IMDG: Not regulated

15	REGULATORY INFORMATION
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Canadian Controlled Products Regulations: This product has been classified according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33, and the MSDS contains all required information.

WHMIS Classification: Non-controlled, exempt

Inventory Status

This material is listed on the following inventories: DSL, AICS, ENCS, PICCS, IECSC, and NZIoC.

This material is **not** listed on the following inventories: TSCA, EINECS, and KECI. Therefore, it can only be used for TSCA exempt purposes such as R&D or veterinary use.

Canada CEPA Schedule 1 - None

US Regulations

CERCLA Hazardous Substance List (40 CFR 302.4): None

SARA Title III

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): None

Section 311/312 (40 CFR 370): None

Section 313 Toxic Release Inventory (40 CFR 372): None

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): None

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): None

State Regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): None

Massachusetts Right-To-Know List: None

Minnesota Hazardous Substances List: None

New Jersey Right-To-Know List: None

Pennsylvania Right-To-Know List: None

Rhode Island Right-To-Know List: None

European Regulations

Austria MAK List (Annex I): None

Denmark (Annex 3.6, April 2005): None

Germany (Dangerous Substances Ordinance 2004, Annex III): None

Norway (List of Dangerous Substance): None

Sweden (Sensitizers- Annex 3): None

Switzerland (Toxins List 1): Sodium thiosulfate, pentahydrate (Toxicity category 4)

16	OTHER INFORMATION
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Hazard Ratings

	Health Hazard	Fire Hazard	Reactivity Hazard
HMIS	1	0	0

	Health Hazard	Fire Hazard	Reactivity Hazard	Special Hazard
NFPA	1	0	0	N/A

*- Chronic health effect; 0 – Minimal; 1 – Slight; 2 – Moderate; 3 – Serious; 4 – Severe

S37 – Wear suitable gloves.

S45 – In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

ABBREVIATIONS:

BIV - Boehringer Ingelheim Vetmedica, Inc.

N/A - Not applicable

N/E - Not established

pph – parts per hour

References:

1. Ariel WebInsight Regulatory Database. Regulatory Summary for North America, Western Europe, and Global Inventories Database.
2. GHS Manual
3. RTECS – Sodium thiosulfate, pentahydrate, RTECS No. WE6660000
4. Ready and Reload Pack Labels

Prepared by: Boehringer Ingelheim Vetmedica, Inc.

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