



# MATERIAL SAFETY DATA SHEET

## 1 PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Ready-Reload Pack Series

**Product No. :** Not applicable

**GHS Product Identifier:** Not applicable

**Synonyms:** Ready Pack, Ready Pack DT, Ready Pack XL, Ready Pack XL DT, Reload Pack, Reload Pack DT, Reload Pack XL, Reload Pack XL DT

**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.

### **Description:**

Ready Pack – This package is intended to aid in the administration of Boehringer Ingelheim oral vaccines by water delivery. See label for instructions on use.

Reload Pack – This package is intended to aid in the administration of oral vaccines to swine by water delivery. Use 1 Reload Pack for each Ready Pack (120 oz) or 2 Reload Packs for each Ready Pack XL (280 oz). Use 1 Reload Pack XL DT for each Ready Pack XL DT (280 oz).

Ready Pack DT, Ready Pack XL DT, Reload Pack DT, and Reload Pack XL DT contain a non-toxic FD&C blue dye.

**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

<b>3</b>	<b>COMPOSITION / INFORMATION ON INGREDIENTS</b>
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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.

<b>4</b>	<b>FIRST AID MEASURES</b>
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**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.

<b>5</b>	<b>FIRE-FIGHTING MEASURES</b>
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**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

<b>6</b>	<b>ACCIDENTAL RELEASE MEASURES</b>
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**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

<b>13</b>	<b>DISPOSAL CONSIDERATIONS</b>
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**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.

<b>14</b>	<b>TRANSPORT INFORMATION</b>
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**DOT:** Not regulated

**TDG:** Not regulated

**ADR/RID:** Not regulated

**IATA:** Not regulated

**IMDG:** Not regulated

<b>15</b>	<b>REGULATORY INFORMATION</b>
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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. In the United States, this product is regulated by the USDA Animal and Plant Health Inspection Service (APHIS).

**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****Hazard Ratings**

	<b>Health Hazard</b>	<b>Fire Hazard</b>	<b>Reactivity Hazard</b>
<b>HMIS</b>	1	0	0

	<b>Health Hazard</b>	<b>Fire Hazard</b>	<b>Reactivity Hazard</b>	<b>Special Hazard</b>
<b>NFPA</b>	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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