



MATERIAL SAFETY DATA SHEET

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: SERAQUIN® Tablets
Product No.: Not applicable
GHS Product Identifier: Not applicable

Synonyms: Not available
Molecular Formula: Mixture, not applicable
Molecular Weight: Not applicable
CAS Number: Mixture, not applicable
Chemical Family: Nutritional Supplement

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

Emergency Telephone:
Transportation Emergency: (800) 424-9300
Medical Emergency (24HR): (800)530-5432

Intended Use: A veterinary nutritional supplement containing glucosamine HCl, chondroitin sulfate and an antioxidant that provides support of joint function in cats and dogs.

Non-emergency Telephone: (800) 821-7467

2 HAZARDS IDENTIFICATION

Emergency Overview

Physical State:

Cats and small dogs: 800 mg tablet

Convex chewable tablet (12 mm diameter; height 7 mm)
SERAQUIN is presented in a box with 3 blisters (strips) of 20 tablets.
Boehringer Ingelheim name, logo and SERAQUIN are printed in black on the back of the aluminum foil.

Dogs: 2 gram tablet

Convex chewable tablet (19 mm diameter; height 7 mm)
SERAQUIN is presented in a box with 3 or 6 blisters (strips) of 10 tablets.
Boehringer Ingelheim name, logo and SERAQUIN are printed in black on the back of the aluminum foil.

Color: Light beige with orange spots

Odor: Sour yeast and cheese

Not classified as hazardous.

Handle in accordance with good industrial hygiene and safety practice.

For cats and dogs - oral use only.

Not for human use.

Precautionary Statements:

Keep out of reach of children.

Keep only in original container.

Avoid direct sunlight and moisture.

Keep at a temperature not exceeding 30° C.

If medical advice is needed: Have product container or label at hand.

Fire-fighting: Use foam, carbon dioxide, dry powder and water fog or material appropriate for surrounding fire.

Wash thoroughly with soap and water after handling.

Spills: Sweep spilled substance into appropriate waste containers.

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

Keep away from food, drink, and animal feedstuffs.

Acute effect: Improved joint function in the animal.

Precautions/Contraindications:

Use with caution in animals with a history of clotting disorders, diabetes, metabolic disorders associated with hyperglycemia, urinary tract stones and allergies to shellfish.

Overdosage: None known

ADVERSE REACTIONS TO PRODUCT: If the animal's condition worsens or does not improve, stop product immediately and consult your veterinarian.

Potential Health Effects

Inhalation: Not expected to be an inhalation hazard.

Eye Contact: Not expected to be a hazard to the eye with prescribed use. Contact with eye may cause transient irritation.

Skin Contact: Not expected to be a skin hazard. Can cause hypersensitive reactions for patients allergic to any of the components or shell fish.

Ingestion: Not expected to be an ingestion hazard.

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

Target Organ(s): Bones/joints

Potential Physical Effects: Improved joint function

OSHA Regulatory Status: Nonhazardous, exempt

Environment: No data available

3 COMPOSITION / INFORMATION ON INGREDIENTS

Cats and small dogs:

Chemical Name	EC No.	CAS- No.	Concentration	Classification	Notes
Glucosamine HCl	----	66-84-2	125 mg	not applicable	----
Chondroitin sulfate, porcine	----	9007-28-7	95 mg	not applicable	----
Turmeric extract	----	977083-26-3	proprietary	not applicable	----
Yeast, inactivated	----	not applicable	proprietary	not applicable	----
Glucose, monohydrate	2000751	50-99-7	proprietary	not applicable	----
Sugar (saccharose)	2003349	57-50-1	proprietary	not applicable	----
Trigarol hydrolysed chicken protein	----	not applicable	proprietary	not applicable	----
Calcium stearate	2164728	1592-23-0	proprietary	not applicable	----
Glycerol	2002895	56-81-5	proprietary	not applicable	----
Corn protein	----	not applicable	proprietary	not applicable	----
Corn starch	----	9005-25-8	proprietary	not applicable	----
Dicalcium phosphate	2318261	7757-93-9	proprietary	not applicable	----

Dogs:

Chemical Name	EC No.	CAS- No.	Concentration	Classification	Notes
Glucosamine HCl	----	66-84-2	500 mg	not applicable	----
Chondroitin sulfate, porcine	----	9007-28-7	380 mg	not applicable	----
Turmeric extract	----	977083-26-3	proprietary	not applicable	----
Yeast, inactivated	----	not applicable	proprietary	not applicable	----
Glucose, monohydrate	2000751	50-99-7	proprietary	not applicable	----
Sugar (saccharose)	2003349	57-50-1	proprietary	not applicable	----
Trigarol hydrolysed chicken protein	----	not applicable	proprietary	not applicable	----
Calcium stearate	2164728	1592-23-0	proprietary	not applicable	----
Glycerol	2002895	56-81-5	proprietary	not applicable	----
Corn protein	----	not applicable	proprietary	not applicable	----
Corn starch	----	9005-25-8	proprietary	not applicable	----
Dicalcium phosphate	2318261	7757-93-9	proprietary	not applicable	----

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

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: For animal use only. Not for human use.

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: Carbon monoxide, carbon dioxide

Flammability Class: 0

6 ACCIDENTAL RELEASE MEASURES

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

Spill Cleanup Methods: STEPS TO BE TAKEN IF SIGNIFICANT QUANTITIES OF TABLETS ARE BROKEN: Wear an approved respirator, eye protection, personal protective coverings and gloves. Use HEPA filtered vacuum or wet sweeping to clean up spillage. Avoid dust. Place spillage in appropriate container for waste disposal. Wash contaminated clothing before use.

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

7 HANDLING AND STORAGE

Handling: HANDLING SIGNIFICANT QUANTITIES OF BROKEN TABLETS: Avoid contact with eyes, skin or clothing. Do not taste or swallow. Avoid generating dust. Wash hand thoroughly after handling.

Storage: Store in a dry place below 30° C (86° F) to maintain product integrity during shelf life. Shelf live is 24 months. Avoid direct sunlight and moisture.

8	EXPOSURE CONTROLS / PERSONAL PROTECTION
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Exposure Limits:

Chemical Name	Source	Type	Exposure Limits	Notes
2-Амино-2-деокси- D-глюкозы, гидрохлорид (Glucosamine HCl), aerosol	Russian Federation	MAC Ceiling Limit	0.005 mg/m ³	Hazardous class 1 - allergen

Engineering Controls: Not generally required when handling containers or tablets. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If operations involve crushing or other processes that may release powder, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

Respiratory Protection: Not generally required when handling containers or tablets. If containers or tablets are broken and 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: Dust

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) if exposure to dust is likely.

Hand Protection: It is a good industrial hygiene practice to minimize skin contact

Skin Protection: It is a good industrial hygiene practice to minimize skin contact.

Hygiene Measures: Eye bath, washing facilities

9	PHYSICAL AND CHEMICAL PROPERTIES
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Color: Light beige with orange spots

Odor: Sour yeast and cheese

Odor Threshold: Not applicable

Physical State: Cats and dogs: 800mg: Convex chewable tablet (12 mm diameter; height 7 mm)

Dogs: 2gm: Convex chewable tablet (19 mm diameter; height 7 mm)

pH: Slightly acidic (aqueous solution)

Melting Point: No data available

Freezing Point: No data available

Boiling Point: No data available

Flash Point: > 90° C (194° F)

Ignition Temperature: > 90° C (194° F)

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:
Solubility: Partly soluble in water
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: None known

Incompatible Materials: Strong oxidizing agents

Hazardous Decomposition Products: None known

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

11 TOXICOLOGICAL INFORMATION

Specified Substances

Acute Toxicity

Chemical Name	Test Results
D-Glucose, 2-amino-2-deoxy-hydrochloride	Oral LD ₅₀ (mouse): 15 g/kg
Chondroitin sulfuric acids	Intravenous LD ₅₀ (mouse): 2340mg/kg

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: Glucose, monohydrate : Class 1: ID 4806: Slightly water-endangering; Stärke: Class 1: ID 7034: slightly water-endangering; calciumhydrogenorthosphat, mit einem gehalt an fluor von weniger als 0,005 ght, bezogen auf den wasserfreien stoff: Class 1: ID 6516: slightly water-endangering

13 DISPOSAL CONSIDERATIONS

General Information: Dispose of in accordance with local, state and federal regulations.

Disposal Methods: No specific disposal method required. Do not empty into drains; dispose of this material and its container in a safe way. Do not contaminate water, food, or feed by storage disposal.

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

14 TRANSPORT INFORMATION

DOT: Not regulated

TDG: Not regulated

ADR/RID: Not regulated

IATA: Not regulated

IMDG: Not regulated

15 REGULATORY INFORMATION

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: Noncontrolled, exempt

Inventory Status

This product is **not** listed on the US TSCA Inventory. Therefore, it can only be used for TSCA exempt purposes such as R&D or veterinary use.

This material is **not** listed on the DSL Inventory.

US Regulations

FEDERAL LAW RESTRICTS THIS DRUG TO LICENSED VETERINARIANS.

State Regulations

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

Massachusetts Right-To-Know List: Sucrose dust; Glycerin mist

Minnesota Hazardous Substances List: Sucrose, Glycerin mist

New Jersey Right-To-Know List: Sucrose

Pennsylvania Right-To-Know List: .alpha.-d-alpha.-d-glucopyranoside, .beta.-d-fructofuranosyl

Rhode Island Right-To-Know List: Sucrose

European Regulations

Switzerland Toxins List 1: Calciumstearat: G-7699; tested: found not to be toxic, Calcium-hydrogenphosphat G-7156, tested: found not to be toxic

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

16	OTHER INFORMATION
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Hazard Ratings

	Health Hazard	Fire Hazard	Reactivity Hazard
HMIS	0	0	0

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

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

This product has been reviewed and is classified and labeled as follows in full accord with EC Directive 67/548 and all other current applicable amending Directives, including, but not limited to, 91/155/EC, 1999/45/EC, 2001/58/EC and 2001/59/EC.

Not classified as hazardous

Handle in accordance with good industrial hygiene and safety practice.

ABBREVIATIONS:

BIV - Boehringer Ingelheim Vetmedica, Inc.

AIHA- American Industrial Hygiene Association

mppcf – million particles/cubic foot

N/A - Not applicable

N/E - Not established

References:

1. Ariel WebInsight Regulatory Database. Regulatory Summary for North America, Eastern Europe, Western Europe, Asia Pacific, and Global Inventories Database
2. SERAQUIN MSDS, Boehringer Ingelheim Danmark A/S, July 12, 2006.
3. RTECS, D-Glucose, 2-amino-2-deoxy-hydrochloride, No. LZ6665000, Review Date, 200602
4. RTECS, Chondroitin sulfuric acids, No. GA8430000, Review Date, 200408.
5. GHS Manual

Revision Information: New MSDS

Prepared by: Boehringer Ingelheim Vetmedica, Inc.

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