

SECTION 1 Identification

1.1. GHS Product identifier

Product form : Mixture
Trade name : Tiamulin HF 10%

1.2. Other means of identification

Other means of identification : Registered product - DIN 02444364

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Medicated Feed Premix
Restrictions on use : For veterinary use only

1.4. Supplier's details

Bio Agri Mix LP
P.O. Box 399
Mitchell, ON, N0K 1N0
Canada
T 519-348-9865

1.5. Emergency phone number

Emergency number : CANUTEC: 1-613-996-6666 (transport)

SECTION 2 Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Not classified

2.2. GHS label elements, including precautionary statements

GHS CA labelling

Supplementary information : Exempt - Registered product - (DIN 02444364).

This product is not subject to the Hazardous Products Act (HPA) Part II (Hazardous Products) as per paragraph 12(j); Schedule 1 (Non-Application of Part II).

This restriction states that Part II does not apply in respect of the sale or importation of anything listed in Schedule 1 which includes any pest control product as defined in subsection 2(1) of the Pest Control Products Act, any explosive as defined in section 2 of the Explosives Act, any cosmetic, device, drug or food, as defined in section 2 of the Food and Drugs Act, any consumer product as defined in section 2 of the Canada Consumer Product Safety Act and any wood or product made of wood.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

Tiamulin HF 10%

Safety Data Sheet

According to SOR/2015-17, Hazardous Products Regulations (HPR) (amended 2022)

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%
Tiamulin hydrogen fumarate	Acetic acid, [[2-(diethylamino)ethyl]thio]-, (3aS,4R,5S,6S,8R,9S,9aR,10R)-6-ethenyldecahydro-5-hydroxy-4,6,9,10-tetramethyl-1-oxo-3a,9-propano-3aH-cyclopentacycloocten-8-yl ester, (2E)-2-butenedioate (1:1) (salt) / Tiamulin fumarate / Tiamulin hydrogen fumarate	CAS-No.: 55297-96-6	10 – 30
Paraffin oils	Liquid paraffin / Mineral oil / Mineral oil, white / Oil, mineral / Oils, paraffin / Paraffin oil / White mineral oil / Paraffin / KZ oil / Oil mist, refined mineral / PARAFFINUM LIQUIDUM / Mineral oils / Cutting oils	CAS-No.: 8012-95-1	1-5

Comments : CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with the amended HPR as of December 2022.

SECTION 4 First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: Wash skin with plenty of water. Obtain medical attention if irritation persists.
First-aid measures after eye contact	: Rinse eyes with water as a precaution. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation persists.
First-aid measures after ingestion	: Do not induce vomiting. If vomiting occurs have person lean forward. Never give anything by mouth to an unconscious person. Call a poison center or a doctor if you feel unwell.
First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible). Medical personnel should be made aware of substance(s) involved and take measures for self protection. Show this safety data sheet to the doctor in attendance. Avoid contact with skin and eyes. Keep out of the reach of children.

4.2. Most important symptoms/effects , acute and delayed

Symptoms/effects after inhalation	: Prolonged inhalation may be harmful.
Symptoms/effects after skin contact	: Prolonged or repeated contact may dry skin and cause irritation.
Symptoms/effects after eye contact	: Direct contact with eyes may cause temporary irritation.
Symptoms/effects after ingestion	: May cause stomach distress, nausea or vomiting.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: Symptoms may be delayed. Treat symptomatically.
-----------------------------------	---

SECTION 5 Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media	: Treat for surrounding material.
Unsuitable extinguishing media	: Do not use a water jet since it may cause the fire to spread.

Tiamulin HF 10%

Safety Data Sheet

According to SOR/2015-17, Hazardous Products Regulations (HPR) (amended 2022)

5.2. Specific hazards arising from the chemical

Fire hazard	: During fire, gases hazardous to health may be formed. In case of fire or explosion do not breathe fumes.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: May include and are not limited to: oxides of carbon. Nitrogen oxides. Sulphur oxides.

5.3. Special protective actions for fire-fighters

Firefighting instructions	: In case of fire: stop leak if safe to do so. Do not enter fire area without proper protective equipment, including respiratory protection. Move containers from fire area if it can be done without personal risk.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: In the event of a significant spillage : Notify authorities if product enters sewers or public waters. Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
Environmental precautions	: Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment	: Stop leaks if it can be done without personal risk. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up	: Soak up with inert absorbent material (for example sand, sawdust, a universal binder, silica gel). Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Clean contaminated surfaces with an excess of water. Minimise generation of dust.
Other information	: This material and its container must be disposed of in a safe way, and as per local legislation.

For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Avoid contact with skin and eyes. Avoid breathing dust. Do not taste or swallow. Ensure good ventilation of the work station. Wear personal protective equipment. Handle and open container with care.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep out of reach of children. Store tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).
Packaging materials	: Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Tiamulin HF 10%

Safety Data Sheet

According to SOR/2015-17, Hazardous Products Regulations (HPR) (amended 2022)

Paraffin oils (8012-95-1)	
Canada (Alberta) - Occupational Exposure Limits	
OEL TWA	5 mg/m ³
OEL STEL	10 mg/m ³
Canada (Quebec) - Occupational Exposure Limits	
VECD (OEL STEV)	10 mg/m ³ (mist)
VEMP (OEL TWA EV)	5 mg/m ³ (mist)
Canada (British Columbia) - Occupational Exposure Limits	
OEL TWA	0.2 mg/m ³ (mildly refined) 1 mg/m ³ (severely refined)
Canada (Manitoba) - Occupational Exposure Limits	
OEL TWA	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable particulate matter)
Canada (New Brunswick) - Occupational Exposure Limits	
OEL TWA	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable fraction)
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
OEL TWA	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable particulate matter)
Canada (Nova Scotia) - Occupational Exposure Limits	
OEL TWA	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable particulate matter)
Canada (Nunavut) - Occupational Exposure Limits	
OEL TWA	5 mg/m ³
OEL STEL	10 mg/m ³
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016 (Amendment R-044-2021)
Canada (Northwest Territories) - Occupational Exposure Limits	
OEL TWA	5 mg/m ³
OEL STEL	10 mg/m ³
Regulatory reference	Occupational Health and Safety Regulations R-039-2015 (R-013-2020)
Canada (Ontario) - Occupational Exposure Limits	
OEL TWA EV	5 mg/m ³ (pure, highly and severely refined, excluding metal working fluids-inhalable particulate matter)
Regulatory reference	Ontario Occupational Exposure Limits under Regulation 833
Canada (Prince Edward Island) - Occupational Exposure Limits	
OEL TWA	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable particulate matter)
Canada (Saskatchewan) - Occupational Exposure Limits	
OEL TWA	5 mg/m ³
OEL STEL	10 mg/m ³
Regulatory reference	The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10
Canada (Yukon) - Occupational Exposure Limits	
OEL TWA	5 mg/m ³
OEL STEL	10 mg/m ³

Tiamulin HF 10%

Safety Data Sheet

According to SOR/2015-17, Hazardous Products Regulations (HPR) (amended 2022)

8.2. Appropriate engineering controls

Appropriate engineering controls	: Good general 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.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection:
Wear protective gloves. Confirm with a reputable supplier first.
Eye protection:
Wear safety glasses with side shields (or goggles).
Skin and body protection:
Wear suitable protective clothing. As required by employer code.
Respiratory protection:
Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Solid
Appearance	: Granular.
Colour	: Grey
Odour	: Characteristic
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: Not applicable
Explosive properties	: Not explosive.
Oxidising properties	: Not oxidising.
Explosive limits	: Not applicable
Particle characteristics	: No data available

Tiamulin HF 10%

Safety Data Sheet

According to SOR/2015-17, Hazardous Products Regulations (HPR) (amended 2022)

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: Keep away from heat and direct sunlight. Do not mix with other chemicals.
Incompatible materials	: Strong oxidizing agents.
Hazardous decomposition products	: May include and are not limited to: oxides of carbon.

SECTION 11 Toxicological information

11.1. Likely routes of exposure

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Tiamulin HF 10%	
Unknown acute toxicity (GHS CA)	Not applicable.
Tiamulin hydrogen fumarate (55297-96-6)	
ATE CA (oral)	841 mg/kg
Paraffin oils (8012-95-1)	
LD50 oral rat	> 24 g/kg (Source: NLM_CIP)
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat [ppm]	2062 ppm/4h

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Likely routes of exposure	: Skin and eyes contact. Ingestion. Inhalation.
Symptoms/effects after inhalation	: Prolonged inhalation may be harmful.
Symptoms/effects after skin contact	: Prolonged or repeated contact may dry skin and cause irritation.
Symptoms/effects after eye contact	: Direct contact with eyes may cause temporary irritation.
Symptoms/effects after ingestion	: May cause stomach distress, nausea or vomiting.

SECTION 12 Ecological information

12.1. Toxicity

Ecology - general	: See below for route-specific details.
Hazardous to the aquatic environment, short-term (acute)	: Not classified

Tiamulin HF 10%

Safety Data Sheet

According to SOR/2015-17, Hazardous Products Regulations (HPR) (amended 2022)

Hazardous to the aquatic environment, long-term (chronic) : Not classified

12.2. Persistence and degradability

Tiamulin HF 10%	
Persistence and degradability	Rapidly degradable
Tiamulin hydrogen fumarate (55297-96-6)	
Persistence and degradability	Rapidly degradable
Paraffin oils (8012-95-1)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Waste treatment methods : Dispose of the material collected according to regulations.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling, disposal or collection.

SECTION 14 Transport information

In accordance with TDG

TDG	
14.1. UN Number	Not regulated
14.2. UN Proper Shipping Name	Not regulated
14.3. Transport hazard class(es)	Not regulated
14.4. Packing group, if applicable	Not regulated
14.5. Environmental hazards	Not regulated
No supplementary information available	

Tiamulin HF 10%

Safety Data Sheet

According to SOR/2015-17, Hazardous Products Regulations (HPR) (amended 2022)

14.6. Special precautions for user

TDG

Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78⁹ and the IBC Code¹⁰

Not applicable

SECTION 15 Regulatory information

All components of this product are present on DSL

SECTION 16 Other Information

Issue date : 07/02/2025

Other information : For an updated SDS, please contact the supplier or manufacturer listed on the first page of the document.

Exempt - Registered product - (DIN 02444364).

This product is not subject to the Hazardous Products Act (HPA) Part II (Hazardous Products) as per paragraph 12(j); Schedule 1 (Non-Application of Part II).

This restriction states that Part II does not apply in respect of the sale or importation of anything listed in Schedule 1 which includes any pest control product as defined in subsection 2(1) of the Pest Control Products Act, any explosive as defined in section 2 of the Explosives Act, any cosmetic, device, drug or food, as defined in section 2 of the Food and Drugs Act, any consumer product as defined in section 2 of the Canada Consumer Product Safety Act and any wood or product made of wood.

VETERINARY USE ONLY

CAUTIONS: For use in swine feed only. This drug should not be administered to sows and gilts 4 weeks after service.

WARNINGS: Treated swine must not be slaughtered for use in food for at least 7 days after the latest treatment with this drug at the dose of up to 220 mg/kg tiamulin fumarate for treatment claims or at least 2 days after use at 38.6 mg/kg tiamulin fumarate for prevention claims. When mixing, direct contact with the skin and eyes should be avoided by wearing impermeable rubber gloves and safety glasses. In case of accidental eye contact, irrigate the eyes thoroughly with clean running water immediately. Seek medical advice if irritation persists. When handling the product, inhalation of the dust must be avoided by wearing a disposable half-mask respirator. Contaminated clothing should be removed and any splashes on to the skin should be washed off immediately. Wash hands after use. In case of accidental ingestion, seek medical advice immediately and show the label to the physician.

KEEP OUT OF REACH OF CHILDREN.

ADVERSE REACTIONS: 1. Overdoses of tiamulin have sometimes produced transitory salivation, vomiting and an apparent calming effect on the pig. In very rare cases, death has been reported. 2. In rare cases, redness of the skin, primarily over the ham and underline has been observed during medication. 3. If signs of toxicity or redness of the skin occurs, promptly discontinue use of the therapeutic level of medicated feed.

STORAGE CONDITIONS: Store in a cool dry place at or below 30°C.

Tiamulin HF 10%

Safety Data Sheet

According to SOR/2015-17, Hazardous Products Regulations (HPR) (amended 2022)

The information in the safety data sheet was written by Dell Tech Laboratories Ltd. (www.delltech.com) based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.