

## SAFETY DATA SHEETS

**This SDS packet was issued with item:**

078015787

N/A



## MATERIAL SAFETY DATA SHEET

### 1 PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Acorexx® (0.01% Ivermectin) Otic Suspension

**Product No.:** Not available

**GHS Product Identifier:** Not applicable

**Synonyms:** Ivermectin Otic Suspension

**Molecular Formula:** Mixture, not applicable

**Molecular Weight:** Not applicable

**CAS Number:** Mixture, not applicable

**Chemical Family:** Not applicable

**Manufacturer:**

Boehringer Ingelheim Vetmedica, Inc.  
2621 North Belt Highway  
St. Joseph, MO 64506

**Transportation Emergency:** For Chemical  
Emergency Spill, Leak, Fire, Exposure, or  
Accident Call CHEMTREC Day or Night

Within USA and Canada: 1-800-424-9300

Outside USA and Canada: +1 703-527-3887  
(collect calls accepted)

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

**Intended Use:** Treatment of adult ear mite  
infestations in cats and kittens four weeks of  
age or older.

**Non-emergency Telephone:** (800) 821-7467

### 2 HAZARDS IDENTIFICATION

**Emergency Overview**

**Physical State:** Liquid Suspension

**Color:** White to off-white

**Odor:** Odorless to faint alcohol



**WARNING!**

**Combustible liquid and vapor.**

**Feline use only.****Not for human use.****Precautionary Statements:**

Keep away from heat, sparks and flame.

Do not use or store near heat or open flame.

Keep at a temperature not exceeding 30° C.

Protect from freezing.

Protect from direct sunlight.

Keep only in original container.

Keep container closed.

Fire-fighting: Use water spray, dry chemical, carbon dioxide, foam

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

Avoid contact with eyes, skin and clothing.

Wash thoroughly with soap and water after handling.

Wear suitable gloves and eye/face protection.

Spills: Use non-sparking equipment when picking up flammable spill. Remove ignition sources.

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.

In case of contact with eyes, directly, flush with gently flowing fresh water thoroughly.

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:**

Acarexx® (0.01% Ivermectin) Otic Suspension is indicated for the treatment of adult (*Otodectes cynotis*) infestations in cats and kittens four weeks or older. Effectiveness against eggs and immature stages has not been proven.

**Overdosage:** None known.

**ADVERSE REACTIONS TO PRODUCT:** May cause skin or membrane irritation in sensitive individuals or animals. In approximately 1% of 80 cats and kittens, pain associated with the pinna and vomiting was observed following treatment with Acarexx.

**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. May cause slight eye irritation if exposed. Exposure may cause eye tearing, redness, and discomfort.

**Skin Contact:** Not expected to be a hazard to the skin. May cause slight skin irritation. Prolonged or repeated contact may cause itching, redness, and rash in some individuals or animals.

**Ingestion:** Not expected to be an ingestion hazard with prescribed use. Exposure may cause vomiting, nausea, diarrhea or other systemic effects.

**Chronic Health Effects:** Repeated or prolonged exposure to Ivermectin may cause damage to the reproductive system, mucous membranes or blood.

**Target Organ(s):** Ear, skin, reproductive system, blood

**Potential Physical Effects:** Combustible liquid and vapor. (Flashpoint of 143 degrees F.)

**OSHA Regulatory Status:** Hazardous

**Environment:** No data available

### 3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	EC No.	CAS- No.	Concentration	Classification	Notes
Ethyl Alcohol	2005786	64-17-5	proprietary	F, R11	----
Ivermectin	2745360	70288-86-7	0.01%	T+, R28	----

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.

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

**Ingestion:** Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

**Note to Physician:** For feline use only. Not for human use.

### 5 FIRE-FIGHTING MEASURES

**Extinguishing Media:** Extinguish with water spray, dry chemical, carbon dioxide, foam

**Unsuitable Extinguishing Media:** None known

**Special Fire Fighting Procedures:** Wear self-contained breathing apparatus and protective clothing. Use water spray to keep fire-exposed containers cool.

**Unusual Fire & Explosion Hazards:** Combustible liquid and vapor.

**Hazardous Combustion Products:** Carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen chloride

**Flammability Class:** IIIA [OSHA 1910.106(a) (18) (ii) (a)]

**6 ACCIDENTAL RELEASE MEASURES**

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

**Spill Cleanup Methods:** STEPS TO BE TAKEN IF SIGNIFICANT QUANTITIES OF LIQUID IS SPILLED: Eliminate all ignition sources. Wear an approved respirator, eye protection, personal protective coverings and gloves. Use HEPA filtered vacuum or wet sweeping to clean up spillage. 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 LIQUID: Avoid breathing vapors. Avoid contact with eyes, skin or clothing. Absorb spilled liquid and collect for disposal. Wash hand thoroughly after handling.

**Storage:** Keep only in the original container. Reseal containers immediately after use. Store at 0°-30° C (32°-86° F). Keep from freezing. Protect from direct sunlight. Store away from foodstuffs.

**8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Limits:**

Chemical Name	Source	Type	Exposure Limits	Notes
Ethyl alcohol	ACGIH	8-HR TWA	1000 ppm	Irritation
Ethyl alcohol	OSHA Z-1	PEL	1000 ppm	----

*Where governmentally imposed exposure limites exist, suich limits should take prededence.*

**Engineering Controls:** Not generally required when handling containers or liquid. (See exposure limits). Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions.

**Respiratory Protection:** Not generally required when handling liquid or containers. 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: NIOSH approved organic vapor respirator.

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

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

**Hand Protection:** Wear suitable gloves.

**Skin Protection:** Wear lab coat, apron or appropriate clothing to prevent skin contact.

**Hygiene Measures:** Eye bath, washing facilities

## 9 PHYSICAL AND CHEMICAL PROPERTIES

**Color:** White to off-white

**Odor:** Odorless to faint alcohol

**Odor Threshold:** No data available

**Physical State:** Liquid Suspension

**pH:** 4 - 7

**Melting Point:** No data available

**Freezing Point:** No data available

**Boiling Point:** No data available

**Flash Point:** 143° 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

**Volatility:** No data available

**Specific Gravity:** 0.98

**Solubility:** No data available

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

**Autoignition Temperature:** No data available

**Decomposition Temperature:** No data available

## 10 STABILITY AND REACTIVITY

**Stability:** Stable

**Conditions to Avoid:** High temperatures, freezing, direct sunlight

**Incompatible Materials:** Strong oxidizing agents

**Hazardous Decomposition Products:** Carbon dioxide, carbon monoxide, nitrogen oxides, hydrogen chloride.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

## 11 TOXICOLOGICAL INFORMATION

### Specified Substances

#### Acute Toxicity

Chemical Name	Test Results
Ethyl Alcohol	Eye Irritation (rabbit): 500 mg – severe irritation Skin Irritation (rabbit): 20 mg/24H – moderate irritation Inhalation (rat) LC <sub>50</sub> : 20000 ppm/10H Oral LD <sub>50</sub> (guinea pig) : 5560 mg/kg
Ivermectin	Oral LD <sub>50</sub> (rat): 2 mg/kg Oral LD <sub>50</sub> (mouse): 25 mg/kg

**Listed Carcinogens:**

Chemical Name	IARC	NTP	OSHA	ACGIH
Ethanol	1 – Carcinogenic to humans as ethanol in alcoholic beverages	Known carcinogen (alcoholic beverage consumption)	--	--

**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:** Ethanol: ID No: 96; Class 1: 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

Special provision 49 CFR 173.150 (e) - Aqueous solution containing greater than 50% water and less than 24% alcohol.

**TDG:** Not regulated

Alcohol/water solutions exempt if the ethanol range is 0-50%.

**ADR/RID:** Not regulated

Aqueous solutions of ethyl alcohol and alcoholic beverages containing not more than 24% alcohol by volume are not subject to the provisions of the ADR.

**IATA:** Not regulated

Special provision A58. Ethanol aqueous solutions containing 24% or less alcohol by volume.

**IMDG:** Not regulated

Special provision 144. Aqueous solutions containing 24% or less ethanol by volume.

**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 material 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** listed on the DSL Inventory.

**US Regulations**

**FEDERAL LAW RESTRICTS THIS DRUG TO USE BY OR ON ORDER OF LICENSED VETERINARIANS.**

**CERCLA Hazardous Substance List (40 CFR 302.4):**

Component	Reportable Quantity
Ethyl alcohol (Generic RCRA Waste No. D001)	100lbs

**State Regulations**

**California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):** Ethyl alcohol in alcoholic beverages

**Massachusetts Right-To-Know List:** Denatured alcohol, ethanol, ethyl alcohol

**Minnesota Hazardous Substances List:** Ethanol

**New Jersey Right-To-Know List:** Ethanol

**Pennsylvania Right-To-Know List:** Ethanol

**Rhode Island Right-To-Know List:** Ethanol

**European Regulations**

**Austria MAK List (Annex I):** Ethanol

**Denmark:** The MAL-factor Ethanol - 7 m3 air/10g substance. (The MAL-factor applies to concentrations > 0% by weight)

**Netherlands:** Ethanol: Fertility Risk Category: 1 (may harm fertility), Development Risk Category: 1 (may harm the unborn child), Breastfeeding Risk: May be harmful through breast feeding.

**Norway (List of Dangerous Substance):** Ethanol

**Switzerland Toxins List 1:** Ethanol

<b>16</b>	<b>OTHER INFORMATION</b>
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**Hazard Ratings**

	Health Hazard	Fire Hazard	Reactivity Hazard
<b>HMIS</b>	1	2	0

	Health Hazard	Fire Hazard	Reactivity Hazard	Special Hazard
<b>NFPA</b>	1	2	0	N/A

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

**From Section 3**

F – Highly flammable

T+ – Very toxic

R11 – Highly flammable.

R28 – Very toxic if swallowed.

**Mixture –**

Not classified as hazardous by EC Directives.

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. Acarexx ® (0.01% Ivermectin) Otic Suspension Product Guide and MSDS. IDEXX Laboratories.
2. Ariel WebInsight Regulatory Database. Regulatory Summary for North America, Western Europe, and Global Inventories Database.
3. RTECS No. KQ6300000 – Ethyl alcohol
4. RTECS No. BO7175000 – Ammonium, benzyldimethyl(2-(2-(p-(1,1,3,3-tetramethylbutyl)phenoxy)ethoxy)ethyl)-,chloride
5. RTECS No. IH7891500 – 22,23-Dihydroavermectin B1
6. GHS Manual

**Revision Information:** Revised 8/10/11.

**Prepared by:** Boehringer Ingelheim Vetmedica, Inc.

**Issue Date:** 8/10/2011

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## 1. Identification

<b>Product identifier</b>	<b>Acarexx® (0.01% Ivermectin) Otic Suspension</b>
<b>Other means of identification</b>	None.
<b>Recommended use</b>	Treatment of adult ear mite infestations in cats and kittens four weeks of age or older.
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Manufacturer</b>	Boehringer Ingelheim Vetmedica, Inc.
<b>Address</b>	2621 North Belt Hwy St. Joseph, MO 64506-2002
<b>Transportation emergency</b>	For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-527-3887 (collect calls accepted)
<b>Medical Emergency (24HR):</b>	(866)638-2226
<b>Non-Emergency calls:</b>	(800) 821-7467

## 2. Hazard(s) identification

<b>Physical hazards</b>	Flammable liquids	Category 4
<b>Health hazards</b>	Serious eye damage/eye irritation	Category 2A
<b>OSHA defined hazards</b>	Not classified.	

### Label elements



<b>Signal word</b>	Warning
<b>Hazard statement</b>	Combustible liquid. Causes serious eye irritation.
<b>Precautionary statement</b>	
<b>Prevention</b>	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wash thoroughly after handling. Wear protective gloves/eye protection/face protection.
<b>Response</b>	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. In case of fire: Use appropriate media to extinguish.
<b>Storage</b>	Store in a well-ventilated place. Keep cool.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Ivermectin	70288-86-7	0.01
Ethanol	64-17-5	proprietary

## 4. First-aid measures

<b>Inhalation</b>	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Rinse skin with water/shower. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.
<b>Most important symptoms/effects, acute and delayed</b>	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
<b>Indication of immediate medical attention and special treatment needed</b>	Not for human use. For use in felines only. Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. Persons developing anaphylactic (life threatening) reactions, such as difficulty in breathing or unconsciousness, must receive immediate medical attention.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed. Combustion products may include: carbon oxides, nitrogen oxides, hydrogen chloride.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Combustible liquid.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	<p>Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material.</p> <p>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.</p> <p>Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.</p>
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use care in handling/storage.
<b>Conditions for safe storage, including any incompatibilities</b>	Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS). Store material between 0°C (32°F) and 30°C (86°F). Store away from foodstuffs.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Ethanol (CAS 64-17-5)	PEL	1900 mg/m3 1000 ppm

#### US. ACGIH Threshold Limit Values

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1000 ppm

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3 1000 ppm

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Good general ventilation 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. Provide easy access to water supply and eye wash facilities.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

#### Skin protection

**Hand protection** Wear appropriate chemical resistant gloves.

#### Skin protection

**Other** Wear suitable protective clothing.

#### Respiratory protection

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. Respirator type: NIOSH approved organic vapor respirator.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

**Physical state** Liquid.

**Form** Liquid suspension

**Color** White to off-white.

**Odor** Odorless to faint alcohol.

**Odor threshold** Not available.

**pH** 4 - 7

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range** Not available.

**Flash point** 143.0 °F (61.7 °C)

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not applicable.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not available.

Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	0.98
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Flammability class	IIIA
Oxidizing properties	Not oxidizing.

## 10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials. Keep from freezing.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
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### Information on toxicological effects

Acute toxicity	Not expected to be acutely toxic.
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Components	Species	Test Results
Ethanol (CAS 64-17-5)		
<u>Acute</u>		
<u>Inhalation</u>		
Vapor		
LC50	Mouse	39 g/m <sup>3</sup> , 4 Hours
<u>Oral</u>		
LD50	Rat	7000 - 11000 mg/kg
Ivermectin (CAS 70288-86-7)		
<u>Acute</u>		
<u>Oral</u>		
LD50	Rat	2 mg/kg

<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Not listed.	
<b>NTP Report on Carcinogens</b>	
Not listed.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)</b>	
Not regulated.	
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.

## 12. Ecological information

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components	Species		Test Results
Ethanol (CAS 64-17-5)			
<b>Aquatic</b>			
<b>Acute</b>			
Crustacea	LC50	Ceriodaphnia dubia	5012 mg/l, 48 hours
		Daphnia magna	454 mg/l, 11 days
Fish	LC50	Pimephales promelas	13480 mg/l, 96 hours
<b>Chronic</b>			
Crustacea	NOEC	Ceriodaphnia dubia	9.6 mg/l, 10 days

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
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### Bioaccumulative potential

#### Partition coefficient n-octanol / water (log Kow)

Ethanol (CAS 64-17-5)	-0.31
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<b>Mobility in soil</b>	No data available.
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<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
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## 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**US federal regulations** One or more components are not listed on TSCA. Therefore, it can only be used for TSCA exempt purposes such as R&D or veterinary use. FEDERAL LAW RESTRICTS THIS DRUG TO USE BY OR ON ORDER OF LICENSED VETERINARIANS.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### SARA 304 Emergency release notification

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**Classified hazard categories** Flammable (gases, aerosols, liquids, or solids)  
Serious eye damage or eye irritation

#### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

#### FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Ethanol (CAS 64-17-5)

Low priority

### US state regulations

#### US. Massachusetts RTK - Substance List

Ethanol (CAS 64-17-5)

#### US. New Jersey Worker and Community Right-to-Know Act

Ethanol (CAS 64-17-5)

#### US. Pennsylvania Worker and Community Right-to-Know Law

Ethanol (CAS 64-17-5)

#### US. Rhode Island RTK

Ethanol (CAS 64-17-5)

#### California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

Issue date	27-April-2015
Revision date	05-June-2018
Version #	02
Further information	Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling. HMIS® is a registered trade and service mark of the American Coatings Association (ACA).

**HMIS® ratings**  
Health: 1  
Flammability: 2  
Physical hazard: 0

### NFPA ratings



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