

MATERIAL SAFETY DATA SHEET

SECTION 1 – PRODUCT IDENTIFICATION AND USE





MANUFACTURER'S NAME:	BIMEDA-MTC ANIMAL HEALTH INC.	SUPPLIER'S NAME:	BIMEDA-MTC ANIMAL HEALTH INC.
STREET ADDRESS:	420 BEAVERDALE ROAD	STREET ADDRESS:	420 BEAVERDALE ROAD
CITY AND PROVINCE:	CAMBRIDGE, ONTARIO	CITY AND PROVINCE:	CAMBRIDGE, ONTARIO
POSTAL CODE:	N3C 2W4	POSTAL CODE:	N3C 2W4
TELEPHONE #	519-654-8000	TELEPHONE #	519-654-8000
EMERGENCY RESPONSE:	CHEMTREC	TELEPHONE #	1-800-424-9300
PRODUCT CODE #:	1BIM017, 1BIM018, 1BIM020. 250 ml, 500 ml and 1000 ml	TRADE NAME:	IVERMECTIN

SECTION 2 – COMPOSITION

Chemical characterization

Description: Mixture: Consisting of the following components.

Components:

57-55-6	Propylene Glycol		59.0%
5464-28-8	Glycerol Formal	Warning: 2.6/4	40.0%
70288-86-7	Ivermectin Comp. B1a Comp. B1b	 T,  N; N 20/21-25-50 Danger:  3.1.O/2, 3.1.D/3, 3.1.I/3 Warning:  4.1.A/1	1.0%

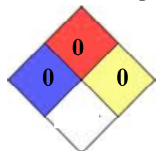
SECTION 3 – HAZARD IDENTIFICATION

Hazard description: Not applicable.

Classification system:

The classification was made according to the latest editions of international substances lists, and from company and regulatory data.

NFPA ratings (scale 0 – 4)



Health = 0
Fire = 0
Reactivity = 0

HMIS ratings (scale 0 – 4)



Health = 0
Fire = 0
Reactivity = 0

GHS label elements

Warning

2.6/4 – Combustible liquid.

Prevention:	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wear protective gloves/protective clothing/eye protection/face protection.
Response:	In case of fire: Use for extinction: CO ₂ , powder or water spray.
Storage:	Store in a well-ventilated place. Keep cool.
Disposal:	Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 4 – FIRST AID MEASURES

General information:	No special measures required.
After inhalation:	Not an expected route of entry. Seek immediate medical advice.
After skin contact:	Immediately wash with water and soap and rinse thoroughly.
After eye contact:	Rinse opened eye for a minimum of 15 minutes under running water. Get medical attention immediately.
After swallowing:	Immediately call a doctor.
After self injection Information for doctor:	Direct contact with the eye can cause irritation. Ivermectin is non-irritating to the skin in animal studies.

SECTION 5 – FIRE FIGHTING MEASURES



Suitable extinguishing agents:	Use water spray or all purpose dry chemical.
Protective equipment:	Fire fighters should wear self-contained breathing apparatus and full protective equipment.

SECTION 6 – ACCIDENTIAL RELEASE MEASURES

Person-related safety precautions:	Not required.
Measures for environmental protection:	Do not allow product to reach sewage system or any water course.
Measures for cleaning/collection:	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste according to Section 13.
Additional information:	No dangerous substances are released.

SECTION 7 – HANDING AND STORAGE

Handling: Information for safe handling:	Store in cool, dry place in tightly closed containers. Handle with care. Avoid jolting and impact.
Information about protection against explosions and fires:	No special measures required.
Storage: Requirements to be met by storerooms and receptacles:	Store only in the original container.
Information about storage in on common storage facility:	Not required.
Further information about storage conditions:	Store in a cool dry, well ventilated place.
Recommended storage temperature:	<30°C (86°F)

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION	
Components with limit values that require monitoring at the workplace:	The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Personal protective equipment: General protective and hygienic measures:	Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Do not eat, drink, smoke or inhale. Do not store food in the working area.
Protection of hands:	 Rubber or other impervious gloves
Penetration time of glove material	The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection:	 Safety goggles.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES	
General Information:	
Form:	Liquid
Color:	Colorless to Yellow
Odor:	Practically odorless
Change in condition:	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	185°C (365°F)
Flash point:	81°C (178°F)
Ignition temperature:	371.0°C (700°F)
Auto igniting:	Product is not self-igniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	2.6 Vol %
Upper:	12.6 Vol %
Vapor pressure at 20° C (68°F):	0.1 hPa
Specific Gravity:	Not determined.
Solubility in / Miscibility with Water:	Not established.

SECTION 10 – STABILITY AND REACTIVITY	
Dangerous reactions:	No dangerous reactions known.
Dangerous products of decomposition:	Carbon monoxide and carbon dioxide.

SECTION 11 – TOXICOLOGICAL INFORMATION
Acute toxicity:
LD/LC50 values that are relevant for classification:
**70288-86-7 Ivermectin Comp. B1a
Comp. B1b**

Oral	LD Oral	>15 mg/kg (adult human)
Dermal	LD50	~80 mg/kg (dog) 25 mg/kg (mouse) 50 mg/kg (rat) >24 MG/KG (Rhesus monkey) 406 mg/kg (rabbit) >660 mg/kg (rat)
Inhalation	LC50/4h LD Subcutaneous LD50 LD50 Subcutaneous	>0.4 mg/kg (rat) >1.6 mg/kg (adult human) 55 mg/kg (rat) ~10 mg/kg (juvenile dog)
Primary irritant effect:		
On the skin:	No irritating effect known.	
On the eye:	No irritating effect known.	
Sensitization:	No sensitizing effects known.	
Additional toxicological information:	The product is not subject to classification according to internally approved calculation methods for preparations. When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.	

SECTION 12 – ECOLOGICAL INFORMATION
Ecological effects.
Aquatic toxicity:
**70288-86-7 Ivermectin Comp. B1a
Comp. B1b**

LC50/48 hours LC50/96 hours	0.025 ppb (Daphnia magna) .3 µg/l (Rainbow Trout)
General notes:	Water hazard class 2 (Self-assessment): Hazardous for water. Do not allow any volumes of product to reach ground water, water source or sewage system. Danger to drinking water if even small quantities leak into the ground.

SECTION 13 – DISPOSAL CONSIDERATIONS
Product:
Recommendation:

Disposal must be made according to official regulations.

Uncleaned packaging:
Recommendation:

Disposal must be made according to official regulations.



Product Identifier: BIMECTIN INJECTION

ANADA 200-447

SECTION 14 – TRANSPORT INFORMATION	
DOT regulations: Hazard class:	Not Regulated
Land transport ADR/RID (Cross-border): ADR/RID class: UN-Number: Packaging group: Proper shipping name:	9 Miscellaneous dangerous substances and articles 3082 III Environmentally hazardous substance, liquid, n.o.s. (ivermectin)
Maritime transport IMDG: IMDG Class: UN Number: Packaging group: Marine pollutant: Proper shipping name:	9 3082 III Yes Environmentally hazardous substance, liquid, n.o.s. (ivermectin)
Air transport ICAO-TI and IATA-DGR: ICAO/IATA Class: UN/ID Number: Packaging group: Proper shipping name:	9 3082 III Environmentally hazardous substance, liquid, n.o.s. (ivermectin)
UN "Model Regulation": -	

SECTION 15 – REGULATIONS	
SARA	
Section 355 (extremely hazardous substances):	None of the ingredients are listed.
Section 313 (Specific toxic chemical listings):	None of the ingredients are listed.
TSCA (Toxic Substances Control Act):	57-55-6 Propylene Glycol
CA Proposition 65	
Chemicals known to cause cancer:	None of the ingredients are listed.
Chemicals known to cause reproductive toxicity for females:	None of the ingredients are listed.
Chemicals known to cause reproductive toxicity for males:	None of the ingredients are listed.
Chemicals known to cause developmental toxicity:	None of the ingredients are listed.
Carcinogenesis potential categories	
EPA (Environmental Protection Agency):	None of the ingredients are listed.
IARC (International Agency for Research on Cancer):	None of the ingredients are listed.
NTP (National Toxicology Program):	None of the ingredients are listed.
TLV (Threshold Limit Value established by ACGIH):	None of the ingredients are listed.
MAK (German Maximum Workplace Concentration):	None of the ingredients are listed.
NIOSH-Ca (National Institute for Occupational Safety and Health):	None of the ingredients are listed.



Product Identifier: BIMECTIN INJECTION

ANADA 200-447

OSHA-CA (Occupational Safety & Health Administration):	None of the ingredients are listed.
Product related hazard information:	Observe the general safety regulations when handling chemicals. The product is not subject to identification regulations according to directives on hazardous materials.
Safety phrases:	Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
Water hazard class:	Water hazard class 2 (Self-assessment): Hazardous for water.

SECTION 16 – PREPARATION DATA

DATE:	October, 2011	TELEPHONE NUMBER:	519-654-8000
DATE REVISED:			

SECTION 17 – OTHER INFORMATION

Information for this material safety data sheet 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 the control of the supplier, it is assumed that user of this material has been fully trained according to the mandatory requirements of WHMIS. 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 form. If user requires independent information on ingredients in this or any other material, we recommend contact supplier.