SAFETY DATA SHEETS

This SDS packet was issued with item:

078377246

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078431764



SAFETY DATA SHEET

1. Identification

Product identifier Ocu-guard® MB-1

Other means of identification

Product code APHIS Code 2772.00, Family Code - 052

Recommended use Recommended for use in prevention and control of pinkeye (infectious bovine kertoconjunctivitis),

caused by Moraxella bovis, in healthy cattle.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer Boehringer Ingelheim Animal Health

Address 2621 North Belt Hwy

St. Joseph, MO 64506-2002

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

Non-Emergency calls: (800) 821-7467

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Sensitization, skin Category 1

Carcinogenicity Category 1A

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement May cause an allergic skin reaction. May cause cancer.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Avoid breathing mist or vapor. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

Storage Store away from incompatible materials. Keep at a temperature between 2 - 7°C Do not freeze.

Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

Version #: 01

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Revision date: -

Mixtures

928297

Ocu-guard® MB-1 SDS US

Issue date: 18-October-2017 1 / 7

Chemical name	CAS number	%
*Formaldehyde	50-00-0	≤ 0.74 g/L
Moraxella bovis - deactivated		Proprietary

Composition comments

* Used to inactivate virus and subsequently removed from solution. Concentration represents maximum remaining amount by percent weight which is below USDA allowable limits.

4. First-aid measures

Move to fresh air. Call a physician if symptoms develop or persist. Inhalation

Wash off with soap and water. Get medical attention if irritation develops and persists. Skin contact

Eve contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur. Most important Direct contact with eyes may cause temporary irritation.

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special treatment needed

Not for human use. For use in animals only.

General information Persons developing anaphylactic (life-threatening) reactions, such as difficulty in breathing or unconsciousness, must receive immediate medical attention. If anaphylactoid reactions occur, epinephrine may be used as an antidote.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from

the chemical

Special protective equipment and precautions for firefighters

Fire fighting

equipment/instructions

Specific methods

General fire hazards

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

During fire, gases hazardous to health may be formed.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Move containers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials.

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Methods and materials for containment and cleaning up Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

928297

Conditions for safe storage, including any incompatibilities

Version #: 01

Observe good industrial hygiene practices.

Issue date: 18-October-2017

Store in original tightly closed container. Keep at a temperature between 2 - 7°C (33 - 45° F). Store away from foodstuffs. Protect from direct sunlight. Protect from freezing. Store away from

incompatible materials, see Section 10 of the SDS.

SDS US Ocu-guard® MB-1

Revision date: -

8. Exposure controls/personal protection

Occupational exposure limits

US, OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Components	Type	Value	
*Formaldehyde (CAS 50-00-0)	STEL	2 ppm	
	TWA	0.75 ppm	
US. ACGIH Threshold Limit Value	ues		
Components	Туре	Value	
*Formaldehyde (CAS 50-00-0)	Ceiling	0.3 ppm	
US. NIOSH: Pocket Guide to Ch	emical Hazards		
Components	Туре	Value	
*Formaldehyde (CAS 50-00-0)	Ceiling	0.1 ppm	

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

TWA

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.

0.016 ppm

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.

In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protection

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

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 Opaque liquid.

Liquid. **Physical state**

Chemically inactivated organism cultures in liquid media packaged in 20 or 100 mL polyethylene **Form**

containers.

Opaque. Color Odor Not available. Not available. **Odor threshold** pН Not available. Not available. Melting point/freezing point Initial boiling point and boiling Not available. range

Flash point Not available. Not available. **Evaporation rate** Not available. Flammability (solid, gas) Upper/lower flammability or explosive limits

Flammability limit - lower Not available.

(%)

Flammability limit - upper

Version #: 01

(%)

928297

Not available.

Not available. Vapor pressure

Revision date: -

Ocu-guard® MB-1 SDS US

3/7

Not available. Vapor density Relative density Not available.

Solubility(ies)

Solubility (water) Not available. Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available. **Decomposition temperature** Not available. Not available. **Viscosity**

10. Stability and reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport. Reactivity

Material is stable under normal conditions. **Chemical stability**

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Strong oxidizing agents. Incompatible materials

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 May cause an allergic skin reaction.

Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics May cause an allergic skin reaction. Dermatitis. Rash. Ingestion of a large quantity may cause

vomiting, nausea, dizziness, drowsiness and other systemic effects.

Information on toxicological effects

Acute toxicity May cause allergic respiratory and skin reactions.

Components **Species Test Results** *Formaldehyde (CAS 50-00-0)

Acute **Dermal**

LD50 Rat 270 mg/kg

Inhalation

LC50 Rat 0.578 mg/l, 4 hours

Oral

LD50 Rat 100 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Direct contact with eyes may cause temporary irritation. Serious eye damage/eye

irritation

Respiratory or skin sensitization

ACGIH sensitization

FORMALDEHYDE (CAS 50-00-0) Dermal sensitization

Respiratory sensitization

Respiratory sensitization Not expected to result in respiratory sensitization.

Skin sensitization May cause an allergic skin reaction.

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

Ocu-guard® MB-1 SDS US

Carcinogenicity May cause cancer. Contains a component that is listed as an IARC 1 (Known Human

Carcinogen), a NTP Known Carcinogen and an ACGIH A2 (Suspected Human Carcinogen). In

vaccines, the chronic exposure potential is negligible.

IARC Monographs. Overall Evaluation of Carcinogenicity

*Formaldehyde (CAS 50-00-0) 1 Carcinogenic to humans.

NTP Report on Carcinogens

*Formaldehyde (CAS 50-00-0) Known To Be Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

*Formaldehyde (CAS 50-00-0)

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Possible hyper sensitization (development of abnormal sensitivity).

12. Ecological information

EcotoxicityThe product is not classified as environmentally hazardous. However, this does not exclude the

Cancer

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components Species Test Results

*Formaldehyde (CAS 50-00-0)

Aquatic

Crustacea EC50 Water flea (Daphnia pulex) 4.3 - 7.8 mg/l, 48 hours

Fish LC50 Striped bass (Morone saxatilis) 10.302 - 16.743 mg/l, 96 hours

0.35

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

*Formaldehyde (CAS 50-00-0)

Mobility in soil Expected to be slightly to moderately mobile in soil.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

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).

Contaminated packaging 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 Not available.

Revision date: -

Annex II of MARPOL 73/78 and

Version #: 01

the IBC Code

928297

Ocu-guard® MB-1 SDS US

Issue date: 18-October-2017

5/7

15. Regulatory information

US federal regulationsThis product is a "Hazardous Che

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

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.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

*Formaldehyde (CAS 50-00-0)

Cancer

Skin sensitization Respiratory sensitization

Eye irritation Skin irritation

respiratory tract irritation

Acute toxicity Flammability

CERCLA Hazardous Substance List (40 CFR 302.4)

*Formaldehyde (CAS 50-00-0)

LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name CAS number Reportable Threshold Threshold Threshold

quantity planning quantity planning quantity, (pounds) lower value upper value (pounds) (pounds)

*Formaldehyde 50-00-0 100 500

SARA 311/312 Hazardous Yes

chemical

SARA 313 (TRI reporting)

 Chemical name
 CAS number
 % by wt.

 *Formaldehyde
 50-00-0
 ≤ 0.74 g/L

Other federal regulations

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

*Formaldehyde (CAS 50-00-0)

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

*Formaldehyde (CAS 50-00-0)

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

WARNING: This product contains chemical(s) known to the State of California to cause cancer.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

*Formaldehyde (CAS 50-00-0)

US. Massachusetts RTK - Substance List

*Formaldehyde (CAS 50-00-0)

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

*Formaldehyde (CAS 50-00-0)

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

*Formaldehyde (CAS 50-00-0)

US. Rhode Island RTK

*Formaldehyde (CAS 50-00-0)

Ocu-guard® MB-1 SDS US

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes

Europe European List of Notified Chemical Substances (ELINCS)

Japan Inventory of Existing and New Chemical Substances (ENCS)

Korea Existing Chemicals List (ECL)

New Zealand

New Zealand Inventory

Yes

Philippines Philippine Inventory of Chemicals and Chemical Substances Yes

(PICCS)

Taiwan Chemical Substance Inventory (TCSI)

United States & Puerto Rico

Toxic Substances Control Act (TSCA) Inventory

Yes

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

Issue date 18-October-2017

Revision date - 01

Further information HMIS® is a registered trade and service mark of the American Coatings Association (ACA).

HMIS® ratings Health: 2*

Flammability: 0 Physical hazard: 0

NFPA ratings



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Ocu-guard® MB-1 SDS US

928297 Version #: 01 Revision date: - Issue date: 18-October-2017

^{*}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).