

SAFETY DATA SHEET



Bovilis MH Single Shot RTU / MH + IBR Formulation

Version
5.0

Revision Date:
14.04.2025

SDS Number:
10876237-00012

Date of last issue: 26.06.2024
Date of first issue: 24.10.2022

SECTION 1. IDENTIFICATION

Product name : Bovilis MH Single Shot RTU / MH + IBR Formulation

Other means of identification : Coopers Bovilis MH Single-Shot RTU READY-TO-USE MH VACCINE FOR CATTLE (92022)
COOPERS BOVILIS MH+IBR BOVINE RESPIRATORY DISEASE (BRD) VACCINE (64608)
Bovilis MH+IBR (A011518)
COOPERS BOVILIS MH MANNHEIMIA HAEMOLYTICA VACCINE FOR CATTLE (55767)

Manufacturer or supplier's details

Company : MSD

Address : Talcahuano 750, 6th floor, Ciudad Autonoma Buenos Aires, Argentina C1013AAP

Telephone : 908-740-4000

Emergency telephone : 1-908-423-6000

E-mail address : EHSDATASTEWARD@msd.com

Recommended use of the chemical and restrictions on use

Recommended use : Veterinary product

Restrictions on use : Not applicable

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin sensitization : Category 1

Carcinogenicity : Category 1B

GHS label elements

Hazard pictograms :

Signal Word : Danger

Hazard Statements : H317 May cause an allergic skin reaction.
H350 May cause cancer.

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Precautionary Statements

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing mist or vapors.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Antigen	Not Assigned	>= 50 -< 70
White mineral oil (petroleum)	8042-47-5	>= 5 -< 10
Glycerine	56-81-5	>= 1 -< 5
Formaldehyde	50-00-0	>= 0,25 -< 1
Thiomersal	54-64-8	>= 0,0025 -< 0,025

SECTION 4. FIRST AID MEASURES

- General advice : In the case of accident or if you feel unwell, seek medical advice immediately.
When symptoms persist or in all cases of doubt seek medical advice.
- If inhaled : If inhaled, remove to fresh air.
Get medical attention.
- In case of skin contact : In case of contact, immediately flush skin with soap and plenty of water.
Remove contaminated clothing and shoes.

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In case of eye contact	Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
If swallowed	Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.
Most important symptoms and effects, both acute and delayed	If swallowed, DO NOT induce vomiting. Get medical attention. Rinse mouth thoroughly with water.
Protection of first-aiders	May cause an allergic skin reaction. May cause cancer.
Notes to physician	First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).
	Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	: Water spray Alcohol-resistant foam Carbon dioxide (CO ₂) Dry chemical
Unsuitable extinguishing media	: None known.
Specific hazards during fire fighting	: Exposure to combustion products may be a hazard to health.
Hazardous combustion products	: Carbon oxides
Specific extinguishing methods	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.
Special protective equipment for fire-fighters	: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).
Environmental precautions	: Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g., by containment or oil barriers). Retain and dispose of contaminated wash water.

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Local authorities should be advised if significant spillages cannot be contained.

- Methods and materials for containment and cleaning up :
- Soak up with inert absorbent material.
 - For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container.
 - Clean up remaining materials from spill with suitable absorbent.
 - Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.
 - Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

- Technical measures :
- See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
- Local/Total ventilation :
- If sufficient ventilation is unavailable, use with local exhaust ventilation.
- Advice on safe handling :
- Do not get on skin or clothing.
 - Avoid breathing mist or vapors.
 - Do not swallow.
 - Avoid contact with eyes.
 - Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment
 - Keep container tightly closed.
 - Take care to prevent spills, waste and minimize release to the environment.
- Conditions for safe storage :
- Keep in properly labeled containers.
 - Store locked up.
 - Keep tightly closed.
 - Store in accordance with the particular national regulations.
- Materials to avoid :
- Do not store with the following product types:
 - Strong oxidizing agents
 - Self-reactive substances and mixtures
 - Organic peroxides
 - Explosives
 - Gases

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis

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White mineral oil (petroleum)	8042-47-5	CMP (Mist)	5 mg/m ³	AR OEL
		CMP - CPT (Mist)	10 mg/m ³	AR OEL
		TWA (Inhalable particulate matter)	5 mg/m ³	ACGIH
Glycerine	56-81-5	CMP (Mist)	10 mg/m ³	AR OEL
Formaldehyde	50-00-0	CMP-C	0,3 ppm	AR OEL
		Further information: A2 - Suspected human carcinogen, Sensitization		
		TWA	0,1 ppm	ACGIH
		STEL	0,3 ppm	ACGIH
Thiomersal	54-64-8	CMP	0,01 mg/m ³ (Mercury)	AR OEL
		Further information: Skin		
		CMP - CPT	0,03 mg/m ³ (Mercury)	AR OEL
		Further information: Skin		
		TWA	0,01 mg/m ³ (Mercury)	ACGIH
		STEL	0,03 mg/m ³ (Mercury)	ACGIH

Engineering measures : Use appropriate engineering controls and manufacturing technologies to control airborne concentrations (e.g., drip-less quick connections).
All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment.
Laboratory operations do not require special containment.

Personal protective equipment

- Respiratory protection : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.
- Filter type : Combined particulates and organic vapor type
- Hand protection : Chemical-resistant gloves
- Material
- Eye protection : Wear safety glasses with side shields or goggles.
If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles.
Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols.
- Skin and body protection : Work uniform or laboratory coat.
- Hygiene measures : If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.
When using do not eat, drink or smoke.
Contaminated work clothing should not be allowed out of the workplace.

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Wash contaminated clothing before re-use.
The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the use of administrative controls.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	suspension
Color	:	white to off-white
Odor	:	odorless
Odor Threshold	:	No data available
pH	:	6,0 - 8,0
Melting point/freezing point	:	0 °C
Initial boiling point and boiling range	:	100 °C (1000 hPa)
Flash point	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Flammability (liquids)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	2,37 kPa (20 °C)
Relative vapor density	:	No data available
Relative density	:	1
Density	:	No data available
Solubility(ies)		
Water solubility	:	soluble
Partition coefficient: n-octanol/water	:	Not applicable
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available

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Viscosity
Viscosity, kinematic : No data available

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Molecular weight : No data available

Particle characteristics
Particle size : Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : Can react with strong oxidizing agents.

Conditions to avoid : None known.

Incompatible materials : Oxidizing agents

Hazardous decomposition products : No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation
Skin contact
Ingestion
Eye contact

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate: > 5.000 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 30000 ppm
Exposure time: 4 h
Test atmosphere: gas
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 5.000 mg/kg
Method: Calculation method

Components:

White mineral oil (petroleum):

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

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Acute inhalation toxicity : LC50 (Rat): > 5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

Glycerine:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Acute dermal toxicity : LD50 (Guinea pig): > 5.000 mg/kg

Formaldehyde:

Acute oral toxicity : Acute toxicity estimate: 100 mg/kg
Method: Expert judgment
Remarks: Based on national or regional regulation.

Acute inhalation toxicity : Acute toxicity estimate (Rat): 100 ppm
Exposure time: 4 h
Test atmosphere: gas
Method: Expert judgment

Acute dermal toxicity : LD50 (Rabbit): 270 mg/kg

Thiomersal:

Acute oral toxicity : LD50 (Rat): 75 mg/kg
Acute toxicity estimate: 10 mg/kg
Method: Expert judgment
Remarks: Based on national or regional regulation.

Acute inhalation toxicity : Acute toxicity estimate: 0,1 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Expert judgment
Remarks: Based on national or regional regulation.

Acute dermal toxicity : Acute toxicity estimate: 10 mg/kg
Method: Expert judgment
Remarks: Based on national or regional regulation.

Skin corrosion/irritation

Not classified based on available information.

Components:

White mineral oil (petroleum):

Species : Rabbit

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Result : No skin irritation

Glycerine:

Species : Rabbit
Result : No skin irritation

Formaldehyde:

Result : Corrosive after 3 minutes to 1 hour of exposure
Remarks : Based on national or regional regulation.

Serious eye damage/eye irritation

Not classified based on available information.

Components:

White mineral oil (petroleum):

Species : Rabbit
Result : No eye irritation

Glycerine:

Species : Rabbit
Result : No eye irritation

Formaldehyde:

Result : Irreversible effects on the eye
Remarks : Based on skin corrosivity.

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified based on available information.

Components:

White mineral oil (petroleum):

Test Type : Buehler Test
Routes of exposure : Skin contact
Species : Guinea pig
Result : negative

Formaldehyde:

Test Type : Human repeat insult patch test (HRIPT)
Routes of exposure : Skin contact
Species : Humans
Result : positive

Assessment : Probability or evidence of high skin sensitization rate in

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II

humans

Germ cell mutagenicity

Not classified based on available information.

Components:**White mineral oil (petroleum):**

- | | |
|-----------------------|--|
| Genotoxicity in vitro | : Test Type: In vitro mammalian cell gene mutation test
Result: negative |
| Genotoxicity in vivo | : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
Species: Mouse
Application Route: Intraperitoneal injection
Method: OECD Test Guideline 474
Result: negative
Remarks: Based on data from similar materials |

Glycerine:

- | | |
|-----------------------|---|
| Genotoxicity in vitro | : Test Type: In vitro mammalian cell gene mutation test
Result: negative |
| | : Test Type: Bacterial reverse mutation assay (AMES)
Result: negative |
| | : Test Type: Chromosome aberration test in vitro
Result: negative |
| | : Test Type: DNA damage and repair, unscheduled DNA synthesis in mammalian cells (in vitro)
Result: negative |

Formaldehyde:

- | | |
|-------------------------------------|--|
| Genotoxicity in vitro | : Test Type: Bacterial reverse mutation assay (AMES)
Result: positive |
| | : Test Type: In vitro mammalian cell gene mutation test
Result: positive |
| | : Test Type: Chromosome aberration test in vitro
Result: positive |
| Genotoxicity in vivo | : Test Type: In vivo mammalian alkaline comet assay
Species: Mouse
Application Route: Inhalation
Result: positive |
| Germ cell mutagenicity - Assessment | : Positive result(s) from in vivo mammalian somatic cell mutagenicity tests. |

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Thiomersal:

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Result: negative
Genotoxicity in vivo	:	Test Type: Mammalian spermatogonial chromosome aberration test (in vivo) Species: Mouse Application Route: Ingestion Result: negative

Carcinogenicity

May cause cancer.

Components:

White mineral oil (petroleum):

Species	:	Rat
Application Route	:	Ingestion
Exposure time	:	24 Months
Result	:	negative

Glycerine:

Species	:	Rat
Application Route	:	Ingestion
Exposure time	:	2 Years
Result	:	negative

Formaldehyde:

Species	:	Rat
Application Route	:	inhalation (gas)
Exposure time	:	28 Months
Result	:	positive

Carcinogenicity - Assessment	:	Sufficient evidence of carcinogenicity in animal experiments
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Thiomersal:

Species	:	Rat
Exposure time	:	1 Years
Result	:	negative

Reproductive toxicity

Not classified based on available information.

Components:

White mineral oil (petroleum):

Effects on fertility	:	Test Type: One-generation reproduction toxicity study Species: Rat Application Route: Skin contact Result: negative
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Effects on fetal development : Test Type: Embryo-fetal development
Species: Rat
Application Route: Ingestion
Result: negative

Glycerine:

Effects on fertility : Test Type: Two-generation reproduction toxicity study
Species: Rat
Application Route: Ingestion
Result: negative

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rat
Application Route: Ingestion
Result: negative

Formaldehyde:

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rat
Application Route: inhalation (gas)
Result: negative

Thiomersal:

Effects on fetal development : Species: Rat
Application Route: Ingestion
Result: positive
Remarks: Based on data from similar materials

Reproductive toxicity - Assessment : Clear evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments

STOT-single exposure

Not classified based on available information.

Components:**Formaldehyde:**

Assessment : May cause respiratory irritation.

STOT-repeated exposure

Not classified based on available information.

Components:**Thiomersal:**

Target Organs : Central nervous system, Cardio-vascular system, Gastrointestinal tract, Kidney
Assessment : Causes damage to organs through prolonged or repeated exposure.

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Species	:	Rat
LOAEL	:	160 mg/kg
Application Route	:	Ingestion
Exposure time	:	90 Days
Species	:	Rat
LOAEL	:	>= 1 mg/l
Application Route	:	inhalation (dust/mist/fume)
Exposure time	:	4 Weeks
Method	:	OECD Test Guideline 412

Glycerine:

Species	:	Rat
NOAEL	:	0,167 mg/l
LOAEL	:	0,622 mg/l
Application Route	:	inhalation (dust/mist/fume)
Exposure time	:	13 Weeks
Species	:	Rat
NOAEL	:	8.000 - 10.000 mg/kg
Application Route	:	Ingestion
Exposure time	:	2 y
Species	:	Rabbit
NOAEL	:	5.040 mg/kg
Application Route	:	Skin contact
Exposure time	:	45 Weeks

Thiomersal:

Species	:	Rat
LOAEL	:	>= 0,5 mg/kg
Application Route	:	Ingestion
Remarks	:	Based on data from similar materials

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****White mineral oil (petroleum):**

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 96 h
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Method: OECD Test Guideline 203

- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
- Toxicity to algae/aquatic plants : NOEC (Pseudokirchneriella subcapitata (green algae)): 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
- Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 1.000 mg/l
Exposure time: 28 d
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 1.000 mg/l
Exposure time: 21 d

Glycerine:

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 54.000 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.955 mg/l
Exposure time: 48 h
- Toxicity to microorganisms : NOEC (Pseudomonas putida): > 10.000 mg/l
Exposure time: 16 h
Method: DIN 38 412 Part 8

Formaldehyde:

- Toxicity to fish : LC50 (Morone saxatilis (striped bass)): 6,7 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia pulex (Water flea)): 5,8 mg/l
Exposure time: 48 h
- Toxicity to algae/aquatic plants : ErC50 (Desmodesmus subspicatus (green algae)): 4,89 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 1,04 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211
- Toxicity to microorganisms : EC50 (activated sludge): 19 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

Thiomersal:

- Toxicity to fish : LC50 (Poecilia reticulata (guppy)): > 0,01 - 0,1 mg/l
Exposure time: 96 h
Remarks: Based on data from similar materials

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Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 0,01 - 0,1 mg/l Exposure time: 48 h Remarks: Based on data from similar materials
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): > 0,01 - 0,1 mg/l Exposure time: 96 h Remarks: Based on data from similar materials
M-Factor (Acute aquatic toxicity)	:	10
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia sp. (Water flea)): > 0,001 - 0,01 mg/l Exposure time: 21 d Remarks: Based on data from similar materials
M-Factor (Chronic aquatic toxicity)	:	10

Persistence and degradability**Components:****White mineral oil (petroleum):**

Biodegradability	:	Result: Not readily biodegradable. Biodegradation: 31 % Exposure time: 28 d
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Glycerine:

Biodegradability	:	Result: Readily biodegradable. Biodegradation: 92 % Exposure time: 30 d Method: OECD Test Guideline 301D
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Formaldehyde:

Biodegradability	:	Result: Readily biodegradable. Biodegradation: 99 % Exposure time: 28 d Method: OECD Test Guideline 301A
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Bioaccumulative potential**Components:****Glycerine:**

Partition coefficient: n-octanol/water	:	log Pow: -1,75
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Formaldehyde:

Partition coefficient: n-octanol/water	:	log Pow: 0,35 Remarks: Calculation
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Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Do not dispose of waste into sewer.
Dispose of in accordance with local regulations.
Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Special precautions for user

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Argentina. Carcinogenic Substances and Agents Registry. : Formaldehyde

Control of precursors and essential chemicals for the preparation of drugs. : Not applicable

The ingredients of this product are reported in the following inventories:

AICS : not determined

DSL : not determined

IECSC : not determined

SECTION 16. OTHER INFORMATION

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Further information

Sources of key data used to compile the Material Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Full text of other abbreviations

ACGIH	: USA. ACGIH Threshold Limit Values (TLV)
AR OEL	: Argentina. Occupational Exposure Limits
ACGIH / TWA	: 8-hour, time-weighted average
ACGIH / STEL	: Short-term exposure limit
AR OEL / CMP	: TLV (Threshold Limit Value)
AR OEL / CMP - CPT	: STEL (Short Term Limit Value)
AR OEL / CMP-C	: Ceiling value

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

SAFETY DATA SHEET



Bovilis MH Single Shot RTU / MH + IBR Formulation

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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