

SAFETY DATA SHEET



Bovilis MH Single Shot RTU / MH + IBR Formulation

Version
6.0

Revision Date:
14.04.2025

SDS Number:
10876239-00013

Date of last issue: 28.09.2024
Date of first issue: 24.10.2022

SECTION 1. IDENTIFICATION

Product identifier : 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 : Rua Coronel Bento Soares, 530
Cruzeiro - Sao Paulo - Brazil CEP 12730-340

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 in accordance with ABNT NBR 14725 Standard

Skin sensitization : Category 1

Carcinogenicity : Category 1B

GHS label elements in accordance with ABNT NBR 14725 Standard

Hazard pictograms :

Signal Word : Danger

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

SAFETY DATA SHEET



Bovilis MH Single Shot RTU / MH + IBR Formulation

Version 6.0 Revision Date: 14.04.2025 SDS Number: 10876239-00013 Date of last issue: 28.09.2024 Date of first issue: 24.10.2022

Precautionary Statements

Prevention:

P201 Obtain special instructions before use.
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.

Storage:

P405 Store locked up.

Other hazards which do not result in classification

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Classification	Concentration (% w/w)
Antigen	Not Assigned		>= 50 - < 70
White mineral oil (petroleum)	8042-47-5		>= 5 - < 10
Formaldehyde	50-00-0	Flam. Gas, 1B Acute Tox. (Oral), 3 Acute Tox. (Inhalation), 2 Acute Tox. (Dermal), 3 Skin Corr., 1B Eye Dam., 1 Skin Sens., 1A Muta., 2 Carc., 1B STOT SE, 3 Aquatic Acute, 2	>= 0,25 - < 1
Thiomersal	54-64-8	Acute Tox. (Oral), 2 Acute Tox. (Inhalation), 2 Acute Tox. (Dermal), 1 Repr., 1B STOT RE, (Central nervous system, Cardio-vascular system, Gastrointestinal tract, Kidney) , 1 Aquatic Acute, 1 Aquatic Chronic, 1	>= 0,0025 - < 0,025

SAFETY DATA SHEET



Bovilis MH Single Shot RTU / MH + IBR Formulation

Version 6.0 Revision Date: 14.04.2025 SDS Number: 10876239-00013 Date of last issue: 28.09.2024 Date of first issue: 24.10.2022

II			
----	--	--	--

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.
Get medical attention.
Wash clothing before reuse.

In case of eye contact : Thoroughly clean shoes before reuse.
Flush eyes with water as a precaution.
Get medical attention if irritation develops and persists.

If swallowed : If swallowed, DO NOT induce vomiting.
Get medical attention.
Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed : May cause an allergic skin reaction.
May cause cancer.

Protection of first-aiders : 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).

Notes to physician : Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water spray
Alcohol-resistant foam
Carbon dioxide (CO2)
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 : In the event of fire, wear self-contained breathing apparatus.

SAFETY DATA SHEET



Bovilis MH Single Shot RTU / MH + IBR Formulation

Version 6.0 Revision Date: 14.04.2025 SDS Number: 10876239-00013 Date of last issue: 28.09.2024
Date of first issue: 24.10.2022

for fire-fighters 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. 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.

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

SAFETY DATA SHEET



Bovilis MH Single Shot RTU / MH + IBR Formulation

Version 6.0 Revision Date: 14.04.2025

SDS Number: 10876239-00013

Date of last issue: 28.09.2024
Date of first issue: 24.10.2022

	<p>workplace. 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.</p>
Conditions for safe storage	<p>: Keep in properly labeled containers. Store locked up. Keep tightly closed. Store in accordance with the particular national regulations.</p>
Materials to avoid	<p>: Do not store with the following product types: Strong oxidizing agents Self-reactive substances and mixtures Organic peroxides Explosives Gases</p>

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
White mineral oil (petroleum)	8042-47-5	TWA (Inhalable particulate matter)	5 mg/m ³	ACGIH
Formaldehyde	50-00-0	CEIL	1,6 ppm 2,3 mg/m ³	BR OEL
Further information: Degree of harmfulness: maximum				
		TWA	0,1 ppm	ACGIH
		STEL	0,3 ppm	ACGIH
Thiomersal	54-64-8	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

SAFETY DATA SHEET



Bovilis MH Single Shot RTU / MH + IBR Formulation

Version 6.0 Revision Date: 14.04.2025 SDS Number: 10876239-00013 Date of last issue: 28.09.2024
Date of first issue: 24.10.2022

Hand protection	
Material	: Chemical-resistant gloves
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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: 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-	: Not applicable

SAFETY DATA SHEET



Bovilis MH Single Shot RTU / MH + IBR Formulation

Version 6.0 Revision Date: 14.04.2025 SDS Number: 10876239-00013 Date of last issue: 28.09.2024
Date of first issue: 24.10.2022

octanol/water
Autoignition temperature : No data available

Decomposition temperature : No data available

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

SAFETY DATA SHEET



Bovilis MH Single Shot RTU / MH + IBR Formulation

Version 6.0 Revision Date: 14.04.2025 SDS Number: 10876239-00013 Date of last issue: 28.09.2024
Date of first issue: 24.10.2022

Components:

White mineral oil (petroleum):

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

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
Result	: No skin irritation

SAFETY DATA SHEET



Bovilis MH Single Shot RTU / MH + IBR Formulation

Version 6.0 Revision Date: 14.04.2025 SDS Number: 10876239-00013 Date of last issue: 28.09.2024
Date of first issue: 24.10.2022

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

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 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

SAFETY DATA SHEET



Bovilis MH Single Shot RTU / MH + IBR Formulation

Version 6.0 Revision Date: 14.04.2025 SDS Number: 10876239-00013 Date of last issue: 28.09.2024
Date of first issue: 24.10.2022

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

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.

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

Formaldehyde:

Species : Rat
Application Route : inhalation (gas)

SAFETY DATA SHEET



Bovilis MH Single Shot RTU / MH + IBR Formulation

Version 6.0 Revision Date: 14.04.2025 SDS Number: 10876239-00013 Date of last issue: 28.09.2024
Date of first issue: 24.10.2022

Exposure time	:	28 Months
Result	:	positive
Carcinogenicity - Assessment	:	Sufficient evidence of carcinogenicity in animal experiments
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
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.
------------	---	-----------------------------------

SAFETY DATA SHEET



Bovilis MH Single Shot RTU / MH + IBR Formulation

Version 6.0 Revision Date: 14.04.2025 SDS Number: 10876239-00013 Date of last issue: 28.09.2024
Date of first issue: 24.10.2022

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.

Repeated dose toxicity

Components:

White mineral oil (petroleum):

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

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 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	:	NOEC (Pseudokirchneriella subcapitata (green algae)): 100

SAFETY DATA SHEET



Bovilis MH Single Shot RTU / MH + IBR Formulation

Version Revision Date: SDS Number: Date of last issue: 28.09.2024
6.0 14.04.2025 10876239-00013 Date of first issue: 24.10.2022

plants	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
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
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)): > 0,0 - 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

SAFETY DATA SHEET



Bovilis MH Single Shot RTU / MH + IBR Formulation

Version 6.0 Revision Date: 14.04.2025 SDS Number: 10876239-00013 Date of last issue: 28.09.2024
Date of first issue: 24.10.2022

Persistence and degradability

Components:

White mineral oil (petroleum):

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

Formaldehyde:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 99 %
Exposure time: 28 d
Method: OECD Test Guideline 301A

Bioaccumulative potential

Components:

Formaldehyde:

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

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.

SAFETY DATA SHEET



Bovilis MH Single Shot RTU / MH + IBR Formulation

Version 6.0 Revision Date: 14.04.2025 SDS Number: 10876239-00013 Date of last issue: 28.09.2024 Date of first issue: 24.10.2022

Domestic regulation

ANTT

Not regulated as a dangerous good

Special precautions for user

Not applicable

SECTION 15. REGULATORY INFORMATION

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

National List of Carcinogenic Agents for Humans - (LINACH)

Group 1: Carcinogenic to humans

Formaldehyde

50-00-0

Brazil. List of chemicals controlled by the Federal Police : 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

Revision Date : 14.04.2025
Date format : dd.mm.yyyy

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)
BR OEL : Brazil. NR 15 - Unhealthy activities and operations
ACGIH / TWA : 8-hour, time-weighted average
ACGIH / STEL : Short-term exposure limit
BR OEL / CEIL : Ceiling

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

SAFETY DATA SHEET



Bovilis MH Single Shot RTU / MH + IBR Formulation

Version 6.0	Revision Date: 14.04.2025	SDS Number: 10876239-00013	Date of last issue: 28.09.2024 Date of first issue: 24.10.2022
----------------	------------------------------	-------------------------------	---

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

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.

BR / Z8