according to the Hazardous Products Regulations



# **Bovilis MH Single Shot RTU / MH + IBR Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 5.0 06/17/2025 10876240-00014 Date of first issue: 10/24/2022

#### **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 name of supplier : Merck & Co., Inc Address : 37 McCarville Street

Charlottetown, PE C1E 2A7

Telephone : 908-740-4000 Emergency telephone : 1-908-423-6000

E-mail address : EHSDATASTEWARD@merck.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 the Hazardous Products Regulations

Skin sensitization : Sub-category 1A

Carcinogenicity : Category 1B

**GHS label elements** 

Hazard pictograms :





Signal Word : Danger

Hazard Statements : H317 May cause an allergic skin reaction.

H350 May cause cancer.

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

according to the Hazardous Products Regulations



# Bovilis MH Single Shot RTU / MH + IBR Formulation

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 5.0 06/17/2025 10876240-00014 Date of first issue: 10/24/2022

and face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.

P308 + P313 IF exposed or concerned: Get medical attention. P333 + P313 If skin irritation or rash occurs: Get medical atten-

tion.

P362 + P364 Take off contaminated clothing and wash it before

reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents and container to an approved waste

disposal plant.

Other hazards

None known.

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

## Components

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
Antigen	No data availa- ble	Not Assigned	>= 30 - < 60 *
White mineral oil (pe-troleum)	Paraffinum liquidum	8042-47-5	>= 5 - < 10 *
White mineral oil (pe- troleum) Glycerine	1,2,3- Propanetriol	56-81-5	>= 1 - < 5 *
Formaldehyde	Methyl aldehyde	50-00-0	>= 0.1 - < 1 *

<sup>\*</sup> Actual concentration or concentration range is withheld as a trade secret

#### **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.

Thoroughly clean shoes before reuse.

In case of eye contact : Flush eyes with water as a precaution.

according to the Hazardous Products Regulations



# Bovilis MH Single Shot RTU / MH + IBR Formulation

Version Revision Date: Date of last issue: 04/14/2025 SDS Number: 06/17/2025 10876240-00014 Date of first issue: 10/24/2022 5.0

Get medical attention if irritation develops and persists.

If swallowed If swallowed, DO NOT induce vomiting.

Get medical attention.

Rinse mouth thoroughly with water. May cause an allergic skin reaction.

Most important symptoms and effects, both acute and

May cause cancer.

delaved

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 prod: :

ucts

Carbon oxides

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances 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, protec- : tive equipment and emer-

gency 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.

according to the Hazardous Products Regulations



# Bovilis MH Single Shot RTU / MH + IBR Formulation

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 5.0 06/17/2025 10876240-00014 Date of first issue: 10/24/2022

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 parameters / Permissible concentration	Basis
White mineral oil (petroleum)	8042-47-5	TWA (Mist)	5 mg/m³	CA AB OEL
		STEL (Mist)	10 mg/m <sup>3</sup>	CA AB OEL

according to the Hazardous Products Regulations



# Bovilis MH Single Shot RTU / MH + IBR Formulation

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 06/17/2025 10876240-00014 Date of first issue: 10/24/2022 5.0

		TWAEV (Mist - Inhalable dust)	5 mg/m³	CA QC OEL
		TWA (Mist)	1 mg/m <sup>3</sup>	CA BC OEL
		TWA (Inhalable particulate matter)	5 mg/m³	ACGIH
Glycerine	56-81-5	TWA (Mist)	10 mg/m <sup>3</sup>	CA AB OEL
		TWA (Mist)	10 mg/m <sup>3</sup>	CA BC OEL
		TWA (Respirable mist)	3 mg/m³	CA BC OEL
		TWAEV (Mist)	10 mg/m <sup>3</sup>	CA QC OEL
Formaldehyde	50-00-0	TWA	0.75 ppm 0.9 mg/m <sup>3</sup>	CA AB OEL
		(c)	1 ppm 1.3 mg/m <sup>3</sup>	CA AB OEL
		TWA	0.1 ppm	CA BC OEL
		STEL	0.3 ppm	CA BC OEL
		STEL	1 ppm	CA ON OEL
		С	1.5 ppm	CA ON OEL
		С	1.5 ppm	CA QC OEL
		TWA	0.1 ppm	ACGIH
		STEL	0.3 ppm	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.

Combined particulates and organic vapor type

Filter type Hand protection

Material Chemical-resistant gloves

Wear safety glasses with side shields or goggles. Eye protection

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.

If exposure to chemical is likely during typical use, provide Hygiene measures

eye flushing systems and safety showers close to the

according to the Hazardous Products Regulations



# Bovilis MH Single Shot RTU / MH + IBR Formulation

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 5.0 06/17/2025 10876240-00014 Date of first issue: 10/24/2022

working place.

When using do not eat, drink or smoke.

Contaminated work clothing should not be allowed out of the

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.

#### **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

according to the Hazardous Products Regulations



# Bovilis MH Single Shot RTU / MH + IBR Formulation

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 06/17/2025 10876240-00014 Date of first issue: 10/24/2022 5.0

Partition coefficient: n-

octanol/water

Not applicable

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. Stable under normal conditions. Chemical stability Possibility of hazardous reac- : Can react with strong oxidizing agents.

tions Conditions to avoid

None known. Oxidizing agents

Incompatible materials 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: > 2,000 mg/kg

Method: Calculation method

Acute toxicity estimate: > 20000 ppm Acute inhalation toxicity

Exposure time: 4 h Test atmosphere: gas Method: Calculation method

according to the Hazardous Products Regulations



# Bovilis MH Single Shot RTU / MH + IBR Formulation

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 5.0 06/17/2025 10876240-00014 Date of first issue: 10/24/2022

Acute dermal toxicity : Acute toxicity estimate: > 2,000 mg/kg

Method: Calculation method

#### 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 inhala-

tion 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

#### Skin corrosion/irritation

Not classified based on available information.

#### **Components:**

### White mineral oil (petroleum):

Species : Rabbit

Result : No skin irritation

Glycerine:

Species : Rabbit

Result : No skin irritation

#### Formaldehyde:

according to the Hazardous Products Regulations



# Bovilis MH Single Shot RTU / MH + IBR Formulation

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 5.0 06/17/2025 10876240-00014 Date of first issue: 10/24/2022

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

humans

### Germ cell mutagenicity

Not classified based on available information.

according to the Hazardous Products Regulations



# Bovilis MH Single Shot RTU / MH + IBR Formulation

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 5.0 06/17/2025 10876240-00014 Date of first issue: 10/24/2022

#### **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 syn-

thesis 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 muta-

genicity tests.

#### Carcinogenicity

May cause cancer.

according to the Hazardous Products Regulations



# Bovilis MH Single Shot RTU / MH + IBR Formulation

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 5.0 06/17/2025 10876240-00014 Date of first issue: 10/24/2022

#### **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 - Assess-

ment

: Sufficient evidence of carcinogenicity in animal experiments

#### 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

### 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

according to the Hazardous Products Regulations



# Bovilis MH Single Shot RTU / MH + IBR Formulation

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 5.0 06/17/2025 10876240-00014 Date of first issue: 10/24/2022

Formaldehyde:

Effects on fetal development: Test Type: Embryo-fetal development

Species: Rat

Application Route: inhalation (gas)

Result: negative

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.

Repeated dose toxicity

**Components:** 

White mineral oil (petroleum):

Species Rat

LOAEL 160 mg/kg Application Route Ingestion Exposure time 90 Days

Species : Rat

LÖAEL : >= 1 mg/l

LOAEL 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

according to the Hazardous Products Regulations



# Bovilis MH Single Shot RTU / MH + IBR Formulation

Version Revision Date: Date of last issue: 04/14/2025 SDS Number: 06/17/2025 10876240-00014 Date of first issue: 10/24/2022 5.0

**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

plants

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

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to fish (Chronic tox-

icity)

NOEC (Oncorhynchus mykiss (rainbow trout)): 1,000 mg/l

Exposure time: 28 d

Toxicity to daphnia and other : NOEC (Daphnia magna (Water flea)): 1,000 mg/l aquatic invertebrates (Chron-

Exposure time: 21 d

ic toxicity)

Glycerine:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 54,000 mg/l

Exposure time: 96 h

aquatic invertebrates

Toxicity to daphnia and other : 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

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia pulex (Water flea)): 5.8 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic : ErC50 (Desmodesmus subspicatus (green algae)): 4.89 mg/l Exposure time: 72 h

plants

Method: OECD Test Guideline 201

13 / 17

according to the Hazardous Products Regulations



# Bovilis MH Single Shot RTU / MH + IBR Formulation

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 5.0 06/17/2025 10876240-00014 Date of first issue: 10/24/2022

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic 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

Persistence and degradability

Components:

White mineral oil (petroleum):

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 31 % Exposure time: 28 d

Glycerine:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 92 % Exposure time: 30 d

Method: OECD Test Guideline 301D

Formaldehyde:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 99 % Exposure time: 28 d

Method: OECD Test Guideline 301A

Bioaccumulative potential

**Components:** 

Glycerine:

Partition coefficient: n-

: log Pow: -1.75

octanol/water

Formaldehyde:

Partition coefficient: n-

octanol/water

: log Pow: 0.35

Remarks: Calculation

Mobility in soil

No data available

Other adverse effects

No data available

according to the Hazardous Products Regulations



# Bovilis MH Single Shot RTU / MH + IBR Formulation

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 5.0 06/17/2025 10876240-00014 Date of first issue: 10/24/2022

#### **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.

**Domestic regulation** 

TDG

Not regulated as a dangerous good

Special precautions for user

Not applicable

#### **SECTION 15. REGULATORY INFORMATION**

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

AICS : not determined

DSL : not determined

IECSC : not determined

#### **SECTION 16. OTHER INFORMATION**

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

CA AB OEL : Canada. Alberta, Occupational Health and Safety Code (table

2: OEL)

CA BC OEL : Canada. British Columbia OEL

CA ON OEL : Ontario Table of Occupational Exposure Limits made under

according to the Hazardous Products Regulations



# **Bovilis MH Single Shot RTU / MH + IBR Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 5.0 06/17/2025 10876240-00014 Date of first issue: 10/24/2022

the Occupational Health and Safety Act.

CA QC OEL : Québec. Regulation respecting occupational health and safe-

ty, Schedule 1, Part 1: Permissible exposure values for air-

borne contaminants

ACGIH / TWA : 8-hour, time-weighted average ACGIH / STEL : Short-term exposure limit

CA AB OEL / TWA

CA AB OEL / STEL

CA AB OEL / (c)

CA BC OEL / TWA

CA BC OEL / TWA

CA BC OEL / STEL

S-hour Occupational exposure limit

ceiling occupational exposure limit

self-ing occupational exposure limit

self-ing occupational exposure limit

self-ing occupational exposure limit

self-ing occupational exposure limit

CA ON OEL / C : Ceiling Limit (C)

CA ON OEL / STEL : Short-Term Exposure Limit (STEL)
CA QC OEL / TWAEV : Time-weighted average exposure value

CA QC OEL / C : 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 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

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 Agen-

cy, http://echa.europa.eu/

Revision Date : 06/17/2025

according to the Hazardous Products Regulations



# Bovilis MH Single Shot RTU / MH + IBR Formulation

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 5.0 06/17/2025 10876240-00014 Date of first issue: 10/24/2022

Date format : mm/dd/yyyy

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

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.

CA / Z8