according to the Hazardous Products Regulations



Ivermectin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 02/03/2025 06/17/2025 1204364-00028 Date of first issue: 01/09/2017 11.0

SECTION 1. IDENTIFICATION

Ivermectin Liquid Formulation Product name

No data available Other means of identification

Manufacturer or supplier's details

Company name of supplier Merck & Co., Inc. 37 McCarville Street Address

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 Not applicable Restrictions on use

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

Skin irritation Category 2

Eye irritation Category 2A

Reproductive toxicity Category 1B

Specific target organ toxicity

- single exposure (Oral)

Category 1 (Central nervous system)

Specific target organ toxicity:

- single exposure

Category 3

Specific target organ toxicity:

- repeated exposure (Oral)

Category 1 (Central nervous system)

GHS label elements

Hazard pictograms





Signal Word Danger

Hazard Statements H315 Causes skin irritation.

> H319 Causes serious eye irritation. H335 May cause respiratory irritation. H360D May damage the unborn child.

H370 Causes damage to organs (Central nervous system) if

swallowed.

H372 Causes damage to organs (Central nervous system)

according to the Hazardous Products Regulations



Ivermectin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 02/03/2025 11.0 06/17/2025 1204364-00028 Date of first issue: 01/09/2017

through prolonged or repeated exposure if swallowed.

Precautionary Statements : Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read

and understood.

P260 Do not breathe mist or vapors.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves, protective clothing, eye protection

and face protection.

Response:

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

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel

unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P308 + P311 IF exposed or concerned: Call a doctor.

P332 + P313 If skin irritation occurs: Get medical attention.

P337 + P313 If eye irritation persists: Get medical attention.

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)
Oils, sesame	Sesamum indi- cum oil	8008-74-0	>= 60 - < 80 *
N-Methyl-2-pyrrolidone	1- Methylpyrroli- dinone	872-50-4	>= 10 - < 30 *
Ivermectin	No data availa- ble	70288-86-7	>= 1 - < 5 *

* Actual concentration or concentration range is withheld as a trade secret

according to the Hazardous Products Regulations



Ivermectin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 02/03/2025 11.0 06/17/2025 1204364-00028 Date of first issue: 01/09/2017

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 plenty of water

for at least 15 minutes while removing contaminated clothing

and shoes.

Get medical attention. Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water

for at least 15 minutes.

If easy to do, remove contact lens, if worn.

Get medical attention.

If swallowed : If swallowed, DO NOT induce vomiting.

Get medical attention.

Rinse mouth thoroughly with water.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and

delayed

Causes skin irritation.

Causes serious eye irritation. May cause respiratory irritation. May damage the unborn child.

Causes damage to organs if swallowed.

Causes damage to organs through prolonged or repeated

exposure if swallowed.

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

Nitrogen oxides (NOx)

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

according to the Hazardous Products Regulations



Ivermectin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 02/03/2025 06/17/2025 1204364-00028 Date of first issue: 01/09/2017 11.0

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.

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.

Do not get on skin or clothing. Advice on safe handling

Do not breathe mist or vapors.

Do not swallow. Do not get in eyes.

Wash skin thoroughly after handling.

Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure

assessment

Keep container tightly closed.

Already sensitized individuals, and those susceptible

to asthma, allergies, chronic or recurrent respiratory disease,

according to the Hazardous Products Regulations



Ivermectin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 02/03/2025 11.0 06/17/2025 1204364-00028 Date of first issue: 01/09/2017

should consult their physician regarding working with

respiratory irritants or sensitizers.

Do not eat, drink or smoke when using this product.

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.

Keep in a cool, well-ventilated place.

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			
Oils, sesame	8008-74-0	TWAEV (Mist)	10 mg/m ³	CA QC OEL			
N-Methyl-2-pyrrolidone	872-50-4	TWA	400 mg/m³	CA ON OEL			
Ivermectin	70288-86-7	TWA	30 μg/m3 (OEB 3)	Internal			
	Further inform	Further information: Skin					
		Wipe limit	300 µg/100 cm2	Internal			

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sam- pling time	Permissible concentration	Basis
N-Methyl-2-pyrrolidone	872-50-4	5-Hydroxy- N-methyl-2- pyrrolidone	Urine	End of shift (As soon as possible after exposure ceases)	100 mg/l	ACGIH BEI

Engineering measures

Use appropriate engineering controls and manufacturing technologies to control airborne concentrations (e.g., dripless 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.

Containment technologies suitable for controlling compounds are required to control at source and to prevent migration of the compound to uncontrolled areas (e.g., open-face

according to the Hazardous Products Regulations



Ivermectin Liquid Formulation

Version Revision Date: SE 11.0 06/17/2025 12

SDS Number: 1204364-00028

Date of last issue: 02/03/2025 Date of first issue: 01/09/2017

containment devices). Minimize open handling.

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
Hand protection

Combined particulates and organic vapor type

Material : Chemical-resistant gloves

Remarks : Consider double gloving.

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.

Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets,

disposable suits) to avoid exposed skin surfaces.

Use appropriate degowning techniques to remove potentially

contaminated clothing.

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. 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 : liquid

Color : light yellow

Odor : characteristic

Odor Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Initial boiling point and boiling :

range

No data available

Flash point : $> 100 \, ^{\circ}\text{C}$

according to the Hazardous Products Regulations



Ivermectin Liquid Formulation

Version **Revision Date:** SDS Number: Date of last issue: 02/03/2025 11.0 06/17/2025 1204364-00028 Date of first issue: 01/09/2017

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 No data available

Relative vapor density No data available

Relative density No data available

Density 0.90 - 0.92 g/cm³

Solubility(ies)

Water solubility insoluble

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. Chemical stability Stable under normal conditions. Can react with strong oxidizing agents.

Possibility of hazardous reac-

tions

Conditions to avoid None known. Incompatible materials Oxidizing agents

according to the Hazardous Products Regulations



Ivermectin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 02/03/2025 11.0 06/17/2025 1204364-00028 Date of first issue: 01/09/2017

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

Method: Calculation method

Components:

Oils, sesame:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

N-Methyl-2-pyrrolidone:

Acute oral toxicity : LD50 (Rat): 4,150 mg/kg

Method: OECD Test Guideline 401

Remarks: The test was conducted equivalent or similar to

guideline

Acute inhalation toxicity : LC50 (Rat): > 5.1 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Remarks: The test was conducted according to guideline

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 402

Remarks: The test was conducted equivalent or similar to

guideline

Ivermectin:

Acute oral toxicity : LD50 (Rat): 50 mg/kg

LD50 (Mouse): 25 mg/kg

LD50 (Monkey): > 24 mg/kg

according to the Hazardous Products Regulations



Ivermectin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 02/03/2025 11.0 06/17/2025 1204364-00028 Date of first issue: 01/09/2017

> Target Organs: Central nervous system Symptoms: Vomiting, Dilatation of the pupil Remarks: No mortality observed at this dose.

Acute inhalation toxicity : LC50 (Rat): 5.11 mg/l

Exposure time: 1 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): 406 mg/kg

LD50 (Rat): > 660 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Components:

Oils, sesame:

Species : Rabbit

Result : No skin irritation

N-Methyl-2-pyrrolidone:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Skin irritation

Remarks : The test was conducted equivalent or similar to guideline

Ivermectin:

Species : Rabbit

Result : No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Components:

Oils, sesame:

Species : Rabbit

Result : No eye irritation

N-Methyl-2-pyrrolidone:

Species : Rabbit

Result : Irritation to eyes, reversing within 21 days

Method : OECD Test Guideline 405

Remarks : The test was conducted equivalent or similar to guideline

Ivermectin:

Species : Rabbit

Result : Mild eye irritation

according to the Hazardous Products Regulations



Ivermectin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 02/03/2025 11.0 06/17/2025 1204364-00028 Date of first issue: 01/09/2017

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Components:

Oils, sesame:

Test Type : Human repeat insult patch test (HRIPT)

Routes of exposure : Skin contact Result : negative

N-Methyl-2-pyrrolidone:

Test Type : Local lymph node assay (LLNA)

Routes of exposure : Skin contact

Species : Mouse

Method : OECD Test Guideline 429

Result : negative

Remarks : Based on data from similar materials

Ivermectin:

Routes of exposure : Dermal Species : Humans

Result : Does not cause skin sensitization.

Germ cell mutagenicity

Not classified based on available information.

Components:

Oils, sesame:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

N-Methyl-2-pyrrolidone:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 471

Result: negative

Remarks: The test was conducted according to guideline

Test Type: In vitro mammalian cell gene mutation test

Method: OECD Test Guideline 476

Result: negative

Remarks: The test was conducted according to guideline

Test Type: DNA damage and repair, unscheduled DNA syn-

thesis in mammalian cells (in vitro) Method: OECD Test Guideline 482

Result: negative

according to the Hazardous Products Regulations



Ivermectin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 02/03/2025 11.0 06/17/2025 1204364-00028 Date of first issue: 01/09/2017

Remarks: The test was conducted equivalent or similar to

guideline

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Ingestion Method: OECD Test Guideline 474

Result: negative

Remarks: The test was conducted according to guideline

Ivermectin:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Test Type: DNA damage and repair, unscheduled DNA syn-

thesis in mammalian cells (in vitro)
Test system: human diploid fibroblasts

Result: negative

Test Type: Mouse Lymphoma

Result: negative

Carcinogenicity

Not classified based on available information.

Components:

N-Methyl-2-pyrrolidone:

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

Method : OECD Test Guideline 451

Result : negative

Remarks : The test was conducted according to guideline

Species : Rat
Application Route : Inhalation
Exposure time : 2 Years

Method : OECD Test Guideline 453

Result : negative

Remarks : The test was conducted equivalent or similar to guideline

Ivermectin:

Species : Rat Application Route : Oral

NOAEL : 1.5 mg/kg body weight

Result : negative

Remarks : Based on data from similar materials

Species : Mouse Application Route : Oral

according to the Hazardous Products Regulations



Ivermectin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 02/03/2025 11.0 06/17/2025 1204364-00028 Date of first issue: 01/09/2017

NOAEL : 2.0 mg/kg body weight

Result : negative

Remarks : Based on data from similar materials

Reproductive toxicity

May damage the unborn child.

Components:

N-Methyl-2-pyrrolidone:

Effects on fertility : Test Type: Two-generation reproduction toxicity study

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 416

Result: negative

Remarks: The test was conducted according to guideline

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

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 414

Result: positive

Remarks: The test was conducted according to guideline

Test Type: Fertility/early embryonic development

Species: Rat

Application Route: inhalation (vapor) Method: OECD Test Guideline 414

Result: positive

Remarks: The test was conducted equivalent or similar to

guideline

Test Type: Embryo-fetal development

Species: Rabbit

Application Route: Ingestion Method: OECD Test Guideline 414

Result: positive

Remarks: The test was conducted equivalent or similar to

guideline

Reproductive toxicity - As-

sessment

Clear evidence of adverse effects on development, based on

animal experiments.

Ivermectin:

Effects on fertility : Test Type: Fertility

Species: Rat

Application Route: Oral

Fertility: NOAEL: 0.6 mg/kg body weight

Result: Animal testing did not show any effects on fertility.

Effects on fetal development : Test Type: Development

Species: Mouse Application Route: Oral

according to the Hazardous Products Regulations



Ivermectin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 02/03/2025 11.0 06/17/2025 1204364-00028 Date of first issue: 01/09/2017

Developmental Toxicity: NOAEL: 0.2 mg/kg body weight Result: Teratogenic effects., Embryotoxic effects and adverse effects on the offspring were detected only at high maternally

toxic doses

Test Type: Development

Species: Rat

Application Route: Oral

Developmental Toxicity: LOAEL: 0.4 mg/kg body weight Result: Embryotoxic effects and adverse effects on the

offspring were detected.

Remarks: The mechanism or mode of action may not be rele-

vant in humans.

Test Type: Development

Species: Rabbit

Application Route: Oral

Result: Teratogenic effects., Embryotoxic effects and adverse effects on the offspring were detected only at high maternally

toxic doses

STOT-single exposure

May cause respiratory irritation.

Causes damage to organs (Central nervous system) if swallowed.

Components:

N-Methyl-2-pyrrolidone:

Assessment : May cause respiratory irritation.

Ivermectin:

Target Organs : Central nervous system
Assessment : Causes damage to organs.

STOT-repeated exposure

Causes damage to organs (Central nervous system) through prolonged or repeated exposure if swallowed.

Components:

Ivermectin:

Target Organs : Central nervous system

Assessment : Causes damage to organs through prolonged or repeated

exposure.

Repeated dose toxicity

Components:

N-Methyl-2-pyrrolidone:

Species : Rat, male NOAEL : 169 mg/kg

according to the Hazardous Products Regulations



Ivermectin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 02/03/2025 11.0 06/17/2025 1204364-00028 Date of first issue: 01/09/2017

LOAEL 433 mg/kg Application Route : Ingestion Exposure time : 90 Days

: OECD Test Guideline 408 Method

Remarks The test was conducted according to guideline

Species : Rat NOAEL : 0.5 mg/l LOAEL 1 mg/l

LOAEL
Application Route
Exposure time : inhalation (dust/mist/fume)

: 96 Days

: OECD Test Guideline 413 Method

Remarks The test was conducted according to guideline

Species : Rabbit, male NOAEL : 826 mg/kg LOAEL : 1,653 mg/kg Application Route Exposure time : Skin contact : 20 Days

Method : OECD Test Guideline 410

Remarks : The test was conducted equivalent or similar to guideline

Ivermectin:

Species Dog NOAEL : 0.5 mg/kg LOAEL : 1 mg/kg Application Route Exposure time : Oral : 14 Weeks

: Central nervous system Target Organs

: Dilatation of the pupil, Tremors, Lack of coordination, anorexia Symptoms

: Monkey Species NOAEL : 1.2 mg/kg Application Route Exposure time : Oral : 2 Weeks

Remarks : No significant adverse effects were reported

Species
NOAEL
LOAEL
Application Route Rat 0.4 mg/kg 0.8 mg/kg Oral Exposure time 3 Months

: spleen, Bone marrow, Kidney Target Organs

Aspiration toxicity

Not classified based on available information.

Experience with human exposure

Components:

N-Methyl-2-pyrrolidone:

Skin contact Symptoms: Skin irritation

according to the Hazardous Products Regulations



Ivermectin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 02/03/2025 11.0 06/17/2025 1204364-00028 Date of first issue: 01/09/2017

Ivermectin:

Skin contact Remarks: Can be absorbed through skin.

Eye contact Remarks: May irritate eyes.

Ingestion Symptoms: Drowsiness, Dilatation of the pupil, Tremors, Vom-

iting, anorexia, Lack of coordination

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

N-Methyl-2-pyrrolidone:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 500 mg/l

Exposure time: 96 h

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 1,000 mg/l

Exposure time: 24 h Method: DIN 38412

Remarks: The test was conducted according to guideline

Toxicity to algae/aquatic

plants

: ErC50 (Desmodesmus subspicatus (green algae)): 600.5 mg/l

Exposure time: 72 h

EC10 (Desmodesmus subspicatus (green algae)): 92.6 mg/l

Exposure time: 72 h

Toxicity to daphnia and other: aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 12.5 mg/l

Exposure time: 21 d

Method: OECD Test Guideline 211

Remarks: The test was conducted according to guideline

Toxicity to microorganisms EC50 (activated sludge): > 600 mg/l

> Exposure time: 30 min Method: ISO 8192

Remarks: The test was conducted according to guideline

Ivermectin:

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)): 0.003 mg/l

Exposure time: 96 h

LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.0048 mg/l

Exposure time: 96 h

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 0.000025 mg/l

Toxicity to algae/aquatic

plants

Exposure time: 48 h

: EC50 (Pseudokirchneriella subcapitata (green algae)): > 9.1

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 9.1

according to the Hazardous Products Regulations



Ivermectin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 02/03/2025 11.0 06/17/2025 1204364-00028 Date of first issue: 01/09/2017

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Persistence and degradability

Components:

Oils, sesame:

Biodegradability : Result: Readily biodegradable.

N-Methyl-2-pyrrolidone:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 73 % Exposure time: 28 d

Method: OECD Test Guideline 301C

Remarks: The test was conducted according to guideline

Ivermectin:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 50 % Exposure time: 240 d

Bioaccumulative potential

Components:

N-Methyl-2-pyrrolidone:

Partition coefficient: n- : log Pow: -0.46

octanol/water Method: OECD Test Guideline 107

Remarks: The test was conducted according to guideline

Ivermectin:

Bioaccumulation : Bioconcentration factor (BCF): 74

Partition coefficient: n-

octanol/water

: log Pow: 3.22

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.

according to the Hazardous Products Regulations



Ivermectin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 02/03/2025 11.0 06/17/2025 1204364-00028 Date of first issue: 01/09/2017

If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Ivermectin)

Class : 9
Packing group : III
Labels : 9
Environmentally hazardous : yes

IATA-DGR

UN/ID No. : UN 3082

Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.

(Ivermectin)

Class : 9 Packing group : III

Labels : Miscellaneous

Packing instruction (cargo : 964

aircraft)

Packing instruction (passen- : 964

ger aircraft)

Environmentally hazardous : yes

IMDG-Code

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Ivermectin)

Class : 9
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes

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

Not applicable for product as supplied.

Domestic regulation

TDG

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Ivermectin)

Class : 9
Packing group : III
Labels : 9
ERG Code : 171

Marine pollutant : yes(Ivermectin)

according to the Hazardous Products Regulations



Ivermectin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 02/03/2025 11.0 06/17/2025 1204364-00028 Date of first issue: 01/09/2017

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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 BEI : ACGIH - Biological Exposure Indices (BEI)

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

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

CA ON OEL / TWA : Time-Weighted Average Limit (TWA)
CA QC OEL / TWAEV : Time-weighted average exposure 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

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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 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.

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