

# **Pyrantel Pamoate / Ivermectin Formulation**

Version **Revision Date:** SDS Number: Date of last issue: 06.04.2024 4892888-00018 4.6 28.09.2024 Date of first issue: 17.09.2019

**Section 1: Identification** 

**Product identifier** Pyrantel Pamoate / Ivermectin Formulation

Recommended use of the chemical and restrictions on use

Recommended use Veterinary product Restrictions on use Not applicable

Manufacturer or supplier's details

: MSD Company

Address 50 Tuas West Drive

Singapore - Singapore 638408

Telephone +1-908-740-4000

Emergency telephone number : 65 6697 2111 (24/7/365)

E-mail address EHSDATASTEWARD@msd.com

Section 2: Hazard identification

Classification of the substance or mixture

single exposure (Oral)

Specific target organ toxicity - : Category 2 (Central nervous system)

repeated exposure (Oral)

Specific target organ toxicity - : Category 2 (Central nervous system)

Short-term (acute) aquatic

hazard

Category 1

Long-term (chronic) aquatic

hazard

Category 1

GHS Label elements, including precautionary statements

Hazard pictograms

Signal word Warning

Hazard statements H371 May cause damage to organs (Central nervous system) if

H373 May cause damage to organs (Central nervous system)



# **Pyrantel Pamoate / Ivermectin Formulation**

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 06.04.2024

 4.6
 28.09.2024
 4892888-00018
 Date of first issue: 17.09.2019

through prolonged or repeated exposure if swallowed. H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : Prevention:

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

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

P273 Avoid release to the environment.

Response

P308 + P311 IF exposed or concerned: Call a POISON

CENTER/ doctor. P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

## **Additional Labelling**

The following percentage of the mixture consists of ingredient(s) with unknown hazards to the aquatic environment: 38.3 %

#### 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)	
4,4'-methylenebis[3-hydroxy-2-naphthoic] acid,	22204-24-6	>= 30 -< 50	
compound with (E)-1,4,5,6-tetrahydro-1-methyl-			
2-[2-(2-thienyl)vinyl]pyrimidine (1:1)			
Glycerine	56-81-5	>= 10 -< 20	
Ivermectin	70288-86-7	>= 1 -< 2.5	
Ethanol#	64-17-5	>= 0.1 -< 1	

<sup>#</sup> Voluntarily-disclosed substance

## Section 4: First-aid measures

## Description of necessary first-aid measures

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

If inhaled : If inhaled, remove to fresh air.



# **Pyrantel Pamoate / Ivermectin Formulation**

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 4892888-00018 Date of first issue: 17.09.2019

Get medical attention if symptoms occur.

In case of skin contact : Wash with water and soap as a precaution.

Get medical attention if symptoms occur.

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

Get medical attention if irritation develops and persists.

If swallowed : If swallowed, DO NOT induce vomiting unless directed to do

so by medical personnel. 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

Risks : May cause damage to organs if swallowed.

May cause 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).

Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically and supportively.

Section 5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Water spray

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

None known.

Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

: Exposure to combustion products may be a hazard to health.

Hazardous combustion prod: :

ucts

Carbon oxides

Nitrogen oxides (NOx)

Sulphur oxides

Special protective actions for fire-fighters

Special protective equipment:

for firefighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

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.



# **Pyrantel Pamoate / Ivermectin Formulation**

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 06.04.2024

 4.6
 28.09.2024
 4892888-00018
 Date of first issue: 17.09.2019

### Section 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

Follow safe handling advice (see section 7) and personal pro-

tective equipment recommendations (see section 8).

**Environmental precautions** 

Environmental precautions : Avoid release to the environment.

Prevent further leakage or spillage if safe to do so. 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

Methods for cleaning up : Soak up with inert absorbent material.

For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absor-

bent.

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 deter-

mine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

## Section 7: Handling and storage

# Precautions for safe handling

Technical measures : See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation

Use only with adequate ventilation.

Advice on safe handling : Do not breathe dust, fume, gas, mist, vapours or spray.

Do not swallow.

Avoid contact with eyes.

Avoid prolonged or repeated contact with skin.

Wash skin thoroughly after handling.

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

sessment

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

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.



# **Pyrantel Pamoate / Ivermectin Formulation**

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 4892888-00018 4.6 28.09.2024 Date of first issue: 17.09.2019

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.

## Conditions for safe storage, including any incompatibilities

Conditions for safe storage Keep in properly labelled containers.

Store locked up.

Store in accordance with the particular national regulations.

Materials to avoid Do not store with the following product types:

Strong oxidizing agents

## Section 8: Exposure controls/personal protection

## **Control parameters**

### **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis	
4,4'-methylenebis[3-hydroxy-2-naphthoic] acid, compound with (E)-1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)vinyl]pyrimidine (1:1)	22204-24-6	TWA	250 μg/m3 (OEB 2)	Internal	
Glycerine	56-81-5	PEL (long term) (Mist)	10 mg/m3	SG OEL	
Ivermectin	70288-86-7	TWA	30 μg/m3 (OEB 3)	Internal	
	Further information: Skin				
		Wipe limit	300 μg/100 cm2	Internal	
Ethanol	64-17-5	PEL (long term)	1,000 ppm 1,880 mg/m3	SG OEL	
		STEL	1,000 ppm	ACGIH	

### Appropriate engineering control measures

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 con-

tainment devices). Minimize open handling.

### Individual protection measures, such as personal protective equipment (PPE)

Eye/face 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.



# **Pyrantel Pamoate / Ivermectin Formulation**

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 06.04.2024

 4.6
 28.09.2024
 4892888-00018
 Date of first issue: 17.09.2019

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 protection : Work uniform or laboratory coat.

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

posable suits) to avoid exposed skin surfaces.

Use appropriate degowning techniques to remove potentially

contaminated clothing.

Respiratory protection : If adequate local exhaust ventilation is not available or expo-

sure assessment demonstrates exposures outside the rec-

ommended guidelines, use respiratory protection. Combined particulates and organic vapour type

Filter type Hand protection

Material : Chemical-resistant gloves

Remarks : Consider double gloving.

# Section 9: Physical and chemical properties

Appearance : paste

Colour : yellow

Odour : No data available

Odour 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 : Not applicable

Evaporation rate : Not applicable

Flammability (solid, gas) : No data available

Flammability (liquids) : Not applicable

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Vapour pressure : Not applicable

Relative vapour density : Not applicable



# **Pyrantel Pamoate / Ivermectin Formulation**

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 4892888-00018 Date of first issue: 17.09.2019

Relative density : No data available

Density : No data available

Solubility(ies)

Water solubility : No data available

Partition coefficient: n-

octanol/water

Not applicable

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, kinematic : Not applicable

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 reac- :

tions

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 : Skin contact exposure 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



# **Pyrantel Pamoate / Ivermectin Formulation**

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 06.04.2024

 4.6
 28.09.2024
 4892888-00018
 Date of first issue: 17.09.2019

Method: Calculation method

## **Components:**

4,4'-methylenebis[3-hydroxy-2-naphthoic] acid, compound with (E)-1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)vinyl]pyrimidine (1:1):

Acute oral toxicity : LD50 (Rat): > 24,000 mg/kg

LD50 (Mouse): > 24,000 mg/kg

LD50 (Dog): 2,000 mg/kg

Glycerine:

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

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

Ivermectin:

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

LD50 (Mouse): 25 mg/kg

LD50 (Monkey): > 24 mg/kg

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

**Ethanol:** 

Acute oral toxicity : LD50 (Rat): 10,470 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat, male): 116.9 mg/l

Exposure time: 4 h
Test atmosphere: vapour

·

Acute dermal toxicity : LD50 (Rabbit): > 15,800 mg/kg

Skin corrosion/irritation

Not classified based on available information.



# **Pyrantel Pamoate / Ivermectin Formulation**

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 06.04.2024

 4.6
 28.09.2024
 4892888-00018
 Date of first issue: 17.09.2019

Components:

Glycerine:

Species : Rabbit

Result : No skin irritation

Ivermectin:

Species : Rabbit

Result : No skin irritation

**Ethanol:** 

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Components:

**Glycerine:** 

Species : Rabbit

Result : No eye irritation

Ivermectin:

Species : Rabbit

Result : Mild eye irritation

Ethanol:

Species : Rabbit

Result : Irritation to eyes, reversing within 21 days

Method : OECD Test Guideline 405

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

**Components:** 

Ivermectin:

Exposure routes : Dermal Species : Humans

Result : Does not cause skin sensitisation.



# **Pyrantel Pamoate / Ivermectin Formulation**

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 06.04.2024

 4.6
 28.09.2024
 4892888-00018
 Date of first issue: 17.09.2019

**Ethanol:** 

Test Type : Mouse ear swelling test (MEST)

Exposure routes : Skin contact Species : Mouse : negative

Germ cell mutagenicity

Not classified based on available information.

**Components:** 

4,4'-methylenebis[3-hydroxy-2-naphthoic] acid, compound with (E)-1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)vinyl]pyrimidine (1:1):

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

Result: negative

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

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

**Ethanol:** 

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

Method: OECD Test Guideline 471

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Method: OECD Test Guideline 476



# **Pyrantel Pamoate / Ivermectin Formulation**

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 06.04.2024

 4.6
 28.09.2024
 4892888-00018
 Date of first issue: 17.09.2019

Result: negative

Test Type: Chromosome aberration test in vitro

Result: negative

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

cytogenetic assay) Species: Rat

Application Route: Ingestion

Result: negative

### Carcinogenicity

Not classified based on available information.

## **Components:**

# **Glycerine:**

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

### 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

NOAEL : 2.0 mg/kg body weight

Result : negative

Remarks : Based on data from similar materials

## Reproductive toxicity

Not classified based on available information.

### **Components:**

# 4,4'-methylenebis[3-hydroxy-2-naphthoic] acid, compound with (E)-1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)vinyl]pyrimidine (1:1):

Effects on foetal develop-

Test Type: Embryo-foetal development

ment

Species: Rat

Application Route: Oral

Developmental Toxicity: NOAEL: 3,000 mg/kg body weight Result: No effects on fertility and early embryonic develop-

ment were detected.

Test Type: Embryo-foetal development

Species: Rabbit



# **Pyrantel Pamoate / Ivermectin Formulation**

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 06.04.2024

 4.6
 28.09.2024
 4892888-00018
 Date of first issue: 17.09.2019

Application Route: Oral

Developmental Toxicity: NOAEL: 1,000 mg/kg body weight Result: No effects on fertility and early embryonic develop-

ment were detected.

Glycerine:

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

Species: Rat

**Application Route: Ingestion** 

Result: negative

Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Rat

Application Route: Ingestion

Result: negative

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 foetal develop-

ment

Test Type: Development

Species: Mouse Application Route: Oral

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 off-

spring 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

**Ethanol:** 

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

Species: Mouse



# **Pyrantel Pamoate / Ivermectin Formulation**

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 06.04.2024

 4.6
 28.09.2024
 4892888-00018
 Date of first issue: 17.09.2019

Application Route: Ingestion

Result: negative

### STOT - single exposure

May cause damage to organs (Central nervous system) if swallowed.

### **Components:**

#### Ivermectin:

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

### STOT - repeated exposure

May cause 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:**

# 4,4'-methylenebis[3-hydroxy-2-naphthoic] acid, compound with (E)-1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)vinyl]pyrimidine (1:1):

Species : Dog
NOAEL : 10 mg/kg
LOAEL : 30 mg/kg
Application Route : Ingestion
Exposure time : 3 d

Remarks : No significant adverse effects were reported

Species : Dog NOAEL : 600 mg/kg Application Route : Oral Exposure time : 19 d

Remarks : No significant adverse effects were reported

Species : Dog
NOAEL : 600 mg/kg
Application Route : Oral
Exposure time : 30 d

Remarks : No significant adverse effects were reported

Species : Dog NOAEL : 600 mg/kg Application Route : Oral



# **Pyrantel Pamoate / Ivermectin Formulation**

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 4892888-00018 Date of first issue: 17.09.2019

Exposure time : 90 d

Remarks : No significant adverse effects were reported

Glycerine:

Species : Rat NOAEL : 0.167

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 yr

Species : Rabbit

NOAEL : 5,040 mg/kg

Application Route : Skin contact

Exposure time : 45 Weeks

Ivermectin:

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

Target Organs : Central nervous system

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

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

Remarks : No significant adverse effects were reported

Species : Rat

NOAEL : 0.4 mg/kg

LOAEL : 0.8 mg/kg

Application Route : Oral

Exposure time : 3 Months

Target Organs : spleen, Bone marrow, Kidney

**Ethanol:** 

Species : Rat

NOAEL : 1,730 mg/kg LOAEL : 3,200 mg/kg Application Route : Ingestion Exposure time : 90 Days



# **Pyrantel Pamoate / Ivermectin Formulation**

Version Revision Date: SDS Number: Date of last issue: 06.04.2024 4.6 28.09.2024 4892888-00018 Date of first issue: 17.09.2019

### **Aspiration toxicity**

Not classified based on available information.

**Experience with human exposure** 

### **Components:**

4,4'-methylenebis[3-hydroxy-2-naphthoic] acid, compound with (E)-1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)vinyl]pyrimidine (1:1):

Ingestion : Symptoms: Abdominal pain, Nausea, Vomiting, Diarrhoea,

Headache, Dizziness, Fever

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**

### **Toxicity**

### **Components:**

4,4'-methylenebis[3-hydroxy-2-naphthoic] acid, compound with (E)-1,4,5,6-tetrahydro-1-methyl-2-[2-(2-thienyl)vinyl]pyrimidine (1:1):

**Ecotoxicology Assessment** 

Acute aquatic toxicity : Toxic effects cannot be excluded

Chronic aquatic toxicity : Toxic effects cannot be excluded

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

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

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.000025 mg/l

Exposure time: 48 h



# **Pyrantel Pamoate / Ivermectin Formulation**

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 06.04.2024

 4.6
 28.09.2024
 4892888-00018
 Date of first issue: 17.09.2019

Toxicity to algae/aquatic

plants

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

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 9.1

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

M-Factor (Acute aquatic tox-

icity)

M-Factor (Chronic aquatic

toxicity)

10,000

10,000

**Ethanol:** 

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 14,200 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Ceriodaphnia dubia (water flea)): 5,012 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

ErC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l

Exposure time: 72 h

EC10 (Chlorella vulgaris (Fresh water algae)): 11.5 mg/l

Exposure time: 72 h

Toxicity to fish (Chronic tox-

icity)

NOEC (Oryzias latipes (Japanese medaka)): >= 79 mg/l

Exposure time: 100 d

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 9.6 mg/l

Exposure time: 9 d

Toxicity to microorganisms

EC50 (Protozoa): 5,800 mg/l

Exposure time: 4 h

Persistence and degradability

**Components:** 

Glycerine:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 92 % Exposure time: 30 d

Method: OECD Test Guideline 301D

Ivermectin:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 50 % Exposure time: 240 d



# **Pyrantel Pamoate / Ivermectin Formulation**

Version SDS Number: Date of last issue: 06.04.2024 **Revision Date:** 4892888-00018 4.6 28.09.2024 Date of first issue: 17.09.2019

**Ethanol:** 

Biodegradability Result: Readily biodegradable.

Biodegradation: 84 % Exposure time: 20 d

**Bioaccumulative potential** 

**Components:** 

**Glycerine:** 

Partition coefficient: n-

octanol/water

log Pow: -1.75

Ivermectin:

Bioaccumulation Bioconcentration factor (BCF): 74

Partition coefficient: n-

octanol/water

log Pow: 3.22

**Ethanol:** 

Partition coefficient: n-

octanol/water

log Pow: -0.35

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 han-

dling site for recycling or disposal.

If not otherwise specified: Dispose of as unused product.

**Section 14: Transport information** 

International Regulations

**UNRTDG** 

**UN** number UN 3077

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Ivermectin)

Transport hazard class(es)

Packing group

9 Ш

Labels 9



# **Pyrantel Pamoate / Ivermectin Formulation**

Date of last issue: 06.04.2024 Version Revision Date: SDS Number: 4.6 28.09.2024 4892888-00018 Date of first issue: 17.09.2019

Environmental hazards yes

**IATA-DGR** 

UN/ID No. UN 3077

UN proper shipping name Environmentally hazardous substance, solid, n.o.s.

(Ivermectin)

Transport hazard class(es) 9

Ш Packing group

Miscellaneous Labels 956

Packing instruction (cargo

aircraft)

Packing instruction (passen-

der aircraft)

Environmentally hazardous yes

**IMDG-Code** 

**UN** number UN 3077

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

> N.O.S. (Ivermectin)

956

Transport hazard class(es) 9 Packing group Ш Labels **EmS Code** F-A. S-F

Marine pollutant ves

### Transport in bulk according to IMO instruments

Not applicable for product as supplied.

### 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

# Safety, health and environmental regulations specific for the product in question

Workplace Safety and Health Act and Workplace Safety and Health (General Provisions) Regulations: This product is subjected to the SDS, labelling, PEL and other requirements in the Act/Regulations.

Not applicable

Environmental Protection and Management Act and

Environmental Protection and Management (Hazard-

ous Substances) Regulations

Fire Safety (Petroleum and Flammable Materials) Not applicable

Regulations

### The components of this product are reported in the following inventories:

DSL not determined

**AICS** not determined



# **Pyrantel Pamoate / Ivermectin Formulation**

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 06.04.2024

 4.6
 28.09.2024
 4892888-00018
 Date of first issue: 17.09.2019

IECSC : not determined

# **Section 16: Other information**

Revision Date : 28.09.2024

**Further information** 

Sources of key data used to compile the 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/

Date format : dd.mm.yyyy

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

SG OEL : Singapore. Workplace Safety and Health (General Provisions)

Regulations - First Schedule Permissible Exposure Limits of

Toxic Substances.

ACGIH / STEL : Short-term exposure limit

SG OEL / PEL (long term) : Permissible Exposure Level (PEL) Long Term

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 Recom-



# **Pyrantel Pamoate / Ivermectin Formulation**

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 06.04.2024

 4.6
 28.09.2024
 4892888-00018
 Date of first issue: 17.09.2019

mendations 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.

SG / EN