

Cypermethrin Liquid Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 26.06.2024

 2.0
 28.09.2024
 10849844-00009
 Date of first issue: 12.09.2022

SECTION 1. IDENTIFICATION

Product name : Cypermethrin Liquid Formulation

Other means of identification : VANQUISH LONG WOOL SPRAY-ON LICE TREATMENT

AND BLOWFLY STRIKE PREVENTIVE FOR LONG WOOLLED SHEEP AND UNSHORN LAMBS (38354)

Vanquish (A005997)

Manufacturer or supplier's details

Company : MSD

Address : Talcahuano 750, 6th floor, Ciudad Autonoma

Buenos Aires, Argentina C1013AAP

Telephone : 908-740-4000

Emergency telephone : 1-908-423-6000

E-mail address : EHSDATASTEWARD@msd.com

Recommended use of the chemical and restrictions on use

Recommended use : Veterinary product Restrictions on use : Not applicable

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin sensitization : Category 1

Carcinogenicity : Category 1B

Reproductive toxicity : Category 2

Short-term (acute) aquatic

hazard

: Category 1

Long-term (chronic) aquatic

hazard

Category 1

GHS label elements

Hazard pictograms





Signal Word : Danger



Cypermethrin Liquid Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 26.06.2024

 2.0
 28.09.2024
 10849844-00009
 Date of first issue: 12.09.2022

Hazard Statements : H317 May cause an allergic skin reaction.

H350 May cause cancer.

H361f Suspected of damaging fertility.

H410 Very toxic to aquatic life with long lasting effects.

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.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection.

Response:

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

P308 + P313 IF exposed or concerned: Get medical advice/

attention.

P333 + P313 If skin irritation or rash occurs: Get medical ad-

vice/ attention.

P362 + P364 Take off contaminated clothing and wash it before

reuse

P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Other hazards which do not result in classification

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)	
Cypermethrin	52315-07-8	>= 5 -< 10	
Oxirane, 2-methyl-, polymer with oxirane,	37251-69-7	>= 1 -< 2,5	
mono(nonylphenyl) ether			
Polyoxyethylene Nonylphenyl Ether, Branched,	68412-53-3	>= 0,25 -< 1	
Phosphate			
Formaldehyde	50-00-0	>= 0,2 -< 0,25	

SECTION 4. FIRST AID MEASURES

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

advice immediately.



Cypermethrin Liquid Formulation

Version **Revision Date:** SDS Number: Date of last issue: 26.06.2024 28.09.2024 10849844-00009 Date of first issue: 12.09.2022 2.0

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. Flush eyes with water as a precaution.

In case of eye contact Get medical attention if irritation develops and persists.

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

May cause an allergic skin reaction. May cause cancer.

delayed

Suspected of damaging fertility.

First Aid responders should pay attention to self-protection, Protection of first-aiders

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

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-

Use personal protective equipment.

Follow safe handling advice (see section 7) and personal



Cypermethrin Liquid Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 26.06.2024

 2.0
 28.09.2024
 10849844-00009
 Date of first issue: 12.09.2022

gency procedures protective equipment recommendations (see section 8).

Environmental precautions : Avoid release to the environment.

Prevent further leakage or spillage if safe to do so.

Prevent spreading over a wide area (e.g., by containment or

oil barriers).

Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material.

For large spills, provide diking or other appropriate

containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate

container.

Clean up remaining materials from spill with suitable

absorbent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items

employed in the cleanup of releases. You will need to

determine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

Technical measures : See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust

ventilation.

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

Do not breathe mist or vapors.

Do not swallow.

Avoid contact with 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.

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.

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



Cypermethrin Liquid Formulation

Version **Revision Date:** SDS Number: Date of last issue: 26.06.2024 10849844-00009 Date of first issue: 12.09.2022 2.0 28.09.2024

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis	
Cypermethrin	52315-07-8	TWA	50 μg/m3 (OEB 3)	Internal	
	Further information: DSEN, Skin				
		Wipe limit	100 μg/100 cm2	Internal	
Formaldehyde	50-00-0	CMP-C	0,3 ppm	AR OEL	
	Further information: A2 - Suspected human carcinogen, Sensitization				
		TWA	0,1 ppm	ACGIH	
		STEL	0,3 ppm	ACGIH	

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

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

Hygiene measures

Work uniform or laboratory coat.

If exposure to chemical is likely during typical use, provide

eye flushing systems and safety showers close to the

working place.

When using do not eat, drink or smoke.

Contaminated work clothing should not be allowed out of the

workplace.

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



Cypermethrin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 26.06.2024 2.0 28.09.2024 10849844-00009 Date of first issue: 12.09.2022

Appearance : suspension

Color : pink

red

Odor : No data available

Odor Threshold : No data available

pH : 3,0 - 6,0

Melting point/freezing point : No data available

Initial boiling point and boiling

range

No data available

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 : No data available

Relative vapor density : No data available

Relative density : 1,02

Density : No data available

Solubility(ies)

Water solubility : soluble

Partition coefficient: n-

octanol/water

: Not applicable

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, kinematic : No data available

Explosive properties : Not explosive

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



Cypermethrin Liquid Formulation

Version **Revision Date:** SDS Number: Date of last issue: 26.06.2024 28.09.2024 10849844-00009 Date of first issue: 12.09.2022 2.0

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. Incompatible materials Oxidizing agents

Hazardous decomposition

products

No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of:

exposure

Inhalation Skin contact Ingestion Eye contact

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity Acute toxicity estimate: > 5.000 mg/kg

Method: Calculation method

Acute inhalation toxicity Acute toxicity estimate: > 30000 ppm

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

Acute toxicity estimate: > 5.000 mg/kg Acute dermal toxicity

Method: Calculation method

Components:

Cypermethrin:

Acute oral toxicity LD50 (Rat, female): 367 mg/kg

LD50 (Rat, male): 891 mg/kg

Acute dermal toxicity LD50 (Rat): > 4.800 mg/kg

LD50 (Rabbit): > 2.400 mg/kg

Oxirane, 2-methyl-, polymer with oxirane, mono(nonylphenyl) ether:

Acute oral toxicity LD50 (Rat): > 4.000 mg/kg

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



Cypermethrin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 26.06.2024 2.0 28.09.2024 10849844-00009 Date of first issue: 12.09.2022

П

Polyoxyethylene Nonylphenyl Ether, Branched, Phosphate:

Acute oral toxicity : LD50 (Rat): 4.450 mg/kg

Method: OECD Test Guideline 401

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:

Cypermethrin:

Species : Rabbit
Method : Draize Test
Result : No skin irritation

Polyoxyethylene Nonylphenyl Ether, Branched, Phosphate:

Species : Rabbit Result : Skin irritation

Formaldehyde:

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

Serious eye damage/eye irritation

Not classified based on available information.

Components:

Cypermethrin:

Species : Rabbit

Result : No eye irritation Method : Draize Test

Polyoxyethylene Nonylphenyl Ether, Branched, Phosphate:

Species : Rabbit

Result : Irreversible effects on the eye

Method : Draize Test



Cypermethrin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 26.06.2024 2.0 28.09.2024 10849844-00009 Date of first issue: 12.09.2022

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:

Cypermethrin:

Test Type : Magnusson-Kligman-Test

Species : Guinea pig

Assessment : Did not cause sensitization on laboratory animals.

Result : Not a skin sensitizer.

Polyoxyethylene Nonylphenyl Ether, Branched, Phosphate:

Routes of exposure : Skin contact Species : Humans Result : negative

Formaldehyde:

Test Type : Human repeat insult patch test (HRIPT)

Routes of exposure : Skin contact Species : Humans Result : positive

Assessment : Probability or evidence of high skin sensitization rate in

humans

Germ cell mutagenicity

Not classified based on available information.

Components:

Cypermethrin:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro

Test system: Human lymphocytes

Result: negative

Test Type: Microbial mutagenesis assay (Ames test)

Result: negative

Test Type: sister chromatid exchange assay

Test system: Human lymphocytes

Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test

Species: Rat



Cypermethrin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 26.06.2024 2.0 28.09.2024 10849844-00009 Date of first issue: 12.09.2022

Application Route: Oral

Result: positive

Test Type: In vivo micronucleus test

Species: Rat

Application Route: Dermal

Result: positive

Test Type: In vivo micronucleus test

Species: Rat

Application Route: Intraperitoneal injection

Result: negative

Germ cell mutagenicity -

Assessment

Weight of evidence does not support classification as a germ

cell mutagen.

Formaldehyde:

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

Result: positive

Test Type: In vitro mammalian cell gene mutation test

Result: positive

Test Type: Chromosome aberration test in vitro

Result: positive

Genotoxicity in vivo : Test Type: In vivo mammalian alkaline comet assay

Species: Mouse

Application Route: Inhalation

Result: positive

Germ cell mutagenicity -

Assessment

Positive result(s) from in vivo mammalian somatic cell

mutagenicity tests.

Carcinogenicity

May cause cancer.

Components:

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

Suspected of damaging fertility.

Components:

Cypermethrin:

Effects on fertility : Test Type: Fertility



Cypermethrin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 26.06.2024 2.0 28.09.2024 10849844-00009 Date of first issue: 12.09.2022

Species: Rat, male Application Route: Oral

Fertility: LOAEL: 68 mg/kg body weight

Symptoms: Effects on fertility., male reproductive effects, Tes-

ticular effects

Test Type: Fertility Species: Rat, male Application Route: Oral

Fertility: NOAEL: 6,25 mg/kg body weight Target Organs: male reproductive organs, Testis

Effects on fetal development : Test Type: Three-generation reproduction toxicity study

Species: Mouse Application Route: Oral

General Toxicity Maternal: NOAEL: 5 mg/kg body weight Symptoms: No effects on fetal development., No effect on

reproduction capacity., Reduced body weight

Test Type: Reproduction/Developmental toxicity screening

test

Species: Rabbit Application Route: Oral

Teratogenicity: NOAEL: 30 mg/kg body weight Symptoms: No effects on fetal development.

Test Type: Reproduction/Developmental toxicity screening

test

Species: Rat

Application Route: Oral

Teratogenicity: NOAEL: 17,5 mg/kg body weight Symptoms: No effects on fetal development.

Reproductive toxicity - As-

sessment

Some evidence of adverse effects on sexual function and

fertility, based on animal experiments.

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:

Cypermethrin:

Target Organs : Nervous system

Assessment : May cause damage to organs.

Formaldehyde:

Assessment : May cause respiratory irritation.



Cypermethrin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 26.06.2024 2.0 28.09.2024 10849844-00009 Date of first issue: 12.09.2022

STOT-repeated exposure

Not classified based on available information.

Repeated dose toxicity

Components:

Cypermethrin:

Species : Rat

NOAEL : 5 mg/kg

Application Route : Oral

Exposure time : 3 Months

Target Organs : Central nervous system

Species : Rabbit

NOAEL : 12,5 mg/kg

Application Route : Oral

Exposure time : 3 Months

Target Organs : Central nervous system

Species : Dog
NOAEL : 1 mg/kg
Application Route : Oral
Exposure time : 1 y

Symptoms : anxiety, central nervous system effects

Species : Rabbit

NOAEL : 20 mg/kg

Application Route : Dermal

Exposure time : 3 Weeks

Target Organs : male reproductive organs

Symptoms : reduced body weight gain, reduced food consumption

Aspiration toxicity

Not classified based on available information.

Experience with human exposure

Components:

Cypermethrin:

General Information : Target Organs: Nervous system

Symptoms: muscle weakness, central nervous system effects

Remarks: Based on Human Evidence The most common side effects are:

Remarks: paraesthesias

Further information

Components:

Cypermethrin:

Remarks : Dermal absorption possible



Cypermethrin Liquid Formulation

Version **Revision Date:** SDS Number: Date of last issue: 26.06.2024 28.09.2024 10849844-00009 Date of first issue: 12.09.2022 2.0

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Cypermethrin:

Toxicity to fish EC50 (Oncorhynchus mykiss (rainbow trout)): 0,39 µg/l

Exposure time: 96 h

EC50 (Cyprinodon variegatus (sheepshead minnow)): 0,95

100.000

Exposure time: 96 h

Toxicity to daphnia and other:

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0,0036 μg/l

Exposure time: 48 h

EC50 (Americamysis): 0,00475 µg/l

Exposure time: 48 h

M-Factor (Acute aquatic tox- :

Toxicity to fish (Chronic tox-

icity)

NOEC (Pimephales promelas (fathead minnow)): 0,14 µg/l

Exposure time: 30 d

Toxicity to daphnia and other:

aquatic invertebrates (Chron-

ic toxicity)

M-Factor (Chronic aquatic

toxicity)

NOEC (Mysidopsis bahia (opossum shrimp)): 0,000781 µg/l

Exposure time: 28 d

: 100.000

Oxirane, 2-methyl-, polymer with oxirane, mono(nonylphenyl) ether:

Toxicity to fish LC50 (Pimephales promelas (fathead minnow)): > 0,1 - 1 mg/l

Exposure time: 96 h

Remarks: Based on data from similar materials

Toxicity to daphnia and other:

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 0,1 - 1 mg/l

Exposure time: 48 h Method: ISO 6341

Remarks: Based on data from similar materials

Toxicity to algae/aquatic

plants

ErC50 (Raphidocelis subcapitata (freshwater green alga)): > 1

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

NOEC (Raphidocelis subcapitata (freshwater green alga)): > 1

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

M-Factor (Acute aquatic tox-

icity)

13 / 18



Cypermethrin Liquid Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 26.06.2024

 2.0
 28.09.2024
 10849844-00009
 Date of first issue: 12.09.2022

Toxicity to fish (Chronic tox-

icity)

NOEC (Oryzias latipes (Japanese medaka)): > 0,1 - 1 mg/l

Exposure time: 100 d

Remarks: Based on data from similar materials

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Mysidopsis bahia (opossum shrimp)): > 0,001 - 0,01

mg/l

10

Exposure time: 28 d

Remarks: Based on data from similar materials

M-Factor (Chronic aquatic

toxicity)

Toxicity to microorganisms

EC10 (activated sludge): > 1 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Remarks: Based on data from similar materials

Polyoxyethylene Nonylphenyl Ether, Branched, Phosphate:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 0,1 - 1 mg/l

Exposure time: 96 h

Remarks: Based on data from similar materials

Toxicity to daphnia and other:

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 0,1 - 1 mg/l

Exposure time: 48 h Method: ISO 6341

Remarks: Based on data from similar materials

Toxicity to algae/aquatic

plants

ErC50 (Raphidocelis subcapitata (freshwater green alga)): > 1

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

NOEC (Raphidocelis subcapitata (freshwater green alga)): > 1

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

M-Factor (Acute aquatic tox-

icity)

: 1

Toxicity to fish (Chronic tox-

icity)

NOEC (Oryzias latipes (Japanese medaka)): > 0,1 - 1 mg/l

Exposure time: 100 d

Remarks: Based on data from similar materials

Toxicity to daphnia and other : aguatic invertebrates (Chron-

ic toxicity)

NOEC (Mysidopsis bahia (opossum shrimp)): > 0,001 - 0,01

mg/l

Exposure time: 28 d

Remarks: Based on data from similar materials

M-Factor (Chronic aquatic

toxicity)

: 10

Toxicity to microorganisms : EC10 (activated sludge): > 1 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209



Cypermethrin Liquid Formulation

Version **Revision Date:** SDS Number: Date of last issue: 26.06.2024 28.09.2024 10849844-00009 Date of first issue: 12.09.2022 2.0

Remarks: Based on data from similar materials

Formaldehyde:

Toxicity to fish LC50 (Morone saxatilis (striped bass)): 6,7 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia pulex (Water flea)): 5,8 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

ErC50 (Desmodesmus subspicatus (green algae)): 4,89 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to daphnia and other : aquatic invertebrates (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:

Cypermethrin:

Stability in water : Degradation half life (DT50): 17 d

Oxirane, 2-methyl-, polymer with oxirane, mono(nonylphenyl) ether:

Biodegradability : Result: Not readily biodegradable.

Remarks: Based on data from similar materials

Polyoxyethylene Nonylphenyl Ether, Branched, Phosphate:

Biodegradability Result: Not readily biodegradable.

Remarks: Based on data from similar materials

Formaldehyde:

Biodegradability Result: Readily biodegradable.

Biodegradation: 99 % Exposure time: 28 d

Method: OECD Test Guideline 301A

Bioaccumulative potential

Components:

Cypermethrin:

Bioaccumulation Bioconcentration factor (BCF): 488

Partition coefficient: n-

octanol/water

log Pow: 6,6



Cypermethrin Liquid Formulation

Version Revision Date: SDS Number: Date of last issue: 26.06.2024 2.0 28.09.2024 10849844-00009 Date of first issue: 12.09.2022

Oxirane, 2-methyl-, polymer with oxirane, mono(nonylphenyl) ether:

Partition coefficient: n- : log Pow: < 4

octanol/water Remarks: Calculation

Polyoxyethylene Nonylphenyl Ether, Branched, Phosphate:

Partition coefficient: n- : log Pow: > 4

octanol/water Remarks: Expert judgment

Formaldehyde:

Partition coefficient: n- : log Pow: 0,35

octanol/water Remarks: Calculation

Mobility in soil

Components:

Cypermethrin:

Distribution among environ-

mental compartments

Stability in soil

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Do not dispose of waste into sewer.

: log Koc: 5,58

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

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Cypermethrin)

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.

(Cypermethrin)

Class : 9 Packing group : III



Cypermethrin Liquid Formulation

Version **Revision Date:** SDS Number: Date of last issue: 26.06.2024 28.09.2024 10849844-00009 Date of first issue: 12.09.2022 2.0

Miscellaneous Labels

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.

(Cypermethrin)

Class Packing group Ш 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.

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/legislation specific for the substance or mixture

Argentina. Carcinogenic Substances and Agents Formaldehyde

Registry.

Control of precursors and essential chemicals for the Not applicable

preparation of drugs.

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

AICS not determined

DSL not determined

IECSC not determined

SECTION 16. OTHER INFORMATION

Revision Date 28.09.2024 Date format dd.mm.yyyy

Further information

Sources of key data used to

compile the Material Safety

eChem Portal search results and European Chemicals Agen-**Data Sheet** cy, http://echa.europa.eu/

Internal technical data, data from raw material SDSs, OECD



Cypermethrin Liquid Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 26.06.2024

 2.0
 28.09.2024
 10849844-00009
 Date of first issue: 12.09.2022

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

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
AR OEL : Argentina. Occupational Exposure Limits

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

AR OEL / CMP-C : Ceiling value

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

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.

AR / Z8