according to GB/T 16483 and GB/T 17519



# **Deltamethrin Liquid Formulation**

Version Revision Date: SDS Number: Date of last issue: 2024/04/06 2.0 2024/09/28 1559909-00018 Date of first issue: 2017/04/25

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Deltamethrin Liquid Formulation

Manufacturer or supplier's details

Company : MSD

Address : No. 485 Jing Tai Road

Pu Tuo District - Shanghai - China 200331

Telephone : +1-908-740-4000

Emergency telephone number : 86-571-87268110

E-mail address : EHSDATASTEWARD@msd.com

Recommended use of the chemical and restrictions on use

Recommended use : Veterinary product Restrictions on use : Not applicable

#### 2. HAZARDS IDENTIFICATION

### **Emergency Overview**

Appearance: liquidColour: colourlessOdour: odourless

Harmful if swallowed. May cause an allergic skin reaction. Causes serious eye damage. Suspected of damaging fertility. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

**GHS Classification** 

Acute toxicity (Oral) : Category 4

Serious eye damage/eye irri-

tation

Category 1

Skin sensitisation : Category 1

Reproductive toxicity : Category 2

Specific target organ toxicity - :

repeated exposure

Category 2

Short-term (acute) aquatic

hazard

Category 1

according to GB/T 16483 and GB/T 17519



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Long-term (chronic) aquatic

hazard

: Category 1

**GHS** label elements

Hazard pictograms









Signal word

Hazard statements H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or re-

peated exposure.

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.

P260 Do not breathe mist or vapours.

P264 Wash skin thoroughly after handling.

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

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:

P301 + P312 + P330 IF SWALLOWED: Call a POISON

CENTER/ doctor if you feel unwell. Rinse mouth.

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

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON

CENTER/ doctor.

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:

according to GB/T 16483 and GB/T 17519



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P405 Store locked up.

### Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

### Physical and chemical hazards

Not classified based on available information.

#### **Health hazards**

Harmful if swallowed. Causes serious eye damage. May cause an allergic skin reaction. Suspected of damaging fertility. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure.

### **Environmental hazards**

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

#### Other hazards which do not result in classification

Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours).

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

## Components

Chemical name	CAS-No.	Concentration (% w/w)
Alpha-(4-(1,1,3,3-Tetramethylbutyl)phenyl)-	9002-93-1	>= 50 -< 70
omega-hydroxypoly(oxy-1,2-ethanediyl)		
deltamethrin (ISO)	52918-63-5	>= 3 -< 10

### 4. 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.

Get medical attention.

In case of skin contact : In case of contact, immediately flush skin with soap and plenty

of water.

Remove contaminated clothing and shoes.

Get medical attention.
Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : 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 immediately.

If swallowed, DO NOT induce vomiting.

Get medical attention.

according to GB/T 16483 and GB/T 17519



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Rinse mouth thoroughly with water.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and

delayed

May cause an allergic skin reaction.

Causes serious eye damage. Suspected of damaging fertility. Suspected of damaging the

unborn child.

Harmful if swallowed.

May cause damage to organs through prolonged or repeated

exposure.

This product contains a pyrethroid.

Pyrethroid poisoning should not be confused with carbamate

or organophosphate poisoning.

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).

Treat symptomatically and supportively. Notes to physician

#### 5. FIREFIGHTING 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) Bromine compounds

Specific extinguishing meth-

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 firefighters

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

Use personal protective equipment.

### 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 pro-

tective equipment recommendations (see section 8).

**Environmental precautions** Avoid release to the environment.

according to GB/T 16483 and GB/T 17519



# **Deltamethrin Liquid Formulation**

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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 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.

### 7. HANDLING AND STORAGE

Handling

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 vapours.

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 as-

sessment

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.

Avoidance of contact : Oxidizing agents

**Storage** 

Conditions for safe storage : Keep in properly labelled 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

according to GB/T 16483 and GB/T 17519



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Packaging material : Unsuitable material: None known.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Components with workplace control parameters

Components	CAS-No.	Value type	Control parame-	Basis	
		(Form of	ters / Permissible		
		exposure)	concentration		
deltamethrin (ISO)	52918-63-5	PC-TWA	0.03 mg/m3	CN OEL	
		TWA	15 μg/m3 (OEB 3)	Internal	
	Further information: DSEN, Skin				
		Wipe limit	100 μg/100 cm <sup>2</sup>	Internal	

**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.

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.

Personal protective equipment

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

sure assessment demonstrates exposures outside the rec-

ommended guidelines, use respiratory protection.

Filter type : Particulates type

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.

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, dis-

posable suits) to avoid exposed skin surfaces.

Use appropriate degowning techniques to remove potentially

contaminated clothing.

Hand protection

Material : Chemical-resistant gloves

Remarks : Consider double gloving.

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

eye flushing systems and safety showers close to the work-

ing place.

according to GB/T 16483 and GB/T 17519



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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.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : colourless

Odour : odourless

Odour Threshold : No data available

pH : 3.4 - 4 (20 °C)

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

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : No data available

Density : No data available

Solubility(ies)

Water solubility : No data available

according to GB/T 16483 and GB/T 17519



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No data available

Partition coefficient: n-

octanol/water

Auto-ignition 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 Not applicable

Particle characteristics

Particle size Not applicable

#### 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

Hazardous decomposition

products

No hazardous decomposition products are known.

#### 11. TOXICOLOGICAL INFORMATION

Exposure routes Inhalation

Skin contact Ingestion Eye contact

**Acute toxicity** 

Harmful if swallowed.

**Product:** 

Acute oral toxicity Acute toxicity estimate: 956.51 mg/kg

Method: Calculation method

Acute inhalation toxicity Acute toxicity estimate: > 10 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

according to GB/T 16483 and GB/T 17519



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### **Components:**

Alpha-(4-(1,1,3,3-Tetramethylbutyl)phenyl)-omega-hydroxypoly(oxy-1,2-ethanediyl):

Acute oral toxicity : LD50 (Rat): 1,900 - 5,000 mg/kg

Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rabbit): > 3,000 mg/kg

Remarks: Based on data from similar materials

deltamethrin (ISO):

Acute oral toxicity : LD50 (Rat): 66.7 mg/kg

LD50 (Rat): 9 - 139 mg/kg

LD50 (Mouse): 19 - 34 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0.8 mg/l

Exposure time: 2 h

Test atmosphere: dust/mist

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

LD50 (Rat): > 800 mg/kg

Acute toxicity (other routes of :

administration)

LD50 (Rat): 2.5 mg/kg

Application Route: Intravenous

LD50 (Mouse): 10 mg/kg

Application Route: Intraperitoneal

### Skin corrosion/irritation

Not classified based on available information.

### Components:

Alpha-(4-(1,1,3,3-Tetramethylbutyl)phenyl)-omega-hydroxypoly(oxy-1,2-ethanediyl):

Result : No skin irritation

deltamethrin (ISO):

Species : Rabbit

Result : No skin irritation

## Serious eye damage/eye irritation

Causes serious eye damage.

### **Components:**

Alpha-(4-(1,1,3,3-Tetramethylbutyl)phenyl)-omega-hydroxypoly(oxy-1,2-ethanediyl):

Result : Irreversible effects on the eye

according to GB/T 16483 and GB/T 17519



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deltamethrin (ISO):

Species : Rabbit

Result : Moderate eye irritation

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified based on available information.

Components:

deltamethrin (ISO):

Test Type : Maximisation Test

Exposure routes : Dermal
Species : Guinea pig
Result : negative

Test Type : Human repeat insult patch test (HRIPT)

Exposure routes : Dermal Species : Humans Result : positive

Germ cell mutagenicity

Not classified based on available information.

**Components:** 

deltamethrin (ISO):

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

Result: negative

Test Type: DNA Repair Test system: Escherichia coli

Result: negative

Test Type: Chromosomal aberration
Test system: Chinese hamster ovary cells

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster lung cells

Concentration: LOAEL: 20 mg/kg

Result: positive

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse

according to GB/T 16483 and GB/T 17519



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Application Route: Oral

Result: negative

Test Type: dominant lethal test

Species: Mouse Application Route: Oral Result: negative

Test Type: sister chromatid exchange assay

Species: Mouse

Cell type: Bone marrow Application Route: Oral Result: negative

## Carcinogenicity

Not classified based on available information.

### **Components:**

## deltamethrin (ISO):

Species : Mouse, male and female

Application Route : oral (feed)
Exposure time : 104 weeks

NOAEL : 8 mg/kg body weight LOAEL : 4 mg/kg body weight

Result : positive Target Organs : Lymph nodes

Species : Rat, male and female

Application Route : oral (feed)
Exposure time : 2 Years
Result : negative

Species : Dog, male and female

Application Route : oral (feed)
Exposure time : 2 Years

NOAEL : 1 mg/kg body weight

Result : negative

### Reproductive toxicity

Suspected of damaging fertility. Suspected of damaging the unborn child.

#### Components:

## deltamethrin (ISO):

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

Species: Rat

Application Route: oral (feed)

Early Embryonic Development: NOAEL: 50 mg/kg body

weight

Symptoms: No effects on fertility, Embryo-foetal toxicity

according to GB/T 16483 and GB/T 17519



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Remarks: Significant toxicity observed in testing

Test Type: Two-generation reproduction toxicity study

Species: Rat

Application Route: Oral

Early Embryonic Development: LOAEL: 84 - 149 mg/kg body

weight

Symptoms: No effects on fertility, Embryo-foetal toxicity

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

Fertility: LOAEL: 1 mg/kg body weight

Symptoms: Effects on fertility Target Organs: Testes

Effects on foetal develop-

ment

Test Type: Development

Species: Mouse

Application Route: oral (gavage)

Developmental Toxicity: LOAEL: 1 mg/kg body weight

Result: Skeletal malformations Remarks: Maternal toxicity observed.

Test Type: Development Species: Rat, female

Developmental Toxicity: NOAEL: 10 mg/kg body weight

Symptoms: No effects on foetal development

Test Type: Development Species: Rabbit, female

Application Route: oral (gavage)

Developmental Toxicity: NOAEL: 16 mg/kg body weight

Symptoms: No effects on foetal development

Reproductive toxicity - As-

sessment

Some evidence of adverse effects on sexual function and

fertility, and/or on development, based on animal experiments.

#### STOT - single exposure

Not classified based on available information.

### **Components:**

## deltamethrin (ISO):

Assessment : May cause respiratory irritation.

### STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

according to GB/T 16483 and GB/T 17519



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#### **Components:**

## deltamethrin (ISO):

Exposure routes Ingestion

Target Organs Central nervous system, Immune system

Causes damage to organs through prolonged or repeated Assessment

exposure.

Exposure routes : inhalation (dust/mist/fume) : Central nervous system Target Organs

Assessment : Causes damage to organs through prolonged or repeated

exposure.

### Repeated dose toxicity

## **Components:**

# deltamethrin (ISO):

Species : Rat, male and female

NOAEL : 1 mg/kg LOAEL : 2.5 mg/kg Application Route : Oral Exposure time : 13 Weeks : Nervous system Target Organs Symptoms : hyperexcitability

Species LOAEL Application Route Exposure time Symptoms Rat 3 mg/m3

: inhalation (dust/mist/fume) : 2 wk / 5 d/wk / 6 h/d

Symptoms Local irritation, respiratory tract irritation

Species
NOAEL
LOAEL
Application Route
Exposure time
Target Organs Dog 0.1 mg/kg 1 mg/kg Oral 13 Weeks Nervous system

Symptoms Dilatation of the pupil, Vomiting, Tremors, Diarrhoea, Saliva-

tion

Species Rat NOAEL 14 mg/kg LOAEL 54 mg/kg Application Route Oral Exposure time 91 d

Target Organs Nervous system

Species Mouse LÖAEL 6 mg/kg Application Route Oral

according to GB/T 16483 and GB/T 17519



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Exposure time : 12 Weeks Target Organs Immune system

Symptoms immune system effects

## **Aspiration toxicity**

Not classified based on available information.

## **Experience with human exposure**

## **Components:**

## deltamethrin (ISO):

Inhalation Symptoms: respiratory tract irritation, Dizziness, Sweating,

Headache, Nausea, Vomiting, anorexia, Fatigue, tingling,

Palpitation, Blurred vision, muscle twitching

Symptoms: Skin irritation, Erythema, pruritis, Headache, Nau-Skin contact

sea, Vomiting, Dizziness, tingling, Sweating, muscle twitching,

Blurred vision, Fatigue, anorexia, Allergic reactions

Symptoms: muscle pain, Small pupils Ingestion

### 12. ECOLOGICAL INFORMATION

## **Ecotoxicity**

# **Components:**

#### Alpha-(4-(1,1,3,3-Tetramethylbutyl)phenyl)-omega-hydroxypoly(oxy-1,2-ethanediyl):

: LC50 (Pimephales promelas (fathead minnow)): 4 - 8.9 mg/l Toxicity to fish

Exposure time: 96 h

Remarks: Based on data from similar materials

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 18 - 26 mg/l

Exposure time: 48 h

Remarks: Based on data from similar materials

Toxicity to microorganisms : IC50: 5,000 mg/l

Exposure time: 16 h

## deltamethrin (ISO):

Toxicity to fish LC50 (Cyprinodon variegatus (sheepshead minnow)): 0.00048

mg/l

Exposure time: 96 h

LC50 (Oncorhynchus mykiss (rainbow trout)): 0.00039 mg/l

Exposure time: 96 h

Toxicity to daphnia and other:

aquatic invertebrates

EC50 (Mysidopsis bahia (opossum shrimp)): 0.0037 µg/l

Exposure time: 48 h

EC50 (Daphnia magna (Water flea)): 0.0035 mg/l

according to GB/T 16483 and GB/T 17519



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Exposure time: 48 h

LC50 (Gammarus fasciatus (freshwater shrimp)): 0.0003 µg/l

Exposure time: 96 h

Toxicity to algae/aquatic

plants

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

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: No toxicity at the limit of solubility

M-Factor (Acute aquatic tox- :

1,000,000

Toxicity to fish (Chronic tox-

icity)

NOEC (Pimephales promelas (fathead minnow)): 0.000022

Exposure time: 36 d

NOEC (Pimephales promelas (fathead minnow)): 0.000017

Exposure time: 260 d

Toxicity to daphnia and other: aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.0041 µg/l

Exposure time: 21 d

M-Factor (Chronic aquatic : 1,000,000

toxicity)

## Persistence and degradability

## **Components:**

## Alpha-(4-(1,1,3,3-Tetramethylbutyl)phenyl)-omega-hydroxypoly(oxy-1,2-ethanediyl):

Biodegradability Biodegradation: > 60 %

Exposure time: 28 d

Method: OECD Test Guideline 301B

Result: Not readily biodegradable.

Biodegradation: 36 % Exposure time: 28 d Method: Closed Bottle test

deltamethrin (ISO):

Stability in water Hydrolysis: 0 %(30 d)

### Bioaccumulative potential

### **Components:**

## Alpha-(4-(1,1,3,3-Tetramethylbutyl)phenyl)-omega-hydroxypoly(oxy-1,2-ethanediyl):

Partition coefficient: n-

octanol/water

: log Pow: 2.7

according to GB/T 16483 and GB/T 17519



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deltamethrin (ISO):

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)

Bioconcentration factor (BCF): 1,800

Partition coefficient: n-

octanol/water

log Pow: 4.6

Mobility in soil

Components:

deltamethrin (ISO):

Distribution among environ-

mental compartments

log Koc: 7.2

Other adverse effects

No data available

#### 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.

### 14. TRANSPORT INFORMATION

### International Regulations

**UNRTDG** 

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(deltamethrin (ISO), Alpha-(4-(1,1,3,3-

Tetramethylbutyl)phenyl)-omega-hydroxypoly(oxy-1,2-

ethanediyl))

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.

(deltamethrin (ISO), Alpha-(4-(1,1,3,3-

Tetramethylbutyl)phenyl)-omega-hydroxypoly(oxy-1,2-

ethanediyl))

Class : 9 Packing group : III

Labels : Miscellaneous

according to GB/T 16483 and GB/T 17519



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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.

(deltamethrin (ISO), Alpha-(4-(1,1,3,3-

Tetramethylbutyl)phenyl)-omega-hydroxypoly(oxy-1,2-

ethanediyl))

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.

## **National Regulations**

## GB 6944/12268

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(deltamethrin (ISO), Alpha-(4-(1,1,3,3-

Tetramethylbutyl)phenyl)-omega-hydroxypoly(oxy-1,2-

ethanediyl))

Class : 9
Packing group : III
Labels : 9
Marine pollutant : no

#### 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.

## 15. REGULATORY INFORMATION

## National regulatory information

## Law on the Prevention and Control of Occupational Diseases

#### **Regulations on Safety Management of Hazardous Chemicals**

Catalogue of Hazardous Chemicals : This product is not listed in the cata-

logue of hazardous chemicals, but it meets the definition of hazardous chemicals and its principles of de-

termination.

according to GB/T 16483 and GB/T 17519



# **Deltamethrin Liquid Formulation**

Version Revision Date: SDS Number: Date of last issue: 2024/04/06 2.0 2024/09/28 1559909-00018 Date of first issue: 2017/04/25

Identification of Major Hazard Installations for Hazardous Chemicals (GB : Not listed

18218)

Hazardous Chemicals for Priority Management under Not listed

SAWS

Regulations on Labour Protection in Workplaces where Toxic Substances are Used

Catalogue of Highly Toxic Chemicals : Not listed

Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

China Severely Restricted Toxic Chemicals for Import

Not listed

and Export

**Regulation on the Administration of Precursor Chemicals** 

Catalogue and Classification of Precursor Chemicals : Not listed

Yangtze River Protection Law

This product does not contain any dangerous chemicals prohibited for inland river transport.

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

**AICS** not determined

DSL not determined

**IECSC** not determined

16. OTHER INFORMATION

**Revision Date** : 2024/09/28

**Further information** 

compile the Safety Data Sheet

Sources of key data used to : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

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

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

Date format : yyyy/mm/dd

Full text of other abbreviations

CN OEL Occupational exposure limits for hazardous agents in the

workplace - Chemical hazardous agents.

CN OEL / PC-TWA Permissible concentration - time weighted average

according to GB/T 16483 and GB/T 17519



# **Deltamethrin Liquid Formulation**

Version Revision Date: SDS Number: Date of last issue: 2024/04/06 2.0 2024/09/28 1559909-00018 Date of first issue: 2017/04/25

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

#### **Disclaimer**

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.

CN / EN