

## Deltamethrin (1%) Liquid Formulation

Version 3.1      Revision Date: 03.11.2023      SDS Number: 10852988-00005      Date of last issue: 30.09.2023  
 Date of first issue: 15.09.2022

---

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Trade name : Deltamethrin (1%) Liquid Formulation

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub-stance/Mixture : Veterinary product

Recommended restrictions on use : Not applicable

#### 1.3 Details of the supplier of the safety data sheet

Company : MSD  
 20 Spartan Road  
 1619 Spartan, South Africa

Telephone : +27119239300

E-mail address of person responsible for the SDS : EHSDATASTEWARD@msd.com

#### 1.4 Emergency telephone number

+1-908-423-6000

---

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Carcinogenicity, Category 1B	H350: May cause cancer.
Specific target organ toxicity - repeated exposure, Category 2	H373: May cause damage to organs through prolonged or repeated exposure.
Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 1	H410: Very toxic to aquatic life with long lasting effects.

#### 2.2 Label elements

##### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

## Deltamethrin (1%) Liquid Formulation

Version 3.1      Revision Date: 03.11.2023      SDS Number: 10852988-00005      Date of last issue: 30.09.2023  
 Date of first issue: 15.09.2022

Hazard statements : H317 May cause an allergic skin reaction.  
 H350 May cause cancer.  
 H373 May cause damage to organs through prolonged or repeated exposure.  
 H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**  
 P201 Obtain special instructions before use.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**  
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
 P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
 P391 Collect spillage.

Hazardous components which must be listed on the label:

deltamethrin (ISO)  
 Formaldehyde

**Additional Labelling**

Restricted to professional users.

**2.3 Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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).

**SECTION 3: Composition/information on ingredients****3.2 Mixtures****Components**

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
deltamethrin (ISO)	52918-63-5 258-256-6 607-319-00-X	Acute Tox. 3; H301 Acute Tox. 3; H331 Eye Irrit. 2; H319 Skin Sens. 1A; H317 Repr. 2; H361fd STOT SE 3; H335 STOT RE 1; H372 (Central nervous system, Immune system)	>= 1 - < 2,5

## Deltamethrin (1%) Liquid Formulation

Version 3.1      Revision Date: 03.11.2023      SDS Number: 10852988-00005      Date of last issue: 30.09.2023  
 Date of first issue: 15.09.2022

		STOT RE 1; H372 (Central nervous system) Aquatic Acute 1; H400 Aquatic Chronic 1; H410	
		M-Factor (Acute aquatic toxicity): 1.000.000 M-Factor (Chronic aquatic toxicity): 1.000.000	
Formaldehyde	50-00-0 200-001-8 605-001-00-5 01-2119488953-20	Flam. Gas 1B; H221 Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 3; H311 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Muta. 2; H341 Carc. 1B; H350 STOT SE 3; H335	$\geq 0,2 - < 1$
Nonylphenol, ethoxylated	9016-45-9	Acute Tox. 4; H302 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	$\geq 0,1 - < 0,25$
		M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 10	
Methanol	67-56-1 200-659-6 603-001-00-X	Flam. Liq. 2; H225 Acute Tox. 3; H301 Acute Tox. 3; H331 Acute Tox. 3; H311 STOT SE 1; H370 (Eye, Central nervous system)	$\geq 0,1 - < 1$

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

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

**Deltamethrin (1%) Liquid Formulation**

Version	Revision Date:	SDS Number:	Date of last issue: 30.09.2023
3.1	03.11.2023	10852988-00005	Date of first issue: 15.09.2022

---

- When symptoms persist or in all cases of doubt seek medical advice.
- 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).
- If inhaled : If inhaled, remove to fresh air.  
Get medical attention.
- In case of skin contact : In case of contact, immediately flush skin with soap and plenty of water.  
Remove contaminated clothing and shoes.  
Get medical attention.  
Wash clothing before reuse.  
Thoroughly clean shoes before reuse.
- In case of eye contact : Flush eyes with water as a precaution.  
Get medical attention if irritation develops and persists.
- If swallowed : If swallowed, DO NOT induce vomiting.  
Get medical attention.  
Rinse mouth thoroughly with water.

**4.2 Most important symptoms and effects, both acute and delayed**

- Risks : May cause an allergic skin reaction.  
May cause cancer.  
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.

**4.3 Indication of any immediate medical attention and special treatment needed**

- Treatment : Treat symptomatically and supportively.
- 

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

- Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Unsuitable extinguishing media : None known.

**5.2 Special hazards arising from the substance or mixture**

- Specific hazards during fire-fighting : Exposure to combustion products may be a hazard to health.

**Deltamethrin (1%) Liquid Formulation**

Version	Revision Date:	SDS Number:	Date of last issue: 30.09.2023
3.1	03.11.2023	10852988-00005	Date of first issue: 15.09.2022

---

Hazardous combustion products : Carbon oxides  
Nitrogen oxides (NO<sub>x</sub>)  
Bromine compounds

**5.3 Advice for firefighters**

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances 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.

---

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Use personal protective equipment.  
Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).

**6.2 Environmental precautions**

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.

**6.3 Methods and material 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 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.

**6.4 Reference to other sections**

See sections: 7, 8, 11, 12 and 13.

## Deltamethrin (1%) Liquid Formulation

Version            Revision Date:            SDS Number:            Date of last issue: 30.09.2023  
3.1                    03.11.2023                10852988-00005        Date of first issue: 15.09.2022

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe 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.  
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.
- 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. 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.

#### 7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers        : Keep in properly labelled containers. Store locked up. Keep tightly closed. Store in accordance with the particular national regulations.
- Advice on common storage        : Do not store with the following product types:  
Strong oxidizing agents  
Self-reactive substances and mixtures  
Organic peroxides  
Explosives  
Gases

#### 7.3 Specific end use(s)

- Specific use(s)                    : No data available

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis

## Deltamethrin (1%) Liquid Formulation

Version 3.1      Revision Date: 03.11.2023      SDS Number: 10852988-00005      Date of last issue: 30.09.2023  
 Date of first issue: 15.09.2022

deltamethrin (ISO)	52918-63-5	TWA	15 µg/m3 (OEB 3)	Internal
	Further information: DSEN, Skin			
		Wipe limit	100 µg/100 cm <sup>2</sup>	Internal
Formaldehyde	50-00-0	OEL- ML	0,2 ppm	ZA OEL
	Further information: Occupational Exposure Limits - Maximum Limits For Hazardous Chemical Agents, dermal sensitisation, potential to produce dermal sensitisation, respiratory sensitisation, potential to produce respiratory sensitisation, denotes carcinogenicity, which is based on GHS categorisation, including category 1A, 1B			
		OEL - ML STEL/C	0,6 ppm	ZA OEL
	Further information: Occupational Exposure Limits - Maximum Limits For Hazardous Chemical Agents, dermal sensitisation, potential to produce dermal sensitisation, respiratory sensitisation, potential to produce respiratory sensitisation, denotes carcinogenicity, which is based on GHS categorisation, including category 1A, 1B			
		TWA	0,3 ppm 0,37 mg/m3	2004/37/EC
		STEL	0,6 ppm 0,74 mg/m3	2004/37/EC
Methanol	67-56-1	OEL-RL	400 ppm	ZA OEL
	Further information: danger of cutaneous absorption, Occupational Exposure Limits - Restricted Limits For Hazardous Chemical Agents			
		OEL- RL STEL/C	500 ppm	ZA OEL
	Further information: danger of cutaneous absorption, Occupational Exposure Limits - Restricted Limits For Hazardous Chemical Agents			
		TWA	200 ppm 260 mg/m3	2006/15/EC

**Biological occupational exposure limits**

Substance name	CAS-No.	Control parameters	Sampling time	Basis
Methanol	67-56-1	Methanol: 15 mg/l (Urine)	End of shift	ZA BEI

**Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:**

Substance name	End Use	Exposure routes	Potential health effects	Value
Propylene glycol	Workers	Inhalation	Long-term local effects	10 mg/m3
	Workers	Inhalation	Long-term systemic effects	168 mg/m3
	Consumers	Inhalation	Long-term local effects	10 mg/m3
	Consumers	Inhalation	Long-term systemic effects	50 mg/m3
Formaldehyde	Workers	Inhalation	Long-term systemic effects	9 mg/m3
	Workers	Inhalation	Long-term local effects	0,375 mg/m3
	Workers	Inhalation	Acute local effects	0,75 mg/m3
	Workers	Skin contact	Long-term systemic effects	240 mg/kg bw/day
	Workers	Skin contact	Long-term local effects	0,037 mg/cm2

# SAFETY DATA SHEET



## Deltamethrin (1%) Liquid Formulation

Version 3.1      Revision Date: 03.11.2023      SDS Number: 10852988-00005      Date of last issue: 30.09.2023  
 Date of first issue: 15.09.2022

			ffects	
	Consumers	Inhalation	Long-term systemic effects	3,2 mg/m <sup>3</sup>
	Consumers	Inhalation	Long-term local effects	0,1 mg/m <sup>3</sup>
	Consumers	Skin contact	Long-term systemic effects	102 mg/kg bw/day
	Consumers	Skin contact	Long-term local effects	0,012 mg/cm <sup>2</sup>
	Consumers	Ingestion	Long-term systemic effects	4,1 mg/kg bw/day
Methanol	Workers	Inhalation	Long-term systemic effects	130 mg/m <sup>3</sup>
	Workers	Inhalation	Acute systemic effects	130 mg/m <sup>3</sup>
	Workers	Inhalation	Long-term local effects	130 mg/m <sup>3</sup>
	Workers	Inhalation	Acute local effects	130 mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effects	20 mg/kg bw/day
	Workers	Skin contact	Acute systemic effects	20 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	26 mg/m <sup>3</sup>
	Consumers	Inhalation	Acute systemic effects	26 mg/m <sup>3</sup>
	Consumers	Inhalation	Long-term local effects	26 mg/m <sup>3</sup>
	Consumers	Inhalation	Acute local effects	26 mg/m <sup>3</sup>
	Consumers	Skin contact	Long-term systemic effects	4 mg/kg bw/day
	Consumers	Skin contact	Acute systemic effects	4 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	4 mg/kg bw/day
	Consumers	Ingestion	Acute systemic effects	4 mg/kg bw/day

### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Propylene glycol	Fresh water	260 mg/l
	Freshwater - intermittent	183 mg/l
	Marine water	26 mg/l
	Sewage treatment plant	20000 mg/l
	Fresh water sediment	572 mg/kg dry weight (d.w.)
	Marine sediment	57,2 mg/kg dry weight (d.w.)
	Soil	50 mg/kg dry weight (d.w.)
Formaldehyde	Fresh water	0,44 mg/l
	Freshwater - intermittent	4,44 mg/l
	Marine water	0,44 mg/l
	Sewage treatment plant	0,19 mg/l



## Deltamethrin (1%) Liquid Formulation

Version 3.1      Revision Date: 03.11.2023      SDS Number: 10852988-00005      Date of last issue: 30.09.2023  
 Date of first issue: 15.09.2022

	Fresh water sediment	2,3 mg/kg dry weight (d.w.)
	Marine sediment	2,3 mg/kg dry weight (d.w.)
	Soil	0,2 mg/kg dry weight (d.w.)

### 8.2 Exposure controls

#### 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 containment devices).

Minimize open handling.

#### Personal protective equipment

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.

Hand protection

Material : Chemical-resistant gloves

Remarks : Consider double gloving.

Skin and body protection : Work uniform or laboratory coat.  
 Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces.

Use appropriate degowning techniques to remove potentially contaminated clothing.

Respiratory protection : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.

Filter type : Combined particulates and inorganic gas/vapour type (B-P)

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance : suspension  
 Colour : white  
 Odour : No data available  
 Odour Threshold : No data available

pH : 6,4 - 7,4

Melting point/freezing point : No data available

Initial boiling point and boiling : No data available

**Deltamethrin (1%) Liquid Formulation**

Version 3.1      Revision Date: 03.11.2023      SDS Number: 10852988-00005      Date of last issue: 30.09.2023  
Date of first issue: 15.09.2022

---

range	
Flash point	: No data available
Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable
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	: 0,994 - 1,014 (20 °C)
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	: 230 - 320 mm <sup>2</sup> /s No data available
Explosive properties	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

**9.2 Other information**

Flammability (liquids)	: No data available
Molecular weight	: No data available
Particle size	: Not applicable

---

**SECTION 10: Stability and reactivity****10.1 Reactivity**

Not classified as a reactivity hazard.

**10.2 Chemical stability**

Stable under normal conditions.



**Deltamethrin (1%) Liquid Formulation**

Version 3.1      Revision Date: 03.11.2023      SDS Number: 10852988-00005      Date of last issue: 30.09.2023  
Date of first issue: 15.09.2022

---

Acute toxicity (other routes of administration) : LD50 (Rat): 2,5 mg/kg  
Application Route: Intravenous  
  
LD50 (Mouse): 10 mg/kg  
Application Route: Intraperitoneal

**Formaldehyde:**

Acute oral toxicity : Acute toxicity estimate: 100 mg/kg  
Method: Expert judgement

Acute inhalation toxicity : Acute toxicity estimate: 100 ppm  
Exposure time: 4 h  
Test atmosphere: gas  
Method: Expert judgement

Acute dermal toxicity : LD50 (Rabbit): 270 mg/kg

**Nonylphenol, ethoxylated:**

Acute oral toxicity : LD50 (Rat): 500 - 2.000 mg/kg

**Methanol:**

Acute oral toxicity : Acute toxicity estimate (Humans): 300 mg/kg  
Method: Expert judgement

Acute inhalation toxicity : Acute toxicity estimate: 3 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour  
Method: Expert judgement  
Remarks: Based on national or regional regulation.

Acute dermal toxicity : Acute toxicity estimate (Humans): 300 mg/kg  
Method: Expert judgement

**Skin corrosion/irritation**

Not classified based on available information.

**Components:****deltamethrin (ISO):**

Species : Rabbit  
Result : No skin irritation

**Formaldehyde:**

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : Corrosive after 3 minutes to 1 hour of exposure

**Nonylphenol, ethoxylated:**

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : No skin irritation

**Deltamethrin (1%) Liquid Formulation**

Version 3.1      Revision Date: 03.11.2023      SDS Number: 10852988-00005      Date of last issue: 30.09.2023  
Date of first issue: 15.09.2022

---

**Methanol:**

Species : Rabbit  
Result : No skin irritation

**Serious eye damage/eye irritation**

Not classified based on available information.

**Components:****deltamethrin (ISO):**

Species : Rabbit  
Result : Moderate eye irritation

**Formaldehyde:**

Species : Rabbit  
Result : Irreversible effects on the eye

**Nonylphenol, ethoxylated:**

Species : Rabbit  
Method : OECD Test Guideline 405  
Result : Irreversible effects on the eye

**Methanol:**

Species : Rabbit  
Result : No 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

**Formaldehyde:**

Test Type : Local lymph node assay (LLNA)  
Exposure routes : Skin contact

## Deltamethrin (1%) Liquid Formulation

Version 3.1      Revision Date: 03.11.2023      SDS Number: 10852988-00005      Date of last issue: 30.09.2023  
 Date of first issue: 15.09.2022

Species : Mouse  
 Method : OECD Test Guideline 429  
 Result : positive

Assessment : Probability or evidence of high skin sensitisation rate in humans

### **Nonylphenol, ethoxylated:**

Test Type : Maximisation Test  
 Exposure routes : Skin contact  
 Species : Guinea pig  
 Result : negative  
 Remarks : Based on data from similar materials

### **Methanol:**

Test Type : Maximisation Test  
 Exposure routes : Skin contact  
 Species : Guinea pig  
 Result : negative

### **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  
 Application Route: Oral  
 Result: negative

Test Type: dominant lethal test  
 Species: Mouse  
 Application Route: Oral  
 Result: negative

Test Type: sister chromatid exchange assay

## Deltamethrin (1%) Liquid Formulation

Version 3.1      Revision Date: 03.11.2023      SDS Number: 10852988-00005      Date of last issue: 30.09.2023  
 Date of first issue: 15.09.2022

---

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

**Formaldehyde:**

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

Test Type: Chromosome aberration test in vitro  
 Result: positive

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo  
 cytogenetic assay)  
 Species: Rat  
 Application Route: Inhalation  
 Result: positive

Germ cell mutagenicity- Assessment : Positive result(s) from in vivo mammalian somatic cell mutagenicity tests.

**Nonylphenol, ethoxylated:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
 Result: negative  
 Remarks: Based on data from similar materials

**Methanol:**

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  
 Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo  
 cytogenetic assay)  
 Species: Mouse  
 Application Route: Intraperitoneal injection  
 Result: negative

**Carcinogenicity**

May cause cancer.

**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

## Deltamethrin (1%) Liquid Formulation

Version 3.1      Revision Date: 03.11.2023      SDS Number: 10852988-00005      Date of last issue: 30.09.2023  
 Date of first issue: 15.09.2022

---

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

### Formaldehyde:

Species : Rat  
 Application Route : inhalation (gas)  
 Exposure time : 28 Months  
 Result : positive

Carcinogenicity - Assessment : Sufficient evidence of carcinogenicity in animal experiments

### Methanol:

Species : Mouse  
 Application Route : inhalation (vapour)  
 Exposure time : 18 Months  
 Result : negative

### Reproductive toxicity

Not classified based on available information.

### 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  
 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



## Deltamethrin (1%) Liquid Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 30.09.2023
3.1	03.11.2023	10852988-00005	Date of first issue: 15.09.2022

---

Target Organs: Testes

Effects on foetal development : 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 - Assessment : Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

**Formaldehyde:**

Effects on foetal development : Test Type: Embryo-foetal development  
Species: Rat  
Application Route: inhalation (gas)  
Result: negative

**Methanol:**

Effects on fertility : Test Type: Fertility/early embryonic development  
Species: Mouse  
Application Route: Ingestion  
Result: negative

Effects on foetal development : Test Type: Embryo-foetal development  
Species: Mouse  
Application Route: Ingestion  
Result: positive  
Remarks: The effects were seen only at maternally toxic doses.

**STOT - single exposure**

Not classified based on available information.

**Components:****deltamethrin (ISO):**

Assessment : May cause respiratory irritation.

**Formaldehyde:**

Assessment : May cause respiratory irritation.

## Deltamethrin (1%) Liquid Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 30.09.2023
3.1	03.11.2023	10852988-00005	Date of first issue: 15.09.2022

---

### Methanol:

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

### STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

### Components:

#### deltamethrin (ISO):

Exposure routes : Ingestion  
 Target Organs : Central nervous system, Immune system  
 Assessment : Causes damage to organs through prolonged or repeated exposure.

Exposure routes : inhalation (dust/mist/fume)  
 Target Organs : Central nervous system  
 Assessment : Causes damage to organs through prolonged or repeated exposure.

### Formaldehyde:

Exposure routes : inhalation (gas)  
 Assessment : The substance or mixture is not classified as specific target organ toxicant, 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  
 Target Organs : Nervous system  
 Symptoms : hyperexcitability

Species : Rat  
 LOAEL : 3 mg/m<sup>3</sup>  
 Application Route : inhalation (dust/mist/fume)  
 Exposure time : 2 wk / 5 d/wk / 6 h/d  
 Symptoms : Local irritation, respiratory tract irritation

Species : Dog  
 NOAEL : 0,1 mg/kg  
 LOAEL : 1 mg/kg  
 Application Route : Oral  
 Exposure time : 13 Weeks  
 Target Organs : Nervous system  
 Symptoms : Dilatation of the pupil, Vomiting, Tremors, Diarrhoea, Salivation

## Deltamethrin (1%) Liquid Formulation

Version 3.1      Revision Date: 03.11.2023      SDS Number: 10852988-00005      Date of last issue: 30.09.2023  
 Date of first issue: 15.09.2022

---

Species : Rat  
 NOAEL : 14 mg/kg  
 LOAEL : 54 mg/kg  
 Application Route : Oral  
 Exposure time : 91 d  
 Target Organs : Nervous system

Species : Mouse  
 LOAEL : 6 mg/kg  
 Application Route : Oral  
 Exposure time : 12 Weeks  
 Target Organs : Immune system  
 Symptoms : immune system effects

### Formaldehyde:

Species : Rat  
 NOAEL : 6 ppm  
 LOAEL : 10 ppm  
 Application Route : inhalation (gas)  
 Exposure time : 28 Days

### Methanol:

Species : Rat  
 NOAEL : 1,06 mg/l  
 Application Route : inhalation (vapour)  
 Exposure time : 90 Days

### 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  
 Skin contact : Symptoms: Skin irritation, Erythema, pruritis, Headache, Nausea, Vomiting, Dizziness, tingling, Sweating, muscle twitching, Blurred vision, Fatigue, anorexia, Allergic reactions  
 Ingestion : Symptoms: muscle pain, Small pupils

---

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Components:

#### **deltamethrin (ISO):**

Toxicity to fish : LC50 (Cyprinodon variegatus (sheepshead minnow)): 0,00048 mg/l

## Deltamethrin (1%) Liquid Formulation

Version 3.1      Revision Date: 03.11.2023      SDS Number: 10852988-00005      Date of last issue: 30.09.2023  
 Date of first issue: 15.09.2022

		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 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 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 Remarks: No toxicity at the limit of solubility
M-Factor (Acute aquatic toxicity)	:	1.000.000
Toxicity to fish (Chronic toxicity)	:	NOEC: 0,000022 mg/l Exposure time: 36 d Species: Pimephales promelas (fathead minnow)
		NOEC: 0,000017 mg/l Exposure time: 260 d Species: Pimephales promelas (fathead minnow)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,0041 µg/l Exposure time: 21 d Species: Daphnia magna (Water flea)
M-Factor (Chronic aquatic toxicity)	:	1.000.000
<b>Formaldehyde:</b>		
Toxicity to fish	:	LC50 : 6,7 mg/l Exposure time: 96 h Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia pulex (Water flea)): 5,8 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): 4,89 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to microorganisms	:	EC50 : 34,1 mg/l Exposure time: 120 h
Toxicity to fish (Chronic tox-	:	NOEC: >= 48 mg/l

## Deltamethrin (1%) Liquid Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 30.09.2023
3.1	03.11.2023	10852988-00005	Date of first issue: 15.09.2022

icity) Exposure time: 28 d  
Species: *Oryzias latipes* (Orange-red killifish)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC:  $\geq 6,4$  mg/l  
Exposure time: 21 d  
Species: *Daphnia magna* (Water flea)  
Method: OECD Test Guideline 211

**Nonylphenol, ethoxylated:**

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 (*Ceriodaphnia dubia* (water flea)):  $> 0,1 - 1$  mg/l  
Exposure time: 48 h  
Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants : ErC50 (*Selenastrum capricornutum* (green algae)):  $> 1 - 10$  mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201  
Remarks: Based on data from similar materials

EC10 (*Selenastrum capricornutum* (green algae)):  $> 1$  mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201  
Remarks: Based on data from similar materials

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : NOEC:  $> 0,1 - 1$  mg/l  
Exposure time: 100 d  
Species: *Oryzias latipes* (Japanese medaka)  
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC:  $> 0,001 - 0,01$  mg/l  
Exposure time: 28 d  
Species: *Mysidopsis bahia* (opossum shrimp)  
Remarks: Based on data from similar materials

M-Factor (Chronic aquatic toxicity) : 10

**Methanol:**

Toxicity to fish : LC50 (*Lepomis macrochirus* (Bluegill sunfish)): 15.400 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)):  $> 10.000$  mg/l  
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (*Pseudokirchneriella subcapitata* (green algae)): 22.000 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 201

**Deltamethrin (1%) Liquid Formulation**

Version	Revision Date:	SDS Number:	Date of last issue: 30.09.2023
3.1	03.11.2023	10852988-00005	Date of first issue: 15.09.2022

---

Toxicity to microorganisms : IC50 : > 1.000 mg/l  
Exposure time: 3 h

Toxicity to fish (Chronic toxicity) : NOEC: 15.800 mg/l  
Exposure time: 200 h  
Species: *Oryzias latipes* (Orange-red killifish)

**12.2 Persistence and degradability****Components:****deltamethrin (ISO):**

Stability in water : Hydrolysis: 0 %(30 d)

**Formaldehyde:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 91 %  
Exposure time: 14 d  
Method: OECD Test Guideline 301C  
Remarks: Based on data from similar materials

**Nonylphenol, ethoxylated:**

Biodegradability : Result: Not readily biodegradable.  
Remarks: Based on data from similar materials

**Methanol:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 95 %  
Exposure time: 20 d

**12.3 Bioaccumulative potential****Components:****deltamethrin (ISO):**

Bioaccumulation : Species: *Lepomis macrochirus* (Bluegill sunfish)  
Bioconcentration factor (BCF): 1.800

Partition coefficient: n-octanol/water : log Pow: 4,6

**Formaldehyde:**

Partition coefficient: n-octanol/water : log Pow: 0,35  
Remarks: Calculation

**Nonylphenol, ethoxylated:**

Partition coefficient: n-octanol/water : log Pow: 4,48

**Methanol:**

Bioaccumulation : Species: *Leuciscus idus* (Golden orfe)

## Deltamethrin (1%) Liquid Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 30.09.2023
3.1	03.11.2023	10852988-00005	Date of first issue: 15.09.2022

---

Bioconcentration factor (BCF): < 10

Partition coefficient: n-octanol/water : log Pow: -0,77

### 12.4 Mobility in soil

#### Components:

##### **deltamethrin (ISO):**

Distribution among environmental compartments : log Koc: 7,2

### 12.5 Results of PBT and vPvB assessment

#### Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

#### Product:

Endocrine disrupting potential : This substance/mixture contains components considered to have endocrine disrupting properties for environment, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

#### Components:

##### **Nonylphenol, ethoxylated:**

Endocrine disrupting potential : The substance is considered to have endocrine disrupting properties according to REACH Article 57(f) for the environment.

---

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities. Do not dispose of waste into sewer.

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

### 14.1 UN number

## Deltamethrin (1%) Liquid Formulation

Version 3.1      Revision Date: 03.11.2023      SDS Number: 10852988-00005      Date of last issue: 30.09.2023  
 Date of first issue: 15.09.2022

---

**ADN** : UN 3082  
**ADR** : UN 3082  
**RID** : UN 3082  
**IMDG** : UN 3082  
**IATA** : UN 3082

## 14.2 UN proper shipping name

**ADN** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
 (deltamethrin (ISO))  
**ADR** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
 (deltamethrin (ISO))  
**RID** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
 (deltamethrin (ISO))  
**IMDG** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
 (deltamethrin (ISO))  
**IATA** : Environmentally hazardous substance, liquid, n.o.s.  
 (deltamethrin (ISO))

## 14.3 Transport hazard class(es)

	Class	Subsidiary risks
<b>ADN</b>	: 9	
<b>ADR</b>	: 9	
<b>RID</b>	: 9	
<b>IMDG</b>	: 9	
<b>IATA</b>	: 9	

## 14.4 Packing group

**ADN**  
 Packing group : III  
 Classification Code : M6  
 Hazard Identification Number : 90  
 Labels : 9

**ADR**  
 Packing group : III  
 Classification Code : M6  
 Hazard Identification Number : 90  
 Labels : 9  
 Tunnel restriction code : (-)

**RID**  
 Packing group : III  
 Classification Code : M6  
 Hazard Identification Number : 90



## Deltamethrin (1%) Liquid Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 30.09.2023
3.1	03.11.2023	10852988-00005	Date of first issue: 15.09.2022

---

Labels : 9

**IMDG**

Packing group : III  
 Labels : 9  
 EmS Code : F-A, S-F

**IATA (Cargo)**

Packing instruction (cargo aircraft) : 964  
 Packing instruction (LQ) : Y964  
 Packing group : III  
 Labels : Miscellaneous

**IATA (Passenger)**

Packing instruction (passenger aircraft) : 964  
 Packing instruction (LQ) : Y964  
 Packing group : III  
 Labels : Miscellaneous

**14.5 Environmental hazards****ADN**

Environmentally hazardous : yes

**ADR**

Environmentally hazardous : yes

**RID**

Environmentally hazardous : yes

**IMDG**

Marine pollutant : yes

**IATA (Passenger)**

Environmentally hazardous : yes

**IATA (Cargo)**

Environmentally hazardous : yes

**14.6 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.

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Remarks : Not applicable for product as supplied.

---

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

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

AICS : not determined

DSL : not determined

## Deltamethrin (1%) Liquid Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 30.09.2023
3.1	03.11.2023	10852988-00005	Date of first issue: 15.09.2022

---

IECSC : not determined

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

---

### SECTION 16: Other information

Other information : 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 H-Statements

H221	: Flammable gas.
H225	: Highly flammable liquid and vapour.
H301	: Toxic if swallowed.
H302	: Harmful if swallowed.
H311	: Toxic in contact with skin.
H314	: Causes severe skin burns and eye damage.
H317	: May cause an allergic skin reaction.
H318	: Causes serious eye damage.
H319	: Causes serious eye irritation.
H330	: Fatal if inhaled.
H331	: Toxic if inhaled.
H335	: May cause respiratory irritation.
H341	: Suspected of causing genetic defects.
H350	: May cause cancer.
H361fd	: Suspected of damaging fertility. Suspected of damaging the unborn child.
H370	: Causes damage to organs.
H372	: Causes damage to organs through prolonged or repeated exposure if inhaled.
H372	: Causes damage to organs through prolonged or repeated exposure if swallowed.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.

#### Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Acute	: Short-term (acute) aquatic hazard
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Carc.	: Carcinogenicity
Eye Dam.	: Serious eye damage
Eye Irrit.	: Eye irritation
Flam. Gas	: Flammable gases
Flam. Liq.	: Flammable liquids
Muta.	: Germ cell mutagenicity
Repr.	: Reproductive toxicity
Skin Corr.	: Skin corrosion
Skin Sens.	: Skin sensitisation
STOT RE	: Specific target organ toxicity - repeated exposure
STOT SE	: Specific target organ toxicity - single exposure
2004/37/EC	: Europe. Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens

## Deltamethrin (1%) Liquid Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 30.09.2023
3.1	03.11.2023	10852988-00005	Date of first issue: 15.09.2022

	at work
2006/15/EC	: Europe. Indicative occupational exposure limit values
ZA BEI	: South Africa. The Regulations for Hazardous Chemical Agents, Biological Exposure Indices
ZA OEL	: South Africa. The Regulations for Hazardous Chemical Agents, Occupational Exposure Limits
2004/37/EC / STEL	: Short term exposure limit
2004/37/EC / TWA	: Long term exposure limit
2006/15/EC / TWA	: Limit Value - eight hours
ZA OEL / OEL- ML	: Occupational Exposure Limit Maximum limit - 8- hour exposure or equivalent (12 hour shifts).
ZA OEL / OEL - ML STEL/C	: Occupational Exposure Limit Maximum limit - Short term occupational exposure limits / ceiling limits
ZA OEL / OEL-RL	: Occupational Exposure Limit Restricted limit - 8- hour exposure or equivalent (12 hour shifts)
ZA OEL / OEL- RL STEL/C	: Occupational Exposure Limit Restricted limit - Short term occupational exposure limits / ceiling limits

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; 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; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; 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

**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 Agency, <http://echa.europa.eu/>

**Deltamethrin (1%) Liquid Formulation**

Version	Revision Date:	SDS Number:	Date of last issue: 30.09.2023
3.1	03.11.2023	10852988-00005	Date of first issue: 15.09.2022

---

**Classification of the mixture:**

Skin Sens. 1	H317
Carc. 1B	H350
STOT RE 2	H373
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

**Classification procedure:**

Calculation method
Calculation method
Calculation method
Calculation method
Calculation method

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.

ZA / EN