according to the OSHA Hazard Communication Standard



# **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

#### **SECTION 1. IDENTIFICATION**

Product name : Deltamethrin (3%) Formulation

Manufacturer or supplier's details

Company name of supplier : Merck & Co., Inc Address : 126 E. Lincoln Avenue

Rahway, New Jersey U.S.A. 07065

Telephone : 908-740-4000 Emergency telephone : 1-908-423-6000

E-mail address : EHSDATASTEWARD@merck.com

Recommended use of the chemical and restrictions on use

Recommended use : Veterinary product Restrictions on use : Not applicable

#### **SECTION 2. HAZARDS IDENTIFICATION**

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids : Category 3

Acute toxicity (Oral) : Category 4

Skin irritation : Category 2

Serious eye damage : Category 1

Skin sensitization : Category 1

Reproductive toxicity : Category 2

Specific target organ toxicity

- repeated exposure (Oral)

Category 1 (Central nervous system, Immune system)

Specific target organ toxicity

- repeated exposure

(Inhalation)

Category 1 (Central nervous system)

Specific target organ toxicity :

- repeated exposure

Category 2 (Auditory system)

Aspiration hazard : Category 1

### Other hazards

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). Vapors may form explosive mixture with air.

### **GHS** label elements

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

Hazard pictograms









Signal Word : Danger

Hazard Statements : H226 Flammable liquid and vapor.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation.

H361fd Suspected of damaging fertility. Suspected of damaging

the unborn child.

H372 Causes damage to organs (Central nervous system, Immune system) through prolonged or repeated exposure if swal-

lowed.

H372 Causes damage to organs (Central nervous system)

through prolonged or repeated exposure if inhaled.

H373 May cause damage to organs (Auditory system) through

prolonged or repeated exposure.

Supplemental Hazard State-

ments

Corrosive to the respiratory tract.

Precautionary Statements

Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read

and understood.

P210 Keep away from heat, sparks, open flame and hot surfac-

es. No smoking.

P233 Keep container tightly closed.

P241 Use explosion-proof electrical, ventilating and lighting

equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P260 Do not breathe mist or vapors.

P264 Wash skin thoroughly after handling.

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

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

P272 Contaminated work clothing must not be allowed out of

the workplace.

P280 Wear protective gloves, protective clothing, eye protection

and face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON

CENTER.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately

all contaminated clothing. Rinse skin with water.

P304 + P340 + P312 IF INHALED: Remove person to fresh air

according to the OSHA Hazard Communication Standard



# **Deltamethrin (3%) Formulation**

Version 3.0	Revision Date: 06/17/2025	SDS Number: 7730555-00011	Date of last issue: 04/14/2025 Date of first issue: 01/13/2021		
		unwell. P305 + P351 + water for severa and easy to do. CENTER. P308 + P313 IF P331 Do NOT i	P338 + P310 IF IN EYES: Rinse cautiously with al minutes. Remove contact lenses, if present Continue rinsing. Immediately call a POISON exposed or concerned: Get medical attention. Induce vomiting. skin irritation or rash occurs: Get medical atten-		
		<b>Storage:</b> P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.			
		<b>Disposal:</b> P501 Dispose of contents and container to an approved waste disposal plant.			

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

#### Components

Chemical name	CAS No./Unique ID	Concentration (% w/w)	Trade secret
Xylene	1330-20-7*	>= 65 - <= 85	TSC
Calcium dodecylbenzene- sulphonate	26264-06-2*	>= 7 - <= 13	TSC
Nonylphenol, ethoxylated	9016-45-9*	>= 3 - <= 7	TSC
Deltamethrin (ISO)	52918-63-5*	>= 1 - <= 5	TSC
2,6-Di-tert-butyl-p-cresol	128-37-0*	>= 1 - <= 5	TSC

<sup>\*</sup> Indicates that the identifier is a CAS No.

TSC- the actual concentration or concentration range is withheld as a trade secret

#### **SECTION 4. FIRST AID MEASURES**

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

advice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

If inhaled : If inhaled, remove to fresh air.

Get medical attention.

In case of skin contact : In case of contact, immediately flush skin with plenty of water

for at least 15 minutes while removing contaminated clothing

and shoes.

Get medical attention.

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

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.

If swallowed : If swallowed, DO NOT induce vomiting. If vomiting occurs have person lean forward.

Call a physician or poison control center immediately.

Disagraph the record by with water

Rinse mouth thoroughly with water.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

This product contains a pyrethroid.

Pyrethroid poisoning should not be confused with carbamate

or organophosphate poisoning.

Harmful if swallowed.

May be fatal if swallowed and enters airways.

Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation.

Suspected of damaging fertility. Suspected of damaging the

unborn child.

Causes damage to organs through prolonged or repeated

exposure if swallowed.

Causes damage to organs through prolonged or repeated

exposure if inhaled.

May cause damage to organs through prolonged or repeated

exposure.

Corrosive to the respiratory tract.

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

and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

Notes to physician : Treat symptomatically and supportively.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media : Water spray

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

High volume water jet

Specific hazards during fire

fighting

Do not use a solid water stream as it may scatter and spread

fire.

Flash back possible over considerable distance. Vapors may form explosive mixtures with air.

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod: :

ucts

Carbon oxides

Nitrogen oxides (NOx) Bromine compounds

Metal oxides

according to the OSHA Hazard Communication Standard



# **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

Sulfur compounds

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, protective equipment and emer-

gency procedures

Remove all sources of ignition.

Use personal protective equipment.

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

Environmental precautions : Avoid release to the environment.

Prevent further leakage or spillage if safe to do so.

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

oil barriers).

Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up

Non-sparking tools should be used.

Soak up with inert absorbent material.

Suppress (knock down) gases/vapors/mists with a water spray

iet.

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.

Use explosion-proof electrical, ventilating and lighting equip-

Materials to avoid

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

ment.

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

Do not breathe mist or vapors.

Do not swallow. Do not get in eyes.

Wash skin thoroughly after handling.

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

assessment

Non-sparking tools should be used. Keep container tightly closed.

Already sensitized individuals, and those susceptible to asthma, allergies, chronic or recurrent respiratory disease,

should consult their physician regarding working with

respiratory irritants or sensitizers.

Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

Take precautionary measures against static discharges. Do not eat, drink or smoke when using this product.

Take care to prevent spills, waste and minimize release to the

environment.

Conditions for safe storage : Keep in properly labeled containers.

Store locked up. Keep tightly closed.

Keep in a cool, well-ventilated place.

Store in accordance with the particular national regulations.

Keep away from heat and sources of ignition. Do not store with the following product types:

Strong oxidizing agents

Self-reactive substances and mixtures

Organic peroxides Flammable solids Pyrophoric liquids Pyrophoric solids

Self-heating substances and mixtures

Substances and mixtures which in contact with water emit

flammable gases

Explosives Gases

Very acutely toxic substances and mixtures

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis	
Xylene	1330-20-7	TWA	100 ppm 435 mg/m <sup>3</sup>	OSHA Z-1	
		TWA	20 ppm	ACGIH	
Deltamethrin (ISO)	52918-63-5	5 TWA 15 μg/m3 (OEB 3) Interna		Internal	
	Further inform	Further information: DSEN, Skin			

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

Ì			Wipe limit	100 µg/100 cm <sup>2</sup>	Internal
2	2,6-Di-tert-butyl-p-cresol	128-37-0	TWA (Inhalable fraction and vapor)	2 mg/m³	ACGIH
			TWA	10 mg/m <sup>3</sup>	NIOSH REL

#### **Biological occupational exposure limits**

Components	CAS-No.	Control parameters	Biological specimen	Sam- pling time	Permissible concentration	Basis
Xylene	1330-20-7	Methylhippu ric acids	Urine	End of shift (As soon as possible after exposure ceases)	0.3 g/g creatinine	ACGIH BEI

**Engineering measures** 

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

All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment.

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

containment devices).
Minimize open handling.

Use explosion-proof electrical, ventilating and lighting equipment.

### Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to

maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and

use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air

supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other

circumstance where air purifying respirators may not provide

adequate protection.

Hand protection

Material : Chemical-resistant gloves

Remarks : Consider double gloving. Take note that the product is

flammable, which may impact the selection of hand

protection.

Eye protection : Wear safety glasses with side shields or goggles.

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

If the work environment or activity involves dusty conditions,

mists or aerosols, wear the appropriate goggles.

Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or

aerosols.

Skin and body protection : Work uniform or laboratory coat.

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

disposable suits) to avoid exposed skin surfaces.

Use appropriate degowning techniques to remove potentially

contaminated clothing.

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

eye flushing systems and safety showers close to the

working place.

When using do not eat, drink or smoke.

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**

Appearance : liquid

Color : yellow

Odor : No data available

Odor Threshold : No data available

pH : 4-5

Melting point/freezing point : No data available

Initial boiling point and boiling

range

No data available

Flash point : 113 - 124 °F / 45 - 51 °C

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 : No data available

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 06/17/2025 7730555-00011 Date of first issue: 01/13/2021 3.0

flammability limit

Vapor pressure No data available

Relative vapor density No data available

Relative density No data available

No data available Density

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.

Molecular weight No data available

Particle characteristics

Particle size Not applicable

#### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity Not classified as a reactivity hazard. Chemical stability Stable under normal conditions. Flammable liquid and vapor.

Possibility of hazardous reac-

tions

Vapors may form explosive mixture with air.

Can react with strong oxidizing agents.

Conditions to avoid Heat, flames and sparks.

Incompatible materials Oxidizing agents

Hazardous decomposition No hazardous decomposition products are known.

products

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

## Information on likely routes of exposure

Inhalation Skin contact

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

Ingestion Eye contact

**Acute toxicity** 

Harmful if swallowed.

**Product:** 

Acute oral toxicity : Acute toxicity estimate: 993.39 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l

Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: 3,060 mg/kg

Method: Calculation method

**Components:** 

Xylene:

Acute oral toxicity : LD50 (Rat): 3,523 mg/kg

Method: Directive 67/548/EEC, Annex V, B.1.

Acute inhalation toxicity : LC50 (Rat): 27.571 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): > 4,200 mg/kg

Calcium dodecylbenzenesulphonate:

Acute oral toxicity : LD50 (Rat): > 500 - 2,000 mg/kg

Method: OECD Test Guideline 401

Remarks: Based on data from similar materials

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

Method: OECD Test Guideline 402

Remarks: Based on data from similar materials

Nonylphenol, ethoxylated:

Acute oral toxicity : LD50 (Rat): 500 - 2,000 mg/kg

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

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 06/17/2025 7730555-00011 Date of first issue: 01/13/2021 3.0

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

LD50 (Rat): > 800 mg/kg

Acute toxicity (other routes of : LD50 (Rat): 2.5 mg/kg

administration)

Application Route: Intravenous

LD50 (Mouse): 10 mg/kg

Application Route: Intraperitoneal

2,6-Di-tert-butyl-p-cresol:

Acute oral toxicity : LD50 (Rat): > 6,000 mg/kg

Method: OECD Test Guideline 401

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

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Skin corrosion/irritation

Causes skin irritation.

**Components:** 

Xylene:

**Species** Rabbit Result Skin irritation

Calcium dodecylbenzenesulphonate:

Species Rabbit

OECD Test Guideline 404 Method

Result Skin irritation

Remarks Based on data from similar materials

Nonylphenol, ethoxylated:

**Species** Rabbit

Method **OECD Test Guideline 404** 

Result No skin irritation

Deltamethrin (ISO):

**Species** Rabbit

Result No skin irritation

2,6-Di-tert-butyl-p-cresol:

Species : Rabbit

Method **OECD Test Guideline 404** 

Result No skin irritation

Remarks Based on data from similar materials

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

#### Serious eye damage/eye irritation

Causes serious eye damage.

#### **Components:**

#### Xylene:

Species : Rabbit

Result : Irritation to eyes, reversing within 21 days

#### Calcium dodecylbenzenesulphonate:

Species : Rabbit

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

Remarks : Based on data from similar materials

### Nonylphenol, ethoxylated:

Species : Rabbit

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

### Deltamethrin (ISO):

Species : Rabbit

Result : Moderate eye irritation

### 2,6-Di-tert-butyl-p-cresol:

Species : Rabbit

Result : No eye irritation

Method : OECD Test Guideline 405

Remarks : Based on data from similar materials

#### Respiratory or skin sensitization

#### Skin sensitization

May cause an allergic skin reaction.

#### Respiratory sensitization

Not classified based on available information.

#### **Components:**

#### Xylene:

Test Type : Local lymph node assay (LLNA)

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

### Calcium dodecylbenzenesulphonate:

Test Type : Maximization Test
Routes of exposure : Skin contact
Species : Guinea pig

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

Method : OECD Test Guideline 406

Result : negative

Remarks : Based on data from similar materials

Nonylphenol, ethoxylated:

Test Type : Maximization Test
Routes of exposure : Skin contact
Species : Guinea pig
Result : negative

Remarks : Based on data from similar materials

Deltamethrin (ISO):

Test Type : Maximization Test

Routes of exposure : Dermal Species : Guinea pig Result : negative

Test Type : Human repeat insult patch test (HRIPT)

Routes of exposure : Dermal Species : Humans Result : positive

2,6-Di-tert-butyl-p-cresol:

Test Type : Human repeat insult patch test (HRIPT)

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

Germ cell mutagenicity

Not classified based on available information.

**Components:** 

Xylene:

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

Result: negative

Test Type: Chromosome aberration test in vitro

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Result: negative

Test Type: In vitro sister chromatid exchange assay in mam-

malian cells Result: negative

Genotoxicity in vivo : Test Type: Rodent dominant lethal test (germ cell) (in vivo)

Species: Mouse

Application Route: Skin contact

Result: negative

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

П

### Calcium dodecylbenzenesulphonate:

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

Method: OECD Test Guideline 471

Result: negative

Remarks: Based on data from similar materials

Test Type: In vitro mammalian cell gene mutation test

Result: negative

Remarks: Based on data from similar materials

Test Type: Chromosome aberration test in vitro

Method: OECD Test Guideline 473

Result: negative

Remarks: Based on data from similar materials

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

cytogenetic assay) Species: Mouse

Application Route: Ingestion

Result: negative

Remarks: Based on data from similar materials

Nonylphenol, ethoxylated:

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

Result: negative

Remarks: Based on data from similar materials

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

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

Application Route: Oral

Result: negative

Test Type: sister chromatid exchange assay

Species: Mouse

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

2,6-Di-tert-butyl-p-cresol:

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

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Result: negative

Test Type: Chromosome aberration test in vitro

Result: negative

Genotoxicity in vivo : Test Type: Mutagenicity (in vivo mammalian bone-marrow

cytogenetic test, chromosomal analysis)

Species: Rat

Application Route: Ingestion

Result: negative

#### Carcinogenicity

Not classified based on available information.

#### **Components:**

### Xylene:

Species : Rat
Application Route : Ingestion
Exposure time : 103 weeks
Result : negative

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)

according to the OSHA Hazard Communication Standard



# **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

Exposure time : 2 Years

NOAEL : 1 mg/kg body weight

Result : negative

2,6-Di-tert-butyl-p-cresol:

Species : Rat
Application Route : Ingestion
Exposure time : 22 Months
Result : negative

IARC No ingredient of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**No component of this product present at levels greater than or equal to 0.1% is

on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

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

**Components:** 

Xylene:

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

Species: Rat

Application Route: inhalation (vapor)

Result: negative

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

Species: Rat

Application Route: inhalation (vapor)

Result: negative

Calcium dodecylbenzenesulphonate:

Effects on fertility : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 422

Result: negative

Remarks: Based on data from similar materials

Effects on fetal development : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 422

Result: negative

Remarks: Based on data from similar materials

according to the OSHA Hazard Communication Standard



# **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

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-fetal 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-fetal 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 fetal 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 fetal development.

Test Type: Development Species: Rabbit, female

Application Route: oral (gavage)

Developmental Toxicity: NOAEL: 16 mg/kg body weight

Symptoms: No effects on fetal development.

Reproductive toxicity - As-

sessment

Some evidence of adverse effects on sexual function and

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

2,6-Di-tert-butyl-p-cresol:

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

Species: Rat

Application Route: Ingestion

Result: negative

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

Species: Rat

Application Route: Ingestion

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

Result: negative

#### STOT-single exposure

May cause respiratory irritation. Corrosive to the respiratory tract.

#### **Components:**

Xylene:

Assessment : May cause respiratory irritation.

Deltamethrin (ISO):

Assessment : May cause respiratory irritation.

### STOT-repeated exposure

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

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

May cause damage to organs (Auditory system) through prolonged or repeated exposure.

### **Components:**

### Xylene:

Routes of exposure : inhalation (vapor)
Target Organs : Auditory system

Assessment : Shown to produce significant health effects in animals at con-

centrations of >0.2 to 1 mg/l/6h/d.

### Calcium dodecylbenzenesulphonate:

Assessment : No significant health effects observed in animals at concentra-

tions of 100 mg/kg bw or less.

#### Deltamethrin (ISO):

Routes of exposure : Ingestion

Target Organs : Central nervous system, Immune system

Assessment : Causes damage to organs through prolonged or repeated

exposure.

Routes of exposure : inhalation (dust/mist/fume)
Target Organs : Central nervous system

Assessment : Causes damage to organs through prolonged or repeated

exposure.

### 2,6-Di-tert-butyl-p-cresol:

Assessment : No significant health effects observed in animals at concentra-

tions of 100 mg/kg bw or less.

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 06/17/2025 7730555-00011 Date of first issue: 01/13/2021 3.0

#### Repeated dose toxicity

#### Components:

#### Xylene:

Species : Rat

LOAEL : > 0.2 - 1 mg/lApplication Route : inhalation (vapor)

Exposure time : 13 Weeks

Remarks Based on data from similar materials

Species Rat

LÖAEL 150 mg/kg Application Route Ingestion Exposure time 90 Days

### Calcium dodecylbenzenesulphonate:

**Species** Rat

LOAEL > 200 mg/kg Application Route : Ingestion Exposure time : 6 - 7 Weeks

Method OECD Test Guideline 422

Remarks Based on data from similar materials

Species
NOAEL
Application Route
Exposure time : Rabbit > 100 mg/kg : Skin contact 28 Days

**OECD Test Guideline 410** Method

Remarks Based on data from similar materials

## 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
Application Route 3 mg/m3

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

: Local irritation, respiratory tract irritation Symptoms

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

Symptoms Dilatation of the pupil, Vomiting, Tremors, Diarrhea, Salivation

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

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

### 2,6-Di-tert-butyl-p-cresol:

Species : Rat

NOAEL : 25 mg/kg

Application Route : Ingestion

Exposure time : 22 Months

#### **Aspiration toxicity**

May be fatal if swallowed and enters airways.

#### **Components:**

#### Xylene:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

#### 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, Nau-

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

Blurred vision, Fatigue, anorexia, Allergic reactions

Ingestion : Symptoms: muscle pain, Small pupils

#### **SECTION 12. ECOLOGICAL INFORMATION**

#### **Ecotoxicity**

#### **Components:**

#### Xylene:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 13.5 mg/l

Exposure time: 96 h

according to the OSHA Hazard Communication Standard



# **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 06/17/2025 7730555-00011 Date of first issue: 01/13/2021 3.0

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 1 - 10 mg/l

Exposure time: 24 h

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

Toxicity to algae/aquatic

plants

EC50 (Skeletonema costatum (marine diatom)): 10 mg/l

Exposure time: 72 h

Toxicity to fish (Chronic tox-

icity)

NOEC (Danio rerio (zebra fish)): > 0.1 - < 1 mg/l

Exposure time: 35 d

Method: OECD Test Guideline 210

Remarks: Based on data from similar materials

Toxicity to daphnia and other: aquatic invertebrates (Chron-

ic toxicity)

EL10 (Daphnia magna (Water flea)): > 1 - 10 mg/l

Exposure time: 21 d

Method: OECD Test Guideline 211

Remarks: Based on data from similar materials

NOEC: > 100 mg/l Toxicity to microorganisms

Exposure time: 3 h

Method: OECD Test Guideline 209

Remarks: Based on data from similar materials

#### Calcium dodecylbenzenesulphonate:

Toxicity to fish LC50 (Leuciscus idus (Golden orfe)): > 1 - 10 mg/l

Exposure time: 96 h

Remarks: Based on data from similar materials

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 1 - 10 mg/l

Exposure time: 48 h

Remarks: Based on data from similar materials

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)): > 10 -

100 ma/l

Exposure time: 72 h

Remarks: Based on data from similar materials

NOEC (Pseudokirchneriella subcapitata (green algae)): > 0.1 -

1 ma/l

Exposure time: 72 h

Remarks: Based on data from similar materials

Toxicity to fish (Chronic tox-

icity)

NOEC (Pimephales promelas (fathead minnow)): > 0.1 - 1

mq/l

Exposure time: 28 d

Remarks: Based on data from similar materials

Toxicity to daphnia and other:

aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): > 1 mg/l

Exposure time: 21 d

Remarks: Based on data from similar materials

Toxicity to microorganisms EC50 (activated sludge): > 100 mg/l

according to the OSHA Hazard Communication Standard



# **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

Exposure time: 3 h

Method: OECD Test Guideline 209

Remarks: Based on data from similar materials

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

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/

Exposure time: 28 d

Remarks: Based on data from similar materials

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

Exposure time: 48 h

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

Exposure time: 96 h

Toxicity to algae/aquatic

lants

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

mg/l

according to the OSHA Hazard Communication Standard



# **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: No toxicity at the limit of solubility.

Toxicity to fish (Chronic tox-

icity)

NOEC (Pimephales promelas (fathead minnow)): 0.000022

mg/l

Exposure time: 36 d

NOEC (Pimephales promelas (fathead minnow)): 0.000017

mg/l

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

2,6-Di-tert-butyl-p-cresol:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 0.57 mg/l

Exposure time: 96 h

Method: Directive 67/548/EEC, Annex V, C.1.

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.48 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)): > 0.24

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 0.24

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to fish (Chronic tox-

icity)

NOEC (Oryzias latipes (Japanese medaka)): 0.053 mg/l

Exposure time: 30 d

Method: OECD Test Guideline 210

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.316 mg/l

Exposure time: 21 d

Toxicity to microorganisms : EC50: > 10,000 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Persistence and degradability

Components:

Xylene:

Biodegradability : Result: Readily biodegradable.

Biodegradation: > 70 % Exposure time: 28 d

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 06/17/2025 7730555-00011 Date of first issue: 01/13/2021 3.0

Method: OECD Test Guideline 301F

Remarks: Based on data from similar materials

Calcium dodecylbenzenesulphonate:

Result: Readily biodegradable. Biodegradability

Remarks: Based on data from similar materials

Nonylphenol, ethoxylated:

Result: Not readily biodegradable. Biodegradability

Remarks: Based on data from similar materials

Deltamethrin (ISO):

Stability in water Hydrolysis: 0 %(30 d)

2,6-Di-tert-butyl-p-cresol:

Biodegradability Result: Not readily biodegradable.

Biodegradation: 4.5 % Exposure time: 28 d

Method: OECD Test Guideline 301C

Bioaccumulative potential

**Components:** 

Xylene:

Partition coefficient: nlog Pow: 3.16 octanol/water

Remarks: Calculation

Calcium dodecylbenzenesulphonate:

Bioaccumulation Bioconcentration factor (BCF): < 500

Remarks: Based on data from similar materials

Partition coefficient: nlog Pow: 4.77

Remarks: Calculation octanol/water

Nonylphenol, ethoxylated:

Partition coefficient: n-: log Pow: 4.48

octanol/water

Deltamethrin (ISO):

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)

Bioconcentration factor (BCF): 1,800

Partition coefficient: nlog Pow: 4.6

octanol/water

2,6-Di-tert-butyl-p-cresol: Bioaccumulation Species: Cyprinus carpio (Carp)

Bioconcentration factor (BCF): 330 - 1,800

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

Partition coefficient: n-

octanol/water

log Pow: 5.1

Mobility in soil

Components:

Deltamethrin (ISO):

Distribution among environmental compartments

nong environ- : log Koc: 7.2

Other adverse effects

No data available

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods** 

Waste from residues : Dispose of in accordance with local regulations.

Do not dispose of waste into sewer.

Contaminated packaging : Empty containers should be taken to an approved waste

handling site for recycling or disposal.

Empty containers retain residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or

death.

If not otherwise specified: Dispose of as unused product.

#### **SECTION 14. TRANSPORT INFORMATION**

#### **International Regulations**

**UNRTDG** 

UN number : UN 1993

Proper shipping name : FLAMMABLE LIQUID, N.O.S.

(Xylene)

Class : 3
Packing group : III
Labels : 3
Environmentally hazardous : no

**IATA-DGR** 

UN/ID No. : UN 1993

Proper shipping name : Flammable liquid, n.o.s.

(Xylene)

Class : 3 Packing group : III

Labels : Flammable Liquids

Packing instruction (cargo

aircraft)

: 366

Packing instruction (passen-

355

ger aircraft)

**IMDG-Code** 

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

UN number : UN 1993

Proper shipping name : FLAMMABLE LIQUID, N.O.S.

(Xylene, Deltamethrin (ISO), 2,6-Di-tert-butyl-p-cresol)

Class : 3
Packing group : III
Labels : 3
EmS Code : F-E, <u>S-E</u>
Marine pollutant : yes

#### Transport in bulk according to IMO instruments

Not applicable for product as supplied.

#### **Domestic regulation**

**49 CFR** 

UN/ID/NA number : UN 1993

Proper shipping name : Flammable liquids, n.o.s.

(Xylene)

Class : 3 Packing group : III

Labels : FLAMMABLE LIQUID

ERG Code : 128

Marine pollutant : yes(Deltamethrin (ISO), 2,6-Di-tert-butyl-p-cresol)

Remarks : THE COMBUSTIBLE LIQUID EXCEPTION MAY BE USED

FOR PACKAGES <119 GAL.

#### 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**

#### **CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ	Calculated product RQ	
		(lbs)	(lbs)	
Xylene	1330-20-7	100	122	
Calcium dodecylbenzenesulpho-	26264-06-2	1000	11111	
nate				

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

#### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)

Acute toxicity (any route of exposure)
Respiratory or skin sensitization

Reproductive toxicity

Specific target organ toxicity (single or repeated exposure)

Aspiration hazard

Skin corrosion or irritation

Serious eye damage or eye irritation

according to the OSHA Hazard Communication Standard



# **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

SARA 313 : The following components are subject to reporting levels

established by SARA Title III, Section 313:

Xylene 1330-20-7 >= 70 - < 90 %

Nonylphenol, 9016-45-9 >= 5 - < 10 %

ethoxylated

**US State Regulations** 

Pennsylvania Right To Know

Xylene 1330-20-7
Calcium dodecylbenzenesulphonate 26264-06-2
Nonylphenol, ethoxylated 9016-45-9
Deltamethrin (ISO) 52918-63-5
2,6-Di-tert-butyl-p-cresol 128-37-0

**California List of Hazardous Substances** 

Xylene 1330-20-7 Calcium dodecylbenzenesulphonate 26264-06-2 2,6-Di-tert-butyl-p-cresol 128-37-0

**California Permissible Exposure Limits for Chemical Contaminants** 

Xylene 1330-20-7 2,6-Di-tert-butyl-p-cresol 128-37-0

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

AICS : not determined

DSL : not determined

IECSC : not determined

### **SECTION 16. OTHER INFORMATION**

### **Further information**

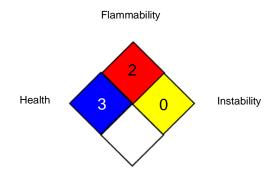
according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

#### NFPA 704:



Special hazard

#### HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

#### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)
NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim-

its for Air Contaminants

ACGIH / TWA : 8-hour, time-weighted average

NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek

OSHA Z-1 / TWA : 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials: bw - Body weight: CERCLA - Comprehensive Environmental Response. Compensation. and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; 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; HMIS - Hazardous Materials Identification System; 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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office

according to the OSHA Hazard Communication Standard



## **Deltamethrin (3%) Formulation**

Version Revision Date: SDS Number: Date of last issue: 04/14/2025 3.0 06/17/2025 7730555-00011 Date of first issue: 01/13/2021

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; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; 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

Sources of key data used to compile the Material Safety

**Data Sheet** 

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

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

Revision Date : 06/17/2025

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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

US / Z8