

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

1.1. Product identifier

Product form : Substance
Name : Deltamethrin tech min 98%
EC index no : 607-319-00-X
EC no : 258-256-6
CAS No : 52918-63-5
Type of product : Biocide
Formula : C22H19Br2NO3

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

1.2.1. Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Insecticide

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Simonis B.V.
7000 AP Doetinchem - The Netherlands
T +31 314 333 700 - F +31 314 344 167
agrochem@simonisbv.nl - <http://www.simonisbv.nl/>

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number
UNITED KINGDOM	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 3 (Inhalation) H331
Acute Tox. 3 (Oral) H301
Aquatic Acute 1 H400 (M=1000000)
Aquatic Chronic 1 H410 (M=1000000)

Full text of H-phrases: see section 16

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS06

GHS09

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H331 - Toxic if inhaled
H301 - Toxic if swallowed
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) :

P261 - Avoid breathing dust
P264 - Wash hands thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P273 - Avoid release to the environment
P301+P310 - IF SWALLOWED: Immediately call a doctor, a POISON CENTER
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P405 - Store locked up
P501 - Dispose of contents/container to an approved waste disposal plant

Deltamethrin tech min 98%

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

2.3. Other hazards

Adverse physicochemical, human health and environmental effects : Very toxic to aquatic life with long lasting effects. Toxic if inhaled. Toxic if swallowed.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substance

Name : Deltamethrin tech min 98%
CAS No : 52918-63-5
EC no : 258-256-6
EC index no : 607-319-00-X

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Deltamethrin tech min 98%	(CAS No) 52918-63-5 (EC no) 258-256-6 (EC index no) 607-319-00-X	> 98	Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Oral), H301 Aquatic Acute 1, H400 (M=1000000) Aquatic Chronic 1, H410 (M=1000000)

Full text of H-phrases: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not apply mouth-to-mouth resuscitation. Get immediate medical advice/attention.
First-aid measures after skin contact : Remove contaminated clothes. Wash skin with plenty of water. If skin irritation persists, take medical advice.
First-aid measures after eye contact : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel unwell. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries after inhalation : Toxic if inhaled.
Symptoms/injuries after ingestion : Toxic if swallowed.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Non flammable.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : For further information, refer to section 10 : "Stability and Reactivity".

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Deltamethrin tech min 98%

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. For further information refer to section 8 : "Exposure-controls/personal protection".

Emergency procedures : Ventilate area. Stop leak if safe to do so.

6.2. Environmental precautions

Do not allow into drains or water courses. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Scoop absorbed substance into closing containers.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8 : "Exposure-controls/personal protection". Concerning disposal elimination after cleaning, see item 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Concerning personal protective equipment to use, see item 8. Provide good ventilation in process area to prevent formation of vapour. Use only outdoors or in a well-ventilated area. Avoid breathing dust, mist.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place. Keep container closed when not in use. Store locked up. Keep away from food, drink and animal feeding stuffs. Protect from moisture.

Incompatible products : Strong bases. Strong acids.

Storage temperature : 0 - 30 °C

Heat and ignition sources : Keep away from heat and direct sunlight.

7.3. Specific end use(s)

Insecticide.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station. Avoid all unnecessary exposure.

Personal protective equipment : Protective clothing. Gloves. Safety glasses. Dust/aerosol mask with filter type P2.

Hand protection : Wear suitable gloves resistant to chemical penetration. Chemical resistant gloves (according to European standard NF EN 374 or equivalent). Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Since the product consists of several substances, it is possible to estimate the durability of the glove material beforehand and it therefore needs to be tested before use. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection : Safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : Wear respiratory protection



Deltamethrin tech min 98%

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Other information : Do not eat, drink or smoke during use. Always wash hands after handling the product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder.
Colour	: White. Off-white.
Odour	: Odourless.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 100 - 102 °C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 100 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 0,0000124 mPa 25°C
Relative vapour density at 20 °C	: No data available
Relative density	: 0,55 25°C
Solubility	: Water: < 0,2 µg/l 20°C Organic solvent:dioxane 900 g/L; cyclohexanone 750 g/L; dichloromethane 700 g/L; acetone 500 g/L; benzene 450 g/L; dimethyl sulfoxide 450 g/L; xylene 250 g/L; ethanol 15 g/L; isopropanol 6 g/L (20°C)
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Extremely high or low temperatures. Keep out of direct sunlight.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Combustion generates : Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Inhalation: Toxic if inhaled. Oral: Toxic if swallowed.

Deltamethrin tech min 98% (52918-63-5)	
LD50 oral rat	87,4 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 0,232 mg/l/4h

Skin corrosion/irritation : The product is not considered to be irritating to the skin

Deltamethrin tech min 98%

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Serious eye damage/irritation	: May cause moderate irritation to the eyes
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: No carcinogenic effect
Reproductive toxicity	: No indications of human reproductive toxicity exist.
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

Deltamethrin tech min 98% (52918-63-5)	
LC50 fishes 1	0,727 µg/l
EC50 Daphnia 1	0,0753 µg/l
EC50 72h algae (1)	> 9,1 mg/l

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Deltamethrin tech min 98% (52918-63-5)	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

12.6. Other adverse effects

Additional information : Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Additional information : Empty containers should be taken for recycle, recovery or waste in accordance with local regulation.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information











In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
3349	3349	3349	3349	3349
14.2. UN proper shipping name				
PYRETHROID PESTICIDE, SOLID, TOXIC	PYRETHROID PESTICIDE, SOLID, TOXIC	Pyrethroid pesticide, solid, toxic	PYRETHROID PESTICIDE, SOLID, TOXIC	PYRETHROID PESTICIDE, SOLID, TOXIC
Transport document description				
UN 3349 PYRETHROID PESTICIDE, SOLID, TOXIC (Deltamethrin tech min 98%), 6.1, II, (D/E), ENVIRONMENTALLY HAZARDOUS	UN 3349 PYRETHROID PESTICIDE, SOLID, TOXIC, 6.1, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS			
14.3. Transport hazard class(es)				
6.1	6.1	6.1	6.1	6.1

Deltamethrin tech min 98%



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

ADR	IMDG	IATA	ADN	RID
 	 	 	 	 
14.4. Packing group				
II				
14.5. Environmental hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Classification code (ADR)	: T7
Special provisions (ADR)	: 61, 274, 648
Limited quantities (ADR)	: 500g
Excepted quantities (ADR)	: E4
Packing instructions (ADR)	: P002, IBC08
Special packing provisions (ADR)	: B4
Mixed packing provisions (ADR)	: MP10
Portable tank and bulk container instructions (ADR)	: T3
Portable tank and bulk container special provisions (ADR)	: TP33
Tank code (ADR)	: SGAH, L4BH
Tank special provisions (ADR)	: TU15, TE19
Vehicle for tank carriage	: AT
Transport category (ADR)	: 2
Special provisions for carriage - Packages (ADR)	: V11
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13, CV28
Special provisions for carriage - Operation (ADR)	: S9, S19
Hazard identification number (Kemler No.)	: 60
Orange plates	:  
Tunnel restriction code (ADR)	: D/E
EAC code	: 2X

- Transport by sea

Special provisions (IMDG)	: 61, 274
Limited quantities (IMDG)	: 500 g
Excepted quantities (IMDG)	: E4
Packing instructions (IMDG)	: P002
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B2, B4
Tank instructions (IMDG)	: T3
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-A

Deltamethrin tech min 98%

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Stowage category (IMDG)	: A
Stowage and segregation (IMDG)	: Clear of living quarters.
Properties and observations (IMDG)	: Solid pesticides present a very wide range of toxic hazard. Toxic if swallowed, by skin contact or by inhalation.
MFAG-No	: 151

- Air transport

PCA Excepted quantities (IATA)	: E4
PCA Limited quantities (IATA)	: Y644
PCA limited quantity max net quantity (IATA)	: 1kg
PCA packing instructions (IATA)	: 669
PCA max net quantity (IATA)	: 25kg
CAO packing instructions (IATA)	: 676
CAO max net quantity (IATA)	: 100kg
Special provisions (IATA)	: A3, A5
ERG code (IATA)	: 6L

- Inland waterway transport

Classification code (ADN)	: T7
Special provisions (ADN)	: 61, 274, 648, 82
Limited quantities (ADN)	: 500 g
Excepted quantities (ADN)	: E4
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 2
Not subject to ADN	: No

- Rail transport

Classification code (RID)	: T7
Special provisions (RID)	: 61, 274, 648
Limited quantities (RID)	: 500g
Excepted quantities (RID)	: E4
Packing instructions (RID)	: P002, IBC08
Special packing provisions (RID)	: B4
Mixed packing provisions (RID)	: MP10
Portable tank and bulk container instructions (RID)	: T3
Portable tank and bulk container special provisions (RID)	: TP33
Tank codes for RID tanks (RID)	: SGAH, L4BH
Special provisions for RID tanks (RID)	: TU15
Transport category (RID)	: 2
Special provisions for carriage – Packages (RID)	: W11
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW28, CW31
Colis express (express parcels) (RID)	: CE9, CE12
Hazard identification number (RID)	: 60
Carriage prohibited (RID)	: No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Deltamethrin tech min 98% is not on the REACH Candidate List

Deltamethrin tech min 98% is not on the REACH Annex XIV List

Type of product (Biocide) 18 - Insecticides, acaricides and products to control other arthropods

Deltamethrin tech min 98%

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Classification according to Regulation (EC) No. 1272/2008 [CLP].

Abbreviations and acronyms:

CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
RID	Regulations concerning the International Carriage of Dangerous Goods by Rai
LC50	Median lethal concentration
LD50	Median lethal dose
SDS	Safety Data Sheet
	CAS (Chemical Abstracts Service) number
	EG-nr.: EINECS- en ELINCS-number
	EINECS: European Inventory of Existing Commercial Substances

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : REACH Disclaimer:
This information is based on current knowledge. Consistency of data in the SDS with CSR is considered, as far as the information is available at the time of compilation (cfr Revision date and Version number). **DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-statements:

Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
H301	Toxic if swallowed
H331	Toxic if inhaled
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Safety Data Sheet applicable for regions : GB - United Kingdom

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product