

# TEMPO RESIDUAL INSECTICIDE

Version Revision Date: SDS Number: Date of last issue: 28.11.2023 1.1 29.07.2024 11285939-00002 Date of first issue: 28.11.2023

**SECTION 1: IDENTIFICATION** 

Product name : TEMPO RESIDUAL INSECTICIDE

Product code : Article/SKU: 88584163; 85807331 UVP: 05130336 Specifica-

tion: 102000007438

Manufacturer or supplier's details

Company : 2022 Environmental Science AU Pty Ltd

ABN 49 656 513 923

Address : Suite 2.06, Level 2, 737 Burwood Road

Hawthorn East, Australia 3123

Telephone : (03) 7019 3839

Emergency telephone number : +61 2 9037 2994

Recommended use of the chemical and restrictions on use

Recommended use : Insecticide

Restrictions on use : Not applicable

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

**GHS Classification** 

Acute toxicity (Oral) : Category 4

Carcinogenicity : Category 1B

Effects on or via lactation

GHS label elements

Hazard pictograms :





Signal word : Danger

Hazard statements : H302 Harmful if swallowed.

H350 May cause cancer.

H362 May cause harm to breast-fed children.

Precautionary statements : Prevention:



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P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P263 Avoid contact during pregnancy and while nursing.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

#### Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. P308 + P313 IF exposed or concerned: Get medical advice/ attention.

### Storage:

P405 Store locked up.

#### Disposal:

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

### Other hazards which do not result in classification

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

Substance / Mixture : Mixture

Chemical nature : Suspension concentrate (=flowable concentrate)(SC)

#### Components

Chemical name	CAS-No.	Concentration (% w/w)	
Glycerine	56-81-5	>= 10 -< 30	
Silica gel, precipitated, crystalline free	112926-00-8	< 10	
beta-Cyfluthrin (ISO)	1820573-27-0	>= 1 -< 10	
(Benzyloxy)methanol	14548-60-8	>= 0.1 -< 1	
Reaction mass of: 5-chloro-2-methyl-4-	55965-84-9	>= 0.0015 -< 0.06	
isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)			

### Alternative CAS Numbers for some regions

Chemical name	Alternative CAS Number(s)
Reaction mass of: 5-chloro-2-methyl-4-	2682-20-4, 26172-55-4
isothiazolin-3-one [EC no. 247-500-7] and 2-	
methyl-2H-isothiazol-3-one [EC no. 220-239-6]	
(3:1)	

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



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

vice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

If inhaled : If inhaled, remove to fresh air.

Get medical attention.

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

of water.

Remove contaminated clothing and shoes.

Get medical attention. Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : 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.

Never give anything by mouth to an unconscious person.

Most important symptoms

and effects, both acute and

delayed

The product causes irritation of eyes, skin and mucous mem-

branes.

Skin and eye paraesthesia which may be severe Usually transient with resolution within 24 hours

Cough sneezing

muscle twitching

discomfort in the chest

anorexia lethargy

Pulmonary oedema

Prostration

Airway hyperreaction

Somnolence Dizziness Coma

Blurred vision
Convulsions
Headache
Nausea
Tremors
Diarrhoea
Vomiting
Palpitation
Abdominal pain
tachycardia

hypotension Harmful if swallowed.

May cause cancer.

May cause harm to breast-fed children.



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This product contains a pyrethroid.

Pyrethroid poisoning should not be confused with carbamate

or organophosphate poisoning.

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 : There is no specific antidote available.

Initial treatment: symptomatic.

Oxygen or artificial respiration if needed.

Keep respiratory tract clear.

Monitor: respiratory and cardiac functions.

In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium

sulphate is always advisable.

In case of convulsions, a benzodiazepine (e.g. diazepam)

should be given according to standard regimens. If not effective, phenobarbital may be used. Contraindication: derivatives of adrenaline.

Contraindication: atropine.

Recovery is spontaneous and without seguelae.

In case of skin irritation, application of oils or lotions containing

vitamin E may be considered.

### **SECTION 5. FIREFIGHTING 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

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod-

ucts

Carbon oxides
Chlorine compounds

Fluorine compounds Nitrogen oxides (NOx)

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO.

Evacuate area.

Special protective equipment :

for firefighters

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

Use personal protective equipment.



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Hazchem Code •3Z

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

tive equipment and emer-

gency procedures

Personal precautions, protec- : Use personal protective equipment.

Follow safe handling advice (see section 7) and personal pro-

tective equipment recommendations (see section 8).

Environmental precautions Avoid release to the environment.

Prevent further leakage or spillage if safe to do so.

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

barriers).

Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up Soak up with inert absorbent material.

For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absor-

bent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to deter-

mine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

#### **SECTION 7. HANDLING AND STORAGE**

Technical measures See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

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

ventilation.

Advice on safe handling Avoid contact during pregnancy and while nursing.

Do not get on skin or clothing.

Do not breathe vapours or spray mist.

Do not swallow.

Avoid contact with eves.

Wash skin thoroughly after handling.

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

sessment

Keep container tightly closed.

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

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

environment.



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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. Wash contaminated clothing before re-use.

Conditions for safe storage : Keep in properly labelled containers.

Store locked up. Keep tightly closed.

Store in accordance with the particular national regulations.

Materials to avoid : Do not store with the following product types:

Strong oxidizing agents

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

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Glycerine	56-81-5	TWA (Mist)	10 mg/m3	AU OEL
Silica gel, precipitated, crystal- line free	112926-00-8	TWA	10 mg/m3	AU OEL

**Engineering measures** : Minimize workplace exposure concentrations.

If sufficient ventilation is unavailable, use with local exhaust

ventilation.

Personal protective equipment

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

sure assessment demonstrates exposures outside the rec-

ommended guidelines, use respiratory protection.

Filter type : Combined particulates, inorganic gas/vapour and organic

vapour type

Hand protection

Material : Nitrile rubber
Break through time : > 480 min
Glove thickness : > 0.4 mm
Protective index : Class 6

Remarks : Choose gloves to protect hands against chemicals depending

on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufactur-



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er. Wash hands before breaks and at the end of workday.

Eye protection : Wear the following personal protective equipment:

Safety glasses

Skin and body protection : Select appropriate protective clothing based on chemical

resistance data and an assessment of the local exposure

potential.

Skin contact must be avoided by using impervious protective

clothing (gloves, aprons, boots, etc).

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : suspension

Colour : light beige, white

Odour : characteristic, very faint

Odour Threshold : No data available

pH : 4 - 5 (23 °C)

Concentration: 100 %

Melting point/freezing point : No data available

Initial boiling point and boiling

range

No data available

Flash point : > 100 °C

Method: DIN 51758

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : 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



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Relative vapour density : No data available

Relative density : No data available

Density : ca. 1.05 g/cm³ (20 °C)

Solubility(ies)

Water solubility : completely miscible

Partition coefficient: n-

octanol/water

Not applicable

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : 600 - 1,000 mPa.s (20 °C)

Viscosity, kinematic : No data available

Flow time : 43 - 60 s (20 °C)

Method: DIN 53211

Explosive properties : Not explosive

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

Particle characteristics

Particle size :  $\leq 5 \mu m$ 

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

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

: Can react with strong oxidizing agents.

Conditions to avoid : None known.

Incompatible materials : Oxidizing agents

Hazardous decomposition

products

: No hazardous decomposition products are known.

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

Exposure routes : Inhalation



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Skin contact Ingestion Eye contact

Acute toxicity

Harmful if swallowed.

**Product:** 

Acute oral toxicity : Acute toxicity estimate: 465.25 mg/kg

Method: Calculation method

Acute inhalation toxicity : Assessment: The substance or mixture has no acute inhala-

tion toxicity

**Components:** 

Glycerine:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD50 (Guinea pig): > 5,000 mg/kg

Silica gel, precipitated, crystalline free:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 401

Remarks: Based on data from similar materials

Acute inhalation toxicity : LC50 (Rat): > 0.69 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Remarks: Based on data from similar materials

beta-Cyfluthrin (ISO):

Acute oral toxicity : LD50 (Rat): 11 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0.081 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 402

(Benzyloxy)methanol:

Acute oral toxicity : LD50 (Rat, female): 812 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 0.502 mg/l



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Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat, male): 1,429 mg/kg

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-

isothiazol-3-one [EC no. 220-239-6] (3:1):

Acute oral toxicity : LD50 (Rat): 64 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0.171 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: Corrosive to the respiratory tract.

Acute dermal toxicity : LD50 (Rabbit): 87.12 mg/kg

#### Skin corrosion/irritation

Not classified based on available information.

#### **Components:**

### Glycerine:

Species : Rabbit

Result : No skin irritation

# Silica gel, precipitated, crystalline free:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

Remarks : Based on data from similar materials

#### beta-Cyfluthrin (ISO):

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

# (Benzyloxy)methanol:

Species : Rabbit
Result : Skin irritation

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-

isothiazol-3-one [EC no. 220-239-6] (3:1): Species : Rabbit

Method : OECD Test Guideline 404

Result : Corrosive after 1 to 4 hours of exposure



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#### Serious eye damage/eye irritation

Not classified based on available information.

#### **Components:**

Glycerine:

Species : Rabbit

Result : No eye irritation

Silica gel, precipitated, crystalline free:

Species : Rabbit

Result : No eye irritation

Method : OECD Test Guideline 405

Remarks : Based on data from similar materials

beta-Cyfluthrin (ISO):

Species : Rabbit

Result : No eye irritation

Method : OECD Test Guideline 405

(Benzyloxy)methanol:

Species : Rabbit

Result : Irreversible effects on the eye

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-

isothiazol-3-one [EC no. 220-239-6] (3:1):

Result : Irreversible effects on the eye Remarks : Based on skin corrosivity.

#### Respiratory or skin sensitisation

### Skin sensitisation

Not classified based on available information.

### Respiratory sensitisation

Not classified based on available information.

**Product:** 

Species : Guinea pig

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

### **Components:**

### beta-Cyfluthrin (ISO):

Test Type : Buehler Test Exposure routes : Skin contact Species : Guinea pig

Method : OECD Test Guideline 406



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Result : negative

(Benzyloxy)methanol:

Test Type : Magnusson-Kligman-Test

Exposure routes : Skin contact
Species : Guinea pig
Result : positive

Assessment : Probability or evidence of low to moderate skin sensitisation

rate in humans

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-

isothiazol-3-one [EC no. 220-239-6] (3:1):

Test Type : Buehler Test
Exposure routes : Skin contact
Species : Guinea pig
Result : positive

Assessment : Probability or evidence of high skin sensitisation rate in hu-

mans

Chronic toxicity

Germ cell mutagenicity

Not classified based on available information.

Components:

Glycerine:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test

Result: negative

Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Test Type: Chromosome aberration test in vitro

Result: negative

Test Type: DNA damage and repair, unscheduled DNA syn-

thesis in mammalian cells (in vitro)

Result: negative

Silica gel, precipitated, crystalline free:

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

Result: negative

Remarks: Based on data from similar materials

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

Species: Rat

Application Route: Ingestion



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Result: negative

Remarks: Based on data from similar materials

beta-Cyfluthrin (ISO):

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

Result: negative

Remarks: Based on data from similar materials

Test Type: Chromosome aberration test in vitro

Result: negative

Remarks: Based on data from similar materials

(Benzyloxy)methanol:

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

Result: positive

Test Type: In vitro mammalian cell gene mutation test

Result: positive

Remarks: Based on data from similar materials

Test Type: Chromosome aberration test in vitro

Result: positive

Remarks: Based on data from similar materials

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

cytogenetic assay)

Species: Rat

Application Route: inhalation (vapour)

Result: positive

Remarks: Based on data from similar materials

Germ cell mutagenicity -

Assessment

Positive result(s) from in vivo non-mammalian somatic cell mutagenicity tests, supported by positive results from in vitro

mutagenicity assays.

Carcinogenicity

May cause cancer.

**Components:** 

Glycerine:

Species : Rat
Application Route : Ingestion
Exposure time : 2 Years
Result : negative

Silica gel, precipitated, crystalline free:

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



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Result : negative

Remarks : Based on data from similar materials

beta-Cyfluthrin (ISO):

Species : Mouse
Application Route : Ingestion
Exposure time : 18 Months
Result : negative

Remarks : Based on data from similar materials

(Benzyloxy)methanol:

Species : Rat

Application Route : Inhalation Exposure time : 28 Months Result : positive

Remarks : Based on data from similar materials

Carcinogenicity - Assess-

ment

: Sufficient evidence of carcinogenicity in animal experiments

### Reproductive toxicity

May cause harm to breast-fed children.

#### **Components:**

Glycerine:

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

Species: Rat

Application Route: Ingestion

Result: negative

Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Rat

Application Route: Ingestion

Result: negative

Silica gel, precipitated, crystalline free:

Effects on foetal develop- : Test Type: Embryo-foetal development

ment Species: Rat

Application Route: Ingestion

Result: negative

Remarks: Based on data from similar materials

beta-Cyfluthrin (ISO):

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

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 416

Result: negative



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Remarks: Based on data from similar materials

Effects on foetal develop-

ment

Test Type: Fertility/early embryonic development

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 426

Result: negative

Reproductive toxicity - As-

sessment

Studies indicating a hazard to babies during the lactation peri-

od

(Benzyloxy)methanol:

Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Mouse

Application Route: Ingestion

Result: negative

Remarks: Based on data from similar materials

STOT - single exposure

Not classified based on available information.

**Product:** 

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

Components:

beta-Cyfluthrin (ISO):

Exposure routes : Ingestion

Target Organs : Nervous system

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

centrations of 300 mg/kg bw or less.

Exposure routes : Skin contact
Target Organs : Nervous system

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

centrations of 1000 mg/kg bw or less.

STOT - repeated exposure

Not classified based on available information.

**Components:** 

(Benzyloxy)methanol:

Target Organs : Respiratory Tract

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

centrations of >0.02 to 0.2 mg/l/6h/d.



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#### Repeated dose toxicity

### **Components:**

### Glycerine:

Species : Rat

NOAEL : 0.167 mg/l LOAEL : 0.622 mg/l

Application Route : inhalation (dust/mist/fume)

Exposure time : 13 Weeks

Species : Rat

NOAEL : 8,000 - 10,000 mg/kg

Application Route : Ingestion Exposure time : 2 yr

Species : Rabbit

NOAEL : 5,040 mg/kg

Application Route : Skin contact

Exposure time : 45 Weeks

### Silica gel, precipitated, crystalline free:

Species : Rat

NOAEL : > 4,500 mg/kg
Application Route : Ingestion
Exposure time : 90 Days

Remarks : Based on data from similar materials

### (Benzyloxy)methanol:

Species : Rat

LOAEL : > 0.02 - 0.2 mg/l

Application Route : inhalation (dust/mist/fume)

Exposure time : 90 Days

Remarks : Based on data from similar materials

# Aspiration toxicity

Not classified based on available information.

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

### **Ecotoxicity**

### **Components:**

### Glycerine:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 54,000 mg/l

Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 1,955 mg/l

aquatic invertebrates Exposure time: 48 h



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Toxicity to microorganisms : NOEC (Pseudomonas putida): > 10,000 mg/l

Exposure time: 16 h

Method: DIN 38 412 Part 8

Silica gel, precipitated, crystalline free:

Toxicity to fish : LL50 (Danio rerio (zebra fish)): > 10,000 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): > 1,000 mg/l

Exposure time: 24 h

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

Toxicity to algae/aquatic

plants

EL50 (Scenedesmus subspicatus): > 10,000 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

beta-Cyfluthrin (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.068 µg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Hyalella azteca (Amphipod)): > 0.0001 - 0.001 µg/l

Exposure time: 48 h

Remarks: Based on data from similar materials

Toxicity to fish (Chronic tox-

icity)

NOEC (Oncorhynchus mykiss (rainbow trout)): > 0.001 - 0.01

µq/l

Exposure time: 58 d

Remarks: Based on data from similar materials

(Benzyloxy)methanol:

Toxicity to fish : EC50 : 81.5 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 43 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

ErC50 (Desmodesmus subspicatus (green algae)): 17.7 mg/l

Exposure time: 72 h

Toxicity to microorganisms : EC50 (activated sludge): > 10 - 100 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Remarks: Based on data from similar materials



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Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-

isothiazol-3-one [EC no. 220-239-6] (3:1):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.19 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.16 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

ErC50 (Skeletonema costatum (marine diatom)): 0.0052 mg/l

Exposure time: 48 h

NOEC (Skeletonema costatum (marine diatom)): 0.00049 mg/l

Exposure time: 48 h

Toxicity to fish (Chronic tox-

icity)

NOEC (Pimephales promelas (fathead minnow)): 0.02 mg/l

Exposure time: 36 d

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.10 mg/l

Exposure time: 21 d

# Persistence and degradability

### **Components:**

Glycerine:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 92 % Exposure time: 30 d

Method: OECD Test Guideline 301D

(Benzyloxy)methanol:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 100 % Exposure time: 18 d

Method: OECD Test Guideline 301E

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-

isothiazol-3-one [EC no. 220-239-6] (3:1):

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 62 % Exposure time: 28 d

Method: OECD Test Guideline 301B

### **Bioaccumulative potential**

#### **Components:**

Glycerine:

Partition coefficient: n- : log Pow: -1.75



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octanol/water

beta-Cyfluthrin (ISO):

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)

Bioconcentration factor (BCF): 1,508 Method: OECD Test Guideline 305

Partition coefficient: n-

octanol/water

: log Pow: 5.8 - 5.9

(Benzyloxy)methanol:

Partition coefficient: n- : log Pow: 0.31 - 1.3

octanol/water Remarks: Calculation

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-

isothiazol-3-one [EC no. 220-239-6] (3:1): Partition coefficient: n- : log Pow: < 1

octanol/water

Mobility in soil
No data available

Other adverse effects

No data available

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

Disposal methods

Waste from residues : It is best to use all of the product in accordance with label

directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local

guidelines.

Do not dispose of waste into sewer.

Contaminated packaging : Follow advice on product label and/or leaflet.

Empty containers retain residue and can be dangerous.

Do not re-use empty containers.

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

# International Regulations

**UNRTDG** 

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(beta-Cyfluthrin (ISO), Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-



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isothiazol-3-one [EC no. 220-239-6] (3:1)

Class Ш Packing group Labels 9 Environmentally hazardous yes

IATA-DGR

UN/ID No. UN 3082

Proper shipping name Environmentally hazardous substance, liquid, n.o.s.

(beta-Cyfluthrin (ISO), Reaction mass of: 5-chloro-2-methyl-4-

isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-

isothiazol-3-one [EC no. 220-239-6] (3:1)

Class Packing group Ш

Labels Miscellaneous

Packing instruction (cargo

aircraft)

Packing instruction (passen-

ger aircraft)

964

Environmentally hazardous yes

**IMDG-Code** 

**UN** number UN 3082

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

964

(beta-Cyfluthrin (ISO), Reaction mass of: 5-chloro-2-methyl-4isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-

isothiazol-3-one [EC no. 220-239-6] (3:1)

Class 9 Ш Packing group Labels 9 EmS Code F-A, S-F Marine pollutant yes

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

Not applicable for product as supplied.

# **National Regulations**

**ADG** 

**UN** number UN 3082

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

(beta-Cyfluthrin (ISO), Reaction mass of: 5-chloro-2-methyl-4isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-

isothiazol-3-one [EC no. 220-239-6] (3:1)

Class 9 Packing group Ш Labels 9 Hazchem Code •3Z Environmentally hazardous yes

#### 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



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Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### **SECTION 15. REGULATORY INFORMATION**

# Safety, health and environmental regulations/legislation specific for the substance or mix-

Therapeutic Goods (Poisons

Standard) Instrument

Schedule 5 (Please use the original publication to check for specific uses, specific conditions or threshold limits that might

apply for this chemical)

Prohibition/Licensing Requirements : There is no applicable prohibition,

authorisation and restricted use requirements, including for carcinogens referred to in Schedule 10 of the model WHS Act and Regula-

tions

Product Type : Insecticides, acaricides and products to control other arthro-

pods

Active substance : 25 g/l

beta-Cyfluthrin (ISO)

#### **SECTION 16: ANY OTHER RELEVANT INFORMATION**

**Further information** 

Revision Date : 29.07.2024

Sources of key data used to compile the Safety Data

Ob ---

Sheet

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

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

Date format : dd.mm.yyyy

Full text of other abbreviations

AU OEL : Australia. Workplace Exposure Standards for Airborne Con-

taminants.

AU OEL / TWA : Exposure standard - time weighted average

AllC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory con-



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centration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative: WHMIS - Workplace Hazardous Materials Information System

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

AU / EN