

**SAFETY DATA SHEET**

According to EC-directive 93/112/EC

Pending

**BIOALLETHRIN TG****1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

**Product label name** Bioallethrin  
**Supplier** SUMITOMO CHEMICAL (UK) PLC  
Horatio House  
77-85 Fulham Palace Rd  
London W6 8JA  
United Kingdom  
Tel.: +44 208 600 7700  
**Emergency telephone** + 31 570679211 (Fax. + 31 570679801)  
Akzo Nobel Chemicals-Deventer-NL  
  
+ 44-1634280888  
Akzo Nobel Chemicals-Gillingham-GB

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

This product is to be considered as a substance in conformance to EC directives

Information on hazardous ingredients

**Chemical description** Bioallethrin**Composition / information on ingredients**

Number	% w/w	CAS-number	Chemical name
1	>93	584-79-2	(RS)-3-Allyl-2-methyl-4-oxocyclopent-2-enyl (1R).trans-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropane carboxylate

Number	EC-number	Annex-1 number	Symbol(s)	Risk-phrase(s)
1	209-542-4	006-025-00-3	Xn N	R20/22 R50/53

**3. HAZARDS IDENTIFICATION**

Harmful by inhalation and if swallowed.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**4. FIRST AID MEASURES**

**Symptoms and effects** May cause a transient itching and/or burning sensation in exposed human skin. Synthetic pyrethroids can produce paresthesias. Typically, symptoms begin several hours after cutaneous exposure, peaks within about 12 hours and resolves within about 24 hours. Extraordinary absorbed doses may rarely cause tremor, hyperexcitability, uncoordinated movements, salivation, nausea or vomiting and diarrhoea.

**First aid**

**General** In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Inhalation** Move to fresh air. If symptoms persist, seek medical advice.

**Skin** Remove contaminated clothing. Wash immediately with soap and water.

**Eye** Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if irritation develops.

**Ingestion** Rinse mouth, give water to drink. Never induce vomiting in unconscious or confused persons. Seek medical advice. Symptomatic treatment is advised.

**Advice to physician**

**5. FIRE-FIGHTING MEASURES**

**Extinguishing media** dry chemical powder, Carbon dioxide.  
Large fires: waterspray or foam

**Unsuitable extinguishing media** Water with full waterjet.

**Special exposure hazards** none known.

**Hazardous decomposition/combustion products** May emit toxic and irritating fumes under fire conditions.

**Protective equipment** Wear self contained breathing apparatus. Wear suitable protective clothing. See also Section 8.

**Other information** Keep away from heat.  
Cool closed containers with water.  
Water used to extinguish a fire should not be allowed to enter the drainage system or water courses.

## BIOALLETHRIN TG

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	For personal protection see Section 8.
<b>Environmental precautions</b>	Do not allow to escape into sewage system or water courses.
<b>Methods for cleaning up</b>	In case of spill (liquid), soak it up immediately with suitable absorbent, such as sawdust or granular absorbent clay. Sweep up and put it into a container for disposal ( See Section 13). Rinse remnant with plenty of water. Do not allow to enter drains or water courses.

### 7. HANDLING AND STORAGE

<b>Handling</b>	Keep away from food, drink and animal feedingstuffs. Avoid contact with skin and eyes. For personal protection see Section 8.
<b>Fire and explosion prevention</b>	No specific recommendations.
<b>Storage requirements</b>	Store in a dry well ventilated place away from sources of heat and direct sunlight. Store at ambient temperatures.
<b>Other information</b>	Keep only in the original container. To maintain quality: Store in polyethylene.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering controls** Provide adequate ventilation.

**Name**

Bioallethrin 3.8 mg/m<sup>3</sup> (TWA)

**Personal protection**

**Respiratory** at least breathing mask (Type A2/P3).

**Hand** Wear protective gloves.

**Eye** Wear safety goggles.

**Skin and body** Wear suitable protective clothing.

**Other information** Launder clothes before reuse.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	viscous liquid
<b>Colour</b>	yellow / brown
<b>Odour</b>	faint characteristic
<b>Boiling point/range</b>	160 °C
<b>Melting point/range</b>	not applicable
<b>Flash point</b>	94 °C
<b>Flammability</b>	combustible material
<b>Autoignition temperature</b>	not determined
<b>Explosive properties</b>	not available
<b>Explosion limits</b>	not determined
<b>Oxidizing properties</b>	not relevant
<b>Vapour pressure</b>	3.3 at 10-4 mm Hg (25 °C )
<b>Density</b>	1.0 - 1.02 g/ml (20 °C )
<b>Bulk density</b>	not applicable
<b>Solubility in water</b>	Insoluble
<b>Solubility in other solvents</b>	Soluble (in most organic solvents)
<b>pH value</b>	not applicable
<b>Partition coefficient n-octanol/water</b>	Log Pow = 4.70
<b>Relative vapour density (air=1)</b>	not determined
<b>Viscosity</b>	not determined

### 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under recommended storage and handling conditions (see section 7).
<b>Conditions to avoid</b>	Avoid direct sunlight.
<b>Materials to avoid</b>	none known.
<b>Hazardous decomposition products</b>	Emits toxic fumes under fire conditions (See also Section 5).

**SAFETY DATA SHEET**

According to EC-directive 93/112/EC

Pending

**BIOALLETHRIN TG****11. TOXICOLOGICAL INFORMATION**

<b>Name</b>	Bioallethrin
<b>Acute toxicity</b>	
<b>Oral LD50</b>	rat: 709 - 1042 mg/kg
<b>Dermal LD50</b>	rabbit : > 3000 mg/kg
<b>Inhalation LC50</b>	rat (4 hours ) : 2,51 mg/l
<b>Irritation</b>	
<b>Skin</b>	Non-irritating (rabbit)
<b>Eye</b>	Non-irritating (rabbit)

**12. ECOLOGICAL INFORMATION**

<b>Name</b>	Bioallethrin
<b>Ecotoxicity</b>	
<b>fish</b>	Acute toxicity, 96h-LC50 (Oncorhynchus kisutch): 0.0094 mg/l Acute toxicity, 96h-LC50 (Salmo gairdneri): 0.0097 mg/l Acute toxicity, 96h-LC50 (Ictalurus panctatus): 0.027 mg/l
<b>daphnia</b>	Acute toxicity, 48h-EC50 (Daphnia magna) : 0.0356 mg/l

**13. DISPOSAL CONSIDERATIONS**

<b>Product</b>	According to local regulations. For further advice contact manufacturer.
<b>Contaminated packaging</b>	According to local regulations.

**14. TRANSPORT INFORMATION***Land transport (ADR/ RID)*

<b>ADR class</b>	9	<b>ADR item number</b>	11c
<b>RID class</b>	9	<b>RID item number</b>	11c
<b>Hazard Identification No.</b>	90	<b>Substance Identification No.</b>	3082
<b>TREM-Card</b>	CEFIC TEC(R)- 90G01	<b>UN number</b>	3082
<b>Proper Shipping Name</b>	Environmentally hazardous substance, liquid, n.o.s. (Bioallethrin)		

*Sea transport (IMDG-code/ IMO)*

<b>IMO/IMDG code</b>		<b>Class</b>	9
<b>Packing group</b>	III	<b>UN number</b>	3082
<b>EMS</b>	none	<b>MFAG</b>	none
<b>Marine pollutant</b>	yes		
<b>Proper Shipping Name</b>	Environmentally hazardous substance, liquid, n.o.s. (Bioallethrin)		

*Air transport (ICAO-TI/ IATA-DGR)*

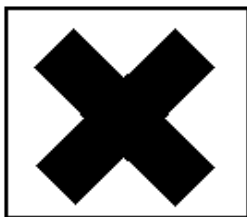
<b>ICAO-TI/IATA-DGR</b>		<b>UN number</b>	3082
<b>Class</b>	9	<b>Packing group</b>	III
<b>Proper Shipping Name</b>	Environmentally hazardous substance, liquid, n.o.s. (Bioallethrin)		

**15. REGULATORY INFORMATION**

<b>Chemical description</b>	Bioallethrin
-----------------------------	--------------

Labelling according to EC directives

<b>EC-number</b>	See section 2
<b>Classification based on</b>	Annex-1 to directive 67/548/EEC



HARMFUL (Xn)



DANGEROUS FOR THE ENVIRONMENT (N)

Symbol(s)

**SAFETY DATA SHEET**

According to EC-directive 93/112/EC

Pending

**BIOALLETHRIN TG**

---

<b>R(isk) phrase(s)</b>	R20/22: Harmful by inhalation and if swallowed R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
<b>S(afety) phrase(s)</b>	S36/37: Wear suitable protective clothing and gloves S46: If swallowed, seek medical advice immediately and show this container or label S60: This material and its container must be disposed of as hazardous waste S61: Avoid release to the environment. Refer to special instructions/Safety data sheets

---

**16. OTHER INFORMATION**

This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.

**History**

<b>Date of printing/ pdf file generated</b>	27-08-2001
<b>Revision</b>	0.00
<b>Composed by</b>	Dr. D.J. Buckland      Dr. R. Martin