

BIORESMETHRIN TG

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product label name Bioresmethrin
Supplier SUMITOMO CHEMICAL (UK) PLC
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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 Bioresmethrin

Composition / information on ingredients

Number	% w/w	CAS-number	Chemical name
1	> 93	28434-01-7	Cyclopropanecarboxylic acid, 2,2 dimethyl-3-(2-methyl-1-propenyl), (5-(phenylmethyl)-3-furanyl methyl ester, (1R-trans)

Number	EC-number	Annex-1 number	Symbol(s)	Risk-phrase(s)
1	249-014-0	613-120-00-9	N	R50/53

3. HAZARDS IDENTIFICATION

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.

Advice to physician Symptomatic treatment is advised.

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.

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions	For personal protection see Section 8.
Environmental precautions	Do not allow to escape into sewage system or water courses.
Methods for cleaning up	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

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls	Provide adequate ventilation.
Exposure limits	No exposure limits have been established for this material.
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	Laundry clothes before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	viscous liquid to whitish solid
Colour	yellow / brown
Odour	faint characteristic
Boiling point/range	174 °C
Melting point/range	32 °C
Flash point	92 °C
Flammability	not determined
Autoignition temperature	not determined
Explosive properties	not available
Explosion limits	not determined
Oxidizing properties	not relevant
Vapour pressure	not determined
Density	1.04-1.06 g/ml (20 °C)
Solubility in water	Insoluble
Solubility in other solvents	Soluble (in most organic solvents)
pH value	not applicable
Partition coefficient n-octanol/water	Log Pow = 4.7
Relative vapour density (air=1)	not determined
Viscosity	not determined

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage and handling conditions (see section 7).
Conditions to avoid	Avoid direct sunlight.
Materials to avoid	Halogens, strong acids or oxidants.
Hazardous decomposition products	Emits toxic fumes under fire conditions (See also Section 5).

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11. TOXICOLOGICAL INFORMATION

Name	Bioresmethrin
Acute toxicity	
Oral LD50	rat (male): 5396 mg/kg
Dermal LD50	rabbit : > 2000 mg/kg
Inhalation LC50	rat (4 hours) : >5.28 mg/l
Irritation	
Skin	Non-irritating (rabbit).
Eye	Non-irritating (rabbit).
Sensitization	Not sensitizing (guinea pig).
Other toxicological information	Not teratogenic. not carcinogenic. NOEL (No Observable Effect Level) = 3-4 mg/kg/day

12. ECOLOGICAL INFORMATION

Name	Bioresmethrin
Ecotoxicity	
fish	Acute toxicity, 96h-LC50 : 0.0062 mg/l
daphnia	Acute toxicity, 48h-EC50 : 0.0008 mg/l

13. DISPOSAL CONSIDERATIONS

Product	According to local regulations. For further advice contact manufacturer.
Contaminated packaging	According to local regulations.

14. TRANSPORT INFORMATION

Land transport (ADR/ RID)

ADR class	9	ADR item number	12c
RID class	9	RID item number	12c
Hazard Identification No.	90	Substance Identification No.	3077
TREM-Card	CEFIC TEC(R)- 90G02	UN number	3077
Proper Shipping Name	Environmentally hazardous substance, solid, n.o.s. (Bioresmethrin)		

Sea transport (IMDG-code/ IMO)

IMO/IMDG code		Class	9
Packing group	III	UN number	3077
EMS	none	MFAG	none
Marine pollutant	yes		
Proper Shipping Name	Environmentally hazardous substance, solid, n.o.s. (Bioresmethrin)		

Air transport (ICAO-TI/ IATA-DGR)

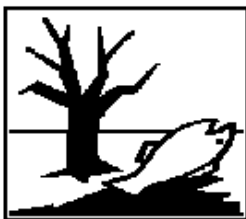
ICAO-TI/IATA-DGR		UN number	3077
Class	9	Packing group	III
Proper Shipping Name	Environmentally hazardous substance, solid, n.o.s. (Bioresmethrin)		

15. REGULATORY INFORMATION

Chemical description	Bioresmethrin
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Labelling according to EC directives

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



Symbol(s)	DANGEROUS FOR THE ENVIRONMENT (N)
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SAFETY DATA SHEET
According to EC-directive 93/112/EC

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R(isk) phrase(s)	R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
S(afety) phrase(s)	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

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