

SAFETY DATA SHEET

RAAM

Revision date: 14.02.2018

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifiers

Product name: RAAM
Chemical name: Bifenthrin
CAS No.: 82657-04-3

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

Identified uses: Insecticide for public health use
Producer R.P.C. LTD. MOSHAV NES HARIM P.O.BOX 128 – 9988500
TEL.: 1-700-500-405
FAX 02-6522866

Information in case of emergency: 04-7771900

SECTION 2: HAZARDS IDENTIFICATION

Acute tox 4
Eye irrit. 2
Skin sens.1
STOT SE 3
Carc. 2
STOT RE 1
Aq chronic 2



Pictogram(s):

Signal word: Danger

Hazard statement(s):

H302: Harmful if swallowed
H305: May be harmful if swallowed and enters airways
H319: Causes serious eye irritation
H317: May cause an allergic skin reaction
H351: Suspected of causing cancer
H372: Causes damage to organs (nervous system) through prolonged or repeated Exposure
EUH066: Repeated exposure may cause skin dryness or crackin
H411: Toxic to aquatic life with long lasting effects

Precautionary statement(s):

P260: Do not breathe fumes/mist/vapours/ spray
P280: Wear protective gloves/clothing/eye protection/face protection

P301+P310:

IF SWALLOWED: Immediately call a POISON CENTER /doctor

P304+P340:

IF INHALED: Remove person to fresh air and keep comfortable for breathing

P312: Call a POISON CENTER or doctor if you feel unwell

P501: Dispose of contents/container in accordance with local/regional/regulation

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS N ^o /EC No	%	Signal word	H-Statements
Bifenthrin	CAS 82657-04-3	10.0	Danger	Acute tox 2 H300 Skin sens 1 H317 Acute tox 3: H331 STOT-RE 1 H372 (nervous system) Carc. 2: H351 Aq acute 1 H400 Aq. acute 1 H410
Terpene Alcohol	CAS 8002-09-3	5.6	Danger	R10,R36,R38
Dimethyl Methyl Glutarate	CAS 14035-94-0	11.0	Danger	Eye dam.H314,H318 H319
Emulsifiers	Mixture		Warning	Skin irrit 2: H315 Eye dam 1: H318 Carc 2: H351 STOT SE 3: H335 Aq acute1 H400 Aq chronic 1 H410

SECTION 4: FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre and follow the advice given. Show this Safety Data Sheet to a doctor.

Ingestion: Do not induce vomiting. Do not give liquids of any kind. Never give anything by mouth to an unconscious person. Consult a doctor immediately.

Skin contact: Remove contaminated clothing. Wash affected area with plenty of soap and water.

Inhalation: Remove to fresh air. If breathing is difficult or discomfort occurs and persists, seek medical attention.

Eye contact: Flush eyes with water for at least 15 minutes. Remove contact lenses if present and easy to do, continue rinsing. If irritation occurs and persists, seek medical attention.

Notes to physician: This product contains light aromatic hydrocarbons that can produce a severe pneumonitis or pulmonary oedema if aspirated during vomiting. Consideration should be given to gastric lavage with an endotracheal tube in place. Treatment is otherwise controlled.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing media:	Water fog, fine water spray, foam, dry chemical, carbon dioxide. Do not use water jet.
Hazards from combustion products:	Do not breathe smoke, gases or vapours generated – carbon monoxide, carbon dioxide, hydrogen chloride and hydrogen fluoride.
Advice for fire fighters:	Fire-fighters should wear full protective gear, including self-contained breathing apparatus. Keep unnecessary people away. Use water spray to cool containers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions:	Wear PPE as recommended in section 8. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid contact with spilled material or contaminated surfaces. Keep people and animals away.
Environmental precautions:	Prevent product from entering drains or water courses. Warn the local water authority if water-courses become contaminated.
Clean-up methods:	Pick up and arrange disposal without creating aerosol. Contain spill and absorb with earth, sand, clay, or other absorbent material, collect and store in sealed drums for safe disposal. Decontaminate the area and equipment by washing areas with water. Keep in suitable, closed containers for disposal. Contaminated extinguishing water must be disposed of in accordance with official regulations.

SECTION 7: HANDLING AND STORAGE

Handling:	Keep out of reach of children. Irritating to eyes. Avoid breathing vapour or spray. For product in eyes, wash immediately with water. For product on skin, immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.
Storage:	Store between 5-30°C in the closed original container, in a cool, dry, well-ventilated area, away from direct sunlight and sources of ignition.
Incompatibility:	Incompatible with acids.
Flammability:	Not flammable under normal conditions of use. The product does not sustain combustion.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure limits:	Hydrotreated Light Petroleum (as hydrocarbon vapour): 200 mg/m ³ TWA
Engineering controls:	Use only in well-ventilated areas. If necessary, use local exhaust ventilation to keep airborne concentration below exposure limits.
Personal protective equipment:	Wear face shield or goggles. Wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat, heavy-duty shoes or boots. Wear elbow length butyl rubber gloves.

If working in a poorly ventilated area or if occupational exposure levels are likely to be exceeded, wear a respirator with filter for vapours.

After each day's use, wash gloves, goggles or face shield, respirator if worn, and contaminated clothing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

a) Appearance:	Milky white liquid
b) pH:	5.5-6.5 AT 25C (1% solution)
c) Boiling point/boiling range:	Decomposes before boiling (tech.)
d) Flash-point:	N.D
e) Vapour pressure:	Vapour pressure: 0.0178 mPa (tech.)
f) Density:	0.995-1.005gr/ltr

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions of use. Will not polymerise.
Chemical stability	The product is stable if stored and handled as prescribed /indicated.
Possibility of hazardous reactions	No hazardous reactions when stored and handled according to instructions.
Conditions to avoid	Sources of ignition and extreme heat.
Incompatible materials	None currently known.
Hazardous decomposition Products:	Carbon monoxide, carbon dioxide, hydrogen chloride and hydrogen fluoride.

SECTION 11: TOXICOLOGICAL INFORMATION

Oral toxicity:	LD ₅₀ rat: >500-2000 mg/kg (GHS Cat 4)
Dermal toxicity:	LD ₅₀ rat: >2000- 5000 mg/kg (GHS Cat 5)
Inhalation toxicity:	LC ₅₀ rat (4 h) >1.01 mg/L (technical material)
Skin irritation:	Mild irritant (not sufficient for classification)
Eye irritation:	irritant
Skin sensitisation:	May cause skin sensitisation
WHO Toxicity classification:	II, moderately hazardous

Based on laboratory evidence from studies in mice, formation of tumours were observed.
Not mutagenic or reproductive toxicity.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity (technical material)

Bird toxicity:	LD ₅₀ Bobwhite quail	1800 mg/kg
Fish toxicity:	LC ₅₀ 96 h rainbow trout	0.00026 mg/L
Daphnia toxicity:	EC ₅₀ 48 h <i>Daphnia magna</i>	0.00011 mg/L
Algal toxicity:	EC ₅₀ 72h Green algae	0.822 mg/L

Bifenthrin is only slightly toxic to both waterfowl and upland game birds. Bifenthrin is highly toxic to fish and aquatic arthropods. However, its low water solubility and strong adsorption to soil help to minimise impact in aquatic systems under field conditions.

Bees:	LD ₅₀ : (Oral)	0.1 µg/bee
	(Contact)	0.015 µg/bee

Toxic to bees

Environmental fate:	Soil DT ₅₀	65 - 125 d
	Soil K _{oc}	1.31 - 3.02 x 10 ⁵

Bifenthrin has moderate stability in soil under aerobic conditions and is stable under a wide range of pHs. Bifenthrin has a high log P_{ow} and high affinity for organic matter. It is not mobile in soil and so should not move into ground water. There is potential for bifenthrin to bioaccumulate (BCF 1703).

SECTION 13: DISPOSAL CONSIDERATIONS

Do not contaminate ponds, waterways or ditches with chemical or used containers. Empty containers should be washed and discarded. Empty containers should not be used for other purposes. Disposal should be in accordance with local, state or national legislation.

SECTION 14: TRANSPORTATION INFORMATION

UN number:	3082		
UN Proper Shipping Name:	Environmentally hazardous substance, liquid, N.O.S. (contains bifenthrin)		
Transport hazard class:	ADR/RID: 9	IMDG: 9	IATA: 9
Packaging group:	ADR/RID: III	IMDG: III	IATA: III
Environmental hazard:	ADR/RID: Yes	IMDG: Marine pollutant: Yes	IATA: Yes

SECTION 15: REGULATORY INFORMATION

No additional regulatory information required for this product.

SECTION 16: OTHER INFORMATION

H- statements:

H300

Fatal if swallowed

H302	Harmful if swallowed
H304	May be fatal if swallowed and enter airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H351	May cause cancer
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
EUH066	Repeated exposure may cause skin dryness or cracking

TWA: Time weighted average: average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

No liability is accepted for any injury, loss, damage or cost arising directly or indirectly from the use of the product or from the use of information contained within the safety data sheet since the customer's handling of the product is necessarily beyond our control. The supplied data are based on current knowledge and experience. This safety data sheet is intended to describe our product in terms of safety requirements. The customer should determine by appropriate trials that the product is suitable for his intended use.

Reason for revision:

Updates to sections 2, 3, 9, 11, 16

Sections, 11 and 12 based on available EU and own data.

Self-classification of mixture (studies/calculation)