

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

1.1. Product identifier

Product name: KARIS

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

Use of substance / mixture: An insecticide for use in agriculture and horticulture.

1.3. Details of the supplier of the safety data sheet

Company name: Headland Agrochemicals

Rectors Lane

Pentre

Deeside

Flintshire

CH5 2DH

United Kingdom

Tel: +44(0)1244 537370

Fax: +44(0)1244 532097

Email: enquiry@headlandgroup.com

1.4. Emergency telephone number

Emergency tel: +44(0)1244 537370

(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CHIP: Xn: R20/22; N: R50/53

Most important adverse effects: Harmful by inhalation and if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Label elements under CHIP:

Hazard symbols: Harmful.

Dangerous for the environment.



Risk phrases: 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.

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- Safety phrases:** S13: Keep away from food, drink and animal feeding stuffs.
S23: Do not breathe spray.
S35: This material and its container must be disposed of in a safe way.
S38: In case of insufficient ventilation, wear suitable respiratory equipment.
S46: If swallowed, seek medical advice immediately and show this container or label.
S57: Use appropriate container to avoid environmental contamination.

2.3. Other hazards

PBT: This product is not identified as a PBT substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

LAMBDA-CYHALOTHRIN (ISO)

EINECS	CAS	CHIP Classification	CLP Classification	Percent
415-130-7	91465-08-6	T+: R26; T: R25; Xn: R21; N: R50/53	Acute Tox. 2: H330; Acute Tox. 3: H301; Acute Tox. 4: H312; Aquatic Acute 1: H400; Aquatic Chronic 1: H410	10-30%

KEROSINE - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM.

265-198-5	64742-94-5	Xn: R65; N: R51/53	Asp. Tox. 1: H304	5-10%
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LIGNOSULPHONIC ACID, SODIUM SALT, SULFOMETHYLATED

-	68512-34-5	Xi: R36/37	-	1-5%
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Section 4: First aid measures

4.1. Description of first aid measures

- Skin contact:** Wash immediately with plenty of soap and water. Remove all contaminated clothes and footwear immediately unless stuck to skin.
- Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.
- Ingestion:** Do not induce vomiting. Wash out mouth with water. Transfer to hospital as soon as possible.
- Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious and breathing is OK, place in the recovery position. Consult a doctor.

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

- Skin contact:** There may be irritation and redness at the site of contact. There may be tingling/numbness on exposed areas.
- Eye contact:** There may be irritation and redness. The eyes may water profusely.
- Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.
- Inhalation:** Inhalation of vapours can lead to irritation of eyes, nose and respiratory tract.

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Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Show this safety data sheet to the doctor in attendance.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Water spray. Carbon dioxide. Dry chemical powder. Foam. Avoid heavy hose streams.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Combustion products of this material must be classed invariably as respiratory poison.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Do not attempt to take action without suitable protective clothing - see section 8 of SDS. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding. Accidental release into water courses must be alerted to the appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Refer to section 13 of SDS for suitable method of disposal.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Smoking is forbidden.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep away from sources of ignition. Keep container tightly closed. The floor of the storage room must be impermeable to prevent the escape of liquids. Opened containers must be resealed and kept upright to prevent leakage.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

8.1. DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area. The floor of the storage room must be impermeable to prevent the escape of liquids.

Respiratory protection: Gas/vapour filter, type A: organic vapours (EN141). Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Impermeable gloves.

Eye protection: Tightly fitting safety goggles. Ensure eye bath is to hand.

Skin protection: Impermeable protective clothing.

Environmental: Refer to specific Member State legislation for requirements under Community environmental legislation.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Beige

Odour: Slightly aromatic.

Solubility in water: Miscible

Viscosity: 150 mPa.s

Viscosity test method: Dynamic

Boiling point/range°C: >104

Flash point°C: >100

Relative density: 1.06

pH: Approx. 5.5

9.2. Other information

Other information: No data available.

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Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable at room temperature.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.
Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Oxidising agents.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

Route	Species	Test	Value	Units
ORAL	RAT	LD50	300 - 2000	mg/kg
DERMAL	RAT	LD50	>2000	mg/kg
VAPOURS	RAT	LC50	2.78	mg/l

Hazardous ingredients:

LAMBDA-CYHALOTHRIN (ISO)

IVN	RAT	LD50	1951	µg/kg
ORL	RAT	LD50	56	mg/kg
SKN	RAT	LD50	632	mg/kg

KEROSINE - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM.

ORL	RAT	LDLO	5	ml/kg
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Relevant effects for mixture:

Effect	Route	Basis
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Acute toxicity (harmful)	INH ING	Hazardous: calculated
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Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact. There may be tingling/numbness on exposed areas.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: Inhalation of vapours can lead to irritation of eyes, nose and respiratory tract.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
RAINBOW TROUT (<i>Oncorhynchus mykiss</i>)	96H LC50	0.0151	mg/l
Daphnia magna	48H EC50	0.043	mg/l
GREEN ALGA (<i>Selenastrum capricornutum</i>)	96H ErC50	23.84	mg/l

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT substance.

12.6. Other adverse effects

Other adverse effects: Very toxic to aquatic organisms.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: The listed waste code number, according to the European Waste Catalogue, is to be understood as a recommendation. A final decision must be made in agreement with the regional waste disposal company.

Recovery operations: Not applicable.

Waste code number: 020108

Disposal of packaging: Completely discharge containers. Do not reuse product container.

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NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: UN3082

14.2. UN proper shipping name

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(LAMBDA-CYHALOTHRIN (ISO))

14.3. Transport hazard class(es)

Transport class: 9

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: Yes

Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 3

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk: The product is not transported in bulk tankers.

Section 15: Regulatory information

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

Specific regulations: This product is a Seveso category/named substance in Annex I of Council Directive 96/82/EC.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and 3: H301: Toxic if swallowed.

H304: May be fatal if swallowed and enters airways.

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H312: Harmful in contact with skin.

H330: Fatal if inhaled.

H410: Very toxic to aquatic life with long lasting effects.

R20/22: Harmful by inhalation and if swallowed.

R21: Harmful in contact with skin.

R25: Toxic if swallowed.

R26: Very toxic by inhalation.

R36/37: Irritating to eyes and respiratory system.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65: Harmful: may cause lung damage if swallowed.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.