

Sharda International Africa (Pty) Ltd

(Co. Reg. No. 2010/002268/07)
P.O. Box 82021, Southdale, 2135, South Africa.

Tel: 031 764 3011, Tel: 087 822 2397
Email: rsa.regn@shardaintl.com, Website: <http://www.shardaintl.com>

SECTION 1. Chemical product and company identification

Product identifier:

Identification as on the label/Trade name: Lufen 5 EC

Additional information: Lufenuron 50 g/l

Relevant identification uses of the substance and uses advised against:

Identified uses: Insecticide

Uses advised against: Use only as directed.

Details of the supplier of the Safety Data Sheet:

Company name: Sharda International Africa (Pty) Ltd

Address: P.O. Box 82021, Southdale, 2135

Phone number.: 031-764-3011

Emergency telephone numbers:

UNITAS Hospital: 0800-111-9900

Tygerberg Hospital: 021-931-6129

Netcare 911: 082911

SECTION 2. HAZARD IDENTIFICATION

Classification of the substances or mixture

The mixture is classified according to

SANS 10234:2008, Regulation EC 1272/2008 [EU-GHS/CLP]	
Hazard classes/Hazard categories	Hazard statement
Acute toxicity oral	H302: Harmful if swallowed
Inhalation	H332: Harmful if inhaled
Skin irritation	H315 – Causes skin irritation
Eye irritation	H320 – Causes eye irritation
Hazardous to the Environment	H400 + 401 – Very toxic to aquatic life with long lasting effects

For full text of H statements see section 16

The most important adverse effects

The most important adverse physiochemical effects: None.

The most important adverse human health effects: Harmful if swallowed. Harmful if inhaled. Causes skin irritation. Causes eye irritation

Label elements



Hazard pictograms:

Signal Word: Warning

Hazard Statements: H302: Harmful if swallowed H332: Harmful if inhaled. H315 – Causes skin irritation. H320 – Causes eye irritation. H400 + 401 – Very toxic to aquatic life with long lasting effects

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Precautionary Statements: P264 Wash skin thoroughly after handling P270 Do not eat, drink or smoke when using this product. P261 + P271 Avoid breathing dust/fume/gas/mist/vapours/spray, . Use only outdoors or in a well-ventilated area. P264 + P280 Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. P273 Avoid release to the environment.

Special labelling of certain mixtures: None

Other hazards: None

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients:

Substance name (IUPAC/EC)	CAS –No.	Concentration % by weight	Classification
			EC1272/2008
Lufenuron	103055-07-8	5.07	Skin Sensitization Category 1 Aquatic acute category 1 Aquatic chronic category 1
Tensiofix B9718	1335202-81-7 71-36-3 64742-95-6	2.79	Skin irritation category 2 Eye damage category 1 Aquatic chronic category 3 Flam liquid category 3 Acute oral toxicity category 4 STOT SE Category 3 STOT SE category 3 Asp toxicity category 1 Mutagenic category 1 B Carcinogenic category 1 B
Tensiofix B 9732	1335202-81-7 71-36-3 64742-95-6	3.9	Skin irritation category 2 Eye damage category 1 Aquatic chronic category 3 Flam liquid category 3 Asp toxicity category 1 Mutagenic category 1B Carcinogenicity category 1B
Cyclohexanone	108-94-1	2.63	Flam liquid category 3 Acute inhalation toxicity 4
Solvesso 150 SD	64742-94-5	6.13	Aspiration toxicity 1

For full text of H statements see section 16

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

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SECTION 4. FIRST AID MEASURES

Description of first aid measures:

In case of inhalation:

Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation persists.

In case of skin contact:

Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Obtain medical attention if irritation persists.

In case of eye contact:

Flush eyes with clean water. Lift eyelids to facilitate irrigation. If present, remove contact lenses and continue rinsing. Seek medical attention if irritation persists.

In case of ingestion:

Rinse mouth with water. Give plenty of water to drink. Seek immediate medical assistance. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed:

Inhalation: Harmful if swallowed

Ingestions: Harmful if inhaled

Skin contact: Causes skin irritation

Eye contact: Causes eye irritation

Anticipated delayed effects: None known

Most important symptoms/effects: None known.

Advice to physician:

Treat symptomatically and supportively. No specific antidote known.

SECTION 5. FIRE -FIGHTING MEASURE

Extinguisher media:

Suitable extinguisher media: Water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

SMALL FIRE: See above.

LARGE FIRE: See above.

Unsuitable extinguishing media: High volume water jet. Use a water jet only to cool heated containers.

Specific hazards arising from the mixture:

Use appropriate extinguishing media for combustibles in the area. Residual organic material will emit toxic fumes when burning.

Special Fire Fighting Procedures:

Remove spectators from surrounding area. Isolate the fire area and evacuate all personnel downwind of the fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Keep upwind. Avoid inhaling hazardous vapours and fumes from burning materials. Remove containers from fire area if possible and without risk. Do not use high volume water jet, due to contamination risk. Do not scatter the burning material. Water can be used to cool unaffected containers but must be contained for later disposal. Contain fire control agents for later disposal. Avoid pollution of waterways by run-off from the site.

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Advice for fire-fighters:

Wear NIOSH/MSHA approved self-contained breathing apparatus and full protective gear. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6. ACCIDENTAL RELEASE

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Keep all personal away. Avoid contact with eyes and skin. Ventilate area of spill or leak, especially in contained areas.

For emergency responders: Avoid contact with eyes and skin. Do not breathe in spray mist or fumes/vapours. Ventilate area of spill or leak, especially in contained areas.

Protective equipment:

Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

Emergency procedures: Alert fire-fighting personnel, evacuate unprotected personal and animals

Environmental precautions:

Prevent spilled product from entering sewers, waterways or ground water. This product is classified to be toxic to aquatic organisms and will cause long-term adverse effects in the aquatic environment. Any spillages or uncontrolled discharges into watercourses should be reported immediately to the police and the Department of Water /Environmental Affairs).

Methods and materials for containment and cleaning up:

Material for containment and cleaning up:

Contain spilled product by diking area with sand or earth.

Cover contained spill with an inert absorbent material such as sand, vermiculite, earth or other appropriate material. Vacuum, scoop, or sweep up material and place into a clean, dry, sealable container. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spilled material. Collect washings and add to the drums already collected. Do not flush spilled material or washings into drains or waterways. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. See section 13 for disposal considerations.

Reference to other sections:

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for information on disposal.

Additional information: None.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid contact with eyes and skin. Harmful if swallowed. Ensure adequate ventilation during handling and use. Do not handle broken containers without protective equipment. Immediately clean up spills that occur during handling. Keep containers tightly closed when not in use. In the case of contact with the product refer to First Aid Measures – Section 4

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Protective measures: General occupational hygiene: Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at the end of each workday. Launder all clothing before it is re-used.

Conditions for safe storage, including incompatibilities:

Keep under lock and key and out of reach of unauthorised persons, children and animals. Store the product in its original labelled container, tightly closed, in an isolated dry cool and well-ventilated area. Do not store this product next to foodstuffs, feed and water supplies. Avoid cross contamination with other pesticides and fertilisers.

Incompatible substances: Refer to product label

Packaging material: Fluorinated plastic containers.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters:

Occupational exposure limits (OEL): None known

Biological exposure indices (BEI): None known.

Additional exposure limits under the conditions of use: None known.

Exposure control:

It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure.

Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

Appropriate engineering controls:

It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

Hygiene measures:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Where there is possibility that an employee's eyes may be exposed to this substance; the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use

Respiratory protection:

If used in a poorly ventilated area (airborne concentrations exceed exposure limits), use a NIOSH approved air-purifying respirator with cartridges/canisters approved for organic vapours.

Hand protection:

Employee must wear appropriate chemical resistant rubber gloves (PVC or neoprene gloves) to prevent skin contact with this product.

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Eye/face protection:

Employee must wear chemical resistant safety goggles or face-shield to prevent eye contact with this product. Contact lenses are not protective eye devices.

Skin and body protection:

Employee must wear appropriate protective (impervious) clothing e.g. long-sleeved cotton overalls, rubber boots, face shield and hat to prevent repeated or prolonged skin contact with this product.

Environmental exposure controls: Environmental manager must be informed of all major spillages.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:	Yellowish brown liquid.
Odour:	Typical pesticide odour.
pH (1% aqueous dilution):	6.8.
Melting point:	Not available. 168.7oC to 169.4oC (technical material, depending on purity).
Freezing Point:	Not available.
Boiling Point:	Not available.
Flash Point:	> 60°C.
Flammability:	Combustible liquid.
Upper/lower explosion limits:	Not available.
Vapour Pressure (mm Hg):	Not available.
Relative Vapour Density:	Not available.
Density/Relative density:	0.924 g/ml.
Solubility:	Not available.
n-octanol/water partition coefficient:	Kow (logP) = 5.12 (data for technical material).
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	Not available

SECTION 10. STABILITY AND REACTIVITY

Reactivity: None known

Chemical stability:

The product is stable for 2 years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme temperatures and conditions. Store below 50°C, preferably below 30°C, and not for prolonged periods in direct sunlight.

Possibility of hazardous reactions: None known

Conditions to avoid: Sensitive to freezing and warm storage conditions

Incompatible materials: None known

Hazardous decomposition products: None known

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SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects:

ACUTE TOXICITY: Formulated product.

Lufenuron CAS 103055-07-8	
Acute toxicity	
Acute Oral LD ₅₀ (rat)	>2000 mg/kg
Acute Dermal LD ₅₀ (rats):	>2000 mg/kg
Acute Inhalation LC ₅₀ 4 h 20 °C (rats)	>2.35 mg/ℓair
Skin irritation/ corrosion (rabbits)	Non irritating to skin
Eye damage / irritation (rabbits)	Non irritating to eyes
Respiratory or skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific Target Organ Toxicity STOT single exposure	Not classified
Specific Target Organ Toxicity STOT repeated exposure	Not classified
Aspiration hazard	Not classified

POTENTIAL ADVERSE EFFECTS:

Inhalation: May be harmful if inhaled.

Eye contact: Due to the inert, this product causes serious eye irritation.

Skin contact: May be harmful in contact with skin.

Ingestion: May be harmful if swallowed.

SECTION 12. ECOLOGICAL INFORMATION

Anticipated behaviour of the chemical product in the environment /possible environmental impact/ecotoxicity:

This product is very toxic to aquatic organisms with long lasting effects.

ECOTOXICITY DATA: Active ingredient:

Lufenuron CAS 103055-07-8	
Acute toxicity	
Birds: LD ₅₀ for bobwhite quail and mallard ducks Dietary LC ₅₀ (8 d) for bobwhite quail and mallard ducks	>2000 mg/kg >5200 mg/kg
Fish: LC ₅₀ (96 h) for rainbow trout >73 LC ₅₀ (96 h) for carp LC ₅₀ (96 h) for bluegill sunfish LC ₅₀ (96 h) for catfish	>73 mg/ℓ >63 mg/ℓ >29 mg/ℓ >45 mg/ℓ
Daphnia – toxic to Daphnia EC ₅₀ (48 h)	1.1 µg/ℓ
Algae EC ₅₀ (72 h) for green algae	10 mg/ℓ
Bees: LC ₅₀ (oral) LD ₅₀ (topical)	>197 µg/bee >200 µg/bee
Worms Acute LC ₅₀ (14 d)	>1000 mg/kg

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Plants: No metabolites occurred in significant amounts in the investigated target crops (cotton, tomatoes).

ENVIRONMENTAL EFFECTS:

Animal: Major route of elimination was via faeces, with very little degradation

Persistence and degradability: Lufenuron is rapidly degraded in biologically active soils under aerobic conditions.

Bio-accumulative Potential: Not determined

Mobility in soil: Lufenuron showed a very strong adsorption onto soil particles: Koc (mean value) 38 mg/g o.c.

Other adverse effects: Not determined.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

General Information: Do not discharge into drains, water courses or onto the ground. Discharge, treatment or disposal may be subject to national, state, or local laws. Empty containers may contain product residues. Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus product into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Comply with local legislation applying to waste disposal. The product may be taken to a registered waste disposal site or incineration plant.

Disposal Methods: Destroy the container by perforating and flattening and dispose of through an approved waste dump site, incineration plant or recycling company.

Container: Since emptied containers retain product residue, follow label warnings even after container is emptied.

Product/ packaging disposal:

Treat as hazardous waste and dispose of in accordance with municipal, provincial and national regulations.

SECTION 14. TRANSPORT INFORMATION

UN Number: 3082
Un proper shipping name: ENVIROMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Lufenuron 50 mg/l)
UN Classification transport hazard class(es): 3
Packing group (if applicable): III
Marine pollutant (Y/N): Yes, Considered a marine pollutant
Transport in bulk according to MARPOL 73/78, Annex II and the IBC Code: Not available

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances.

Relevant information regarding restrictions:

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP] and EU directives 67/548/EEC or EC 1999/45/EC

Other National regulations: National Road Traffic Act, 1996 (ACT NO. 93 of 1996).

SANS 11014:2010 – Safety data sheet for chemical products, Content and order section

SANS 10228:2012- The identification and classification of dangerous goods for transport by road and rail modes.

National Environmental Management: Waste Act 59 of 2008.

Chemical Safety Assessment carried out? No

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SECTION 16. OTHER INFORMATION

Indication of changes:

GHS aligned

Relevant classification and H statements (number and full text):

H302: Harmful if swallowed

H332: Harmful if inhaled

H315 – Causes skin irritation

H320 – Causes eye irritation

H400 + 401 – Very toxic to aquatic life with long lasting effects

Training instructions:

Use as indicated on the label, special training may be required for application.

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to readers:

To the best of our knowledge, the information contained herein is accurate and is based on the present state of our knowledge and does not therefore guarantee specific properties. However, neither the above-named supplier nor any of its subsidiaries assumes any liability whatsoever for any accuracy or completeness of the information contained herein.

Final determinations of suitability of any material are sole responsibility of the users, who must take responsibility for observing existing laws and regulations. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.