

Safety Data Sheet (SDS) Buprofezin

According to UN GHS 8th Ed
Revision Date: 07/05/2022

First print date: 01/06/2018
Version: 1.1

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

Product identifier:

Identification as on the label/Trade name: Buprofezin

Common name: Buprofezin 500g/kg WP

Relevant identification uses of the substance and uses advised against:

Identified uses: Insecticide (miticide)

Uses advised against: Use only as directed.

Details of the supplier of the Safety Data Sheet:

Enviro Bio-Chem (Pty) Ltd, 44 Kerk Street,
Lichtenburg, North West, South Africa, 2740

Details of the Registration Holder:

Erintrade t/a RT Chemicals 44 Kerk Street,
Lichtenburg, North West, South Africa, 2740

Contact Details:

Telephone: +27 87 231 7261

Fax: 086 541 7948

Website: www.envirobiochem.co.za

Emergency telephone numbers:

24 Hour Emergency Number: Bateleur: +27 83 123 3911

Griffon Poison Information Centre: +27 82 446 8946

Poisons Information Helpline: 0861 555 777

Tygerberg Hospital: +27 21 931 6129

SECTION 2. HAZARD IDENTIFICATION

Classification of the substances or mixture

The mixture is classified according to Regulation (EC) No 1272/2008 EU-GHS/CLP

Hazard classes/Hazard categories	Hazard statement
STOT RE (Category 2)	H373
Aquatic Toxicity Acute (Category 1)	H400
Aquatic Toxicity Chronic (Category 1)	H410

Label elements



Hazard pictograms:

Signal Word: Warning

Hazard Statements:

H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

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Precautionary Statements:

P102	Keep out of reach of children
P201	Obtain special instructions before use
P260	Do not breathe mist/vapours/spray.
P264	Wash hands, forearms, and face thoroughly after handling
P270	Do not eat, drink, or smoke when using this product.
P273	Avoid release to the environment.
P391	Collect spillage
P501	Dispose of contents/container in accordance with local/regional/ national regulations

Other hazards: No data available

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients:

Substance name (IUPAC)	CAS Number.	Concentration % by weight	Classification EC1272/2008
Buprofezin	69327-76-0	51%	STOT RE (Category 2) H373 Aquatic Acute (Category 1) H400 Aquatic Chronic (Category 1) H410
Other inerts	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.		

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.

SECTION 4. FIRST AID MEASURES

Description of first aid measures:

In case of inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep the patient under observation. Get medical attention immediately.

In case of skin contact: In case of contact, remove contaminated clothing and shoes and immediately flush skin with plenty of water and a nonabrasive soap for at least 15 minutes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Seek medical attention immediately.

In case of eye contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

In case of ingestion: Wash out mouth with water if the patient is alert and conscious. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to avoid aspiration. Keep patient at rest and transport to nearest medical facility for further treatment. attention. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt, or waistband

Most important symptoms and effects, both acute and delayed:

Specific Target Organ Toxicity: May cause damage to organs (kidneys) through prolonged or repeated exposure

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically and supportively.

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SECTION 5. FIRE FIGHTING MEASURES

Extinguisher media:

Suitable extinguisher media: Foam. Dry powder. Carbon dioxide. Water spray.

Small Fire: Extinguish small fires with carbon dioxide, dry powder, or alcohol-resistant foam.

Large Fire: Water spray can be used for larger fires or cooling of unaffected stock but avoid the accumulation of polluted run-off from the site.

Unsuitable extinguishing media: Do not use high volume water jet, due to contamination risk.

Special hazards arising from the mixture:

Thermal decomposition can lead to release of irritating or toxic fumes (or gases) in fire.

Hazardous decomposition products in case of fire: Refer to Section 10: Stability and Reactivity.

Advice for fire-fighters:

Avoid inhaling hazardous vapours. Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Use an approved/certified respirator or equivalent.

Contain fire control agents for later disposal according to Section 13.

Water can be used to cool unaffected containers.

SECTION 6. ACCIDENTAL RELEASE

Personal precautions, protective equipment, and emergency procedures:

Personal precautions: Do not eat, drink, or smoke while using this product. Do not breathe dust/mist/fume/gas /vapors. Avoid contact with skin and eyes. Keep unnecessary people away. Isolate area. Keep out of low areas.

For emergency responders: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Use an approved/certified respirator or equivalent. Avoid contact with eyes and skin. Do not breathe in irritating or poisonous fumes. Refer to section 8 for recommended personal protective equipment. Evacuate unnecessary personnel.

Environmental precautions:

Stop leak if without risk. Do not touch spilled material. Use a light water spray to reduce vapours.

Prevent entry into drains, watercourses, or confined areas; dike if needed.

If the product contaminates public water, inform appropriate authorities immediately in accordance with local regulations.

Dispose in a safe manner in accordance with local/national regulations.

Methods for containment and cleaning up:

For small spills : Contain spilled material if possible. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth. Collect in a suitable container and label with contents for disposal according to local regulations.

For large spills : Prevent entry into drains, watercourses, or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth. Collect in a suitable container and label with contents for disposal according to local regulations.

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.

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SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

This product may cause damage to organs through prolonged exposure to organs. Wear Suitable protective equipment. Avoid contact with skin and eyes. Avoid breathing vapour or mist . Ensure adequate ventilation. Wash thoroughly after handling. Avoid release to environment. Empty containers may contain hazardous residues. Do not reuse empty container.

Protective measures: Observe directions on label and instructions for use.

Advice on general occupational hygiene: Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities:

Store in accordance with local regulation. Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Keep away from incompatible material. Do not store in unlabeled containers. Do not store material near food, feed or drinking water.

Specific end uses:

Use as directed. Use original container.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

Exposure Limits: Buprofezin - TWA : 2mg/m³ (Japan Society for Occupational Health)
Kaolin (Total dust) – 10 mg/m³ 10-hour TWA (NIOSH -REL)

Exposure control:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. A Risk Assessment should be conducted before handling is to commence to determine specific exposure control.

Appropriate engineering controls: Use with local exhaust ventilation. Ensure that eye wash stations and safety showers are proximal to the work-station location.

Hygiene measures: Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

Eye/face protection: Wear chemical safety goggles.

Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, Polyvinyl alcohol, Polyvinyl chloride.

Body protection: Full body covering, shoes and socks. Appropriate impervious clothing is required to prevent skin contact with the product.

Respiratory protection: Work only in a well-ventilated area. Avoid breathing mist or vapour. Use approved respiratory protection equipment when airborne exposure limits are exceeded.

Environmental exposure controls: Prevent product from entry into sewers and water courses

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Loose powder
Colour	White or pale yellow
Odour	No data available
Odour threshold	No data available
pH	8-10.5

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Melting point / freezing point (°C)	No data available
Boiling point (°C) Xylene	No data available
Flash point (°C)	No data available
Evaporation rate	No data available
Flammability	No data available
Upper /lower flammability limits	No data available
Vapour pressure 20°C	No data available
Vapour density	No data available
Relative density (25°C)	No data available
Water solubility (g/l) at 20°C	No data available
Partition coefficient : n-octanol/water	No data available
Auto-ignition temperature (°C)	No data available
Decomposition temperature (°C)	No data available
Viscosity, dynamic (mPa s)	No data available
Explosive properties Explosive limits, vol% in air (Xylene)	No data available
Oxidising properties	No data available
Explosive limits	No data available
Suspensibility	≥ 80%
Wetting Time	≤60s

SECTION 10. STABILITY AND REACTIVITY

Reactivity:

The product is stable under normal conditions.

Chemical stability:

This product is stable. The active ingredient is stable under dark and cool storage conditions. It is also stable in acid and alkali solution.

Possibility of hazardous reactions:

No information available.

Conditions to avoid:

Avoid direct sunlight, open flames, ignition sources, high temperatures, sources of heat. As a result of flow and agitation, electrostatic charges can be generated. Above 27 °C explosive vapour/air mixtures may be formed.

Incompatible materials:

None known

Hazardous decomposition products:

May decompose at extreme high temperatures to form oxides of carbon, nitrogen, and sulphur .

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution: No data available

Information on toxicological effects:

Assessment of acute toxicity:

The product has not been tested. The data reported is for the main ingredients in the mixture.

Buprofezin CAS No. 69327-76-0	
Acute toxicity:	
Acute Oral LD50 (rat)	2198 mg/kg
Acute Dermal LD50 (rat):	>5000 mg/kg

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Acute Inhalation LC50 - 4 h (rat)	>4.57 mg/l air
Germ cell mutagenicity	Non mutagenic
Carcinogenicity	Non-carcinogenic
Reproductive toxicity	No data available
Specific Target Organ Toxicity STOT single exposure	No data available
Specific Target Organ Toxicity STOT repeated exposure	No data available
Aspiration hazard	No data available

Additional Information:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12. ECOLOGICAL INFORMATION

Buprofezin CAS No. 69327-76-0	
Toxicity	
Birds Acute oral LD ₅₀	>2000 mg/kg Bobwhite quail
Aquatic Toxicity Fish LC ₅₀ (96h) Aquatic Toxicity Daphnia EC ₅₀ (48h) Algae Toxicity E _b C ₅₀ (72h) Bee Toxicity LD ₅₀	0.527 mg/l carp; >0.33 mg/l rainbow trout >0.42 mg/l in water; 0.00031 mg/l in water/ sediment >2.1 mg/l (<i>Pseudokirchneriella subcapitata</i>) >163.5 µg/bee (oral); >200 µg/bee (contact)
Persistence and degradability	DT50 (25°C) 104 d (flooded conditions, silty clay loam, o.c 3.8 %, p H, >6.4), 80 d, (upland conditions, sandy loam, o.c 2,4 % p H 7.0)
Bioaccumulation potential	No data available
Mobility in soil	No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Product:

Keep out of drains, sewers, ditches, and waterways. Refer to container label for disposal information. Treat as hazardous waste and dispose of in accordance with local/ regional/ national/ international regulations.

Container:

Refer to container label for disposal information. Triple or pressure rinse empty containers. Pour rinse water into spray tank. Dispose of as hazardous waste. Do not contaminate water when disposing of rinse water. Dispose of using an approved waste disposal service provider. Follow all local/ regional/ national/ international regulations.

SECTION 14. TRANSPORT INFORMATION

UN Number	3077
UN proper shipping name	Environmentally Hazardous Substance; Solid; N.O.S. (Buprofezin 500 g/kg)
Transport hazard class	9
Packaging group	III
Marine pollutant	Yes

SECTION 15. REGULATORY INFORMATION

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

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Relevant information regarding authorization: Occupational Health and Safety Act 1993. Regulation for Hazardous Chemical Agents, 2021. UN Recommendations on the Transport of Dangerous Goods Model Regulations Rev. 21 (2019), Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Rev 8, 2019.

Relevant information regarding restrictions:

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP]

Other National regulations:

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

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.

Act 36 of 1947 of the Republic of South Africa. This product is registered under it is a violation of South African law to use this product in any manner inconsistent with its approved labelling. Read and follow all label directions

Chemical Safety Assessment carried out? No

SECTION 16. OTHER INFORMATION

Indication of changes:

Classification according to SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]
GHS aligned – all sections

Relevant H statements (number and full text): Section 3

STOT RE 2 – Specific Target Organ Toxicity repeated Exposure (Category 2)

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.

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product, nor where instructions or recommendations are not followed.