Safety Data Sheet (SDS) Bromopropylate

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

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Version: 1.1

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

Product identifier:

Identification as on the label/Trade name: Bromopropylate

Common name: Bromopropylate 500g/L EC

Relevant identification uses of the substance and uses advised against:

Identified uses: Insecticide (acaricide)

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

Contact Details:

Telephone: +27 87 231 7261
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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
Flammable Liquid (Category 3)	H226
Aspiration toxicity (Category 1)	H304
Eye damage (Category 1)	H318
Aquatic Toxicity Acute (Category 1)	H400
Aquatic Toxicity Chronic (Category 1)	H410

For full text of H statements see section 16

The most important adverse effects

The most important adverse physiochemical effects: Flammable liquid.

The most important adverse human health effects: Fatal if swallowed. Causes serious eye damage.

Label elements

Hazard pictograms:
Signal Word: Danger

Hazard Statements:

H304	May be fatal if swallowed and enters airways
H318	Causes serious eye damage
H226	Flammable liquid and vapour
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Precautionary Statements:

P102	Keep out of reach of children
P103	Read label before use
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
P233	Keep container tightly closed
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.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P331	Do NOT induce vomiting.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up
P391	Collect spillage
P501	Dispose of contents/container in accordance with local/regional/ national regulations

Other hazards: None known

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture: **Mixture**

Ingredients:

Substance name (IUPAC)	CAS Number.	Concentration % by weight	Classification EC1272/2008
Bromopropylate	18181-80-1	47.7%	Aquatic Acute (Category 1) H400 Aquatic Chronic (Category 1) H410
Tristyrylphenol ethoxylates	90093-37-1	<10%	Eye Irritation (Category 2A) H319
Calcium dodecylbenzenesulfonate	26264-06-2	<10%	Acute Toxicity Oral (Category 4) H302 Skin Irritation (Category 2) H315 Eye Damage (Category 2A) H318 Aquatic Chronic (Category 4) H413

Solvesso150	63148-62-9	<50%	Aspiration Toxicity (Category 1) H304 Flammable liquid (Category 3) H226

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. Get medical attention.

In case of skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. 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: Immediately transfer patient to nearest hospital or medical centre, warning by telephone of the estimated arrival time so that the start of treatment is not delayed. Do NOT induce vomiting. 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:

Inhalation: Hazardous in case of inhalation product is a lung irritant. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Over-exposure by inhalation may cause respiratory irritation.

Ingestions: May be harmful if swallowed.

Skin contact: Irritant, may cause an allergic reaction.

Eye contact: Hazardous in case of eye contact (corrosive).

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

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:

Fire Hazard: Flammable

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:

For non-emergency personnel: Keep all personal away may be toxic by inhalation. Avoid contact with eyes and skin.
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 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. Collect in suitable and properly labelled containers. Absorb with materials such as: sand, earth, vermiculite, or diatomaceous earth
For large spills Prevent entry into drains, watercourses, or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in well labelled container 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.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid contact with eyes and skin. Use with adequate ventilation. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed.Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas.
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 product in a segregated and approved area. Keep away from heat & sources of ignition. Keep away from combustible material. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use.

Specific end uses:

Use as directed. Use original container.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

Occupational exposure limits (OEL): No information available.
Biological exposure indices (BEI): No information available.
Additional exposure limits under the conditions of use: No information available

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 outdoors in a well-ventilated area. Provide exhaust ventilation or other engineering controls. Ensure that eyewash 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. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Avoid contact with eyes. Wear a full-face shield when handling the product or spraying. The use of safety glasses with side shields (or goggles) are recommended if a face shield is not used.

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: Appropriate impervious clothing is required to prevent skin contact with the product.

Respiratory protection: Use only in well ventilated areas. Respiratory protection is required; use an approved air-purifying respirator.

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	Liquid
Colour	Light yellow to brown transparent liquid
Odour	No data available
Odour threshold	No data available
pH	No data available
Melting point / freezing point (° C)	No data available
Boiling point (° C)	No data available
Flash point (° C)	18 ˚C
Evaporation rate	No data available
Flammability	Combustible Liquid
Upper /lower flammability limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density (25°C) g/cm^3	1.11-1.14
Water solubility (g/l) at 20°C	Emulsifying in water
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	Can form an explosive mixture in air.
Oxidising properties	No data available
Explosive limits	No data available
Acidity (calculated as H_2SO_4)	≤0.5 %

SECTION 10. STABILTY AND REACTIVITY

Reactivity:

The product is stable under normal conditions.

Chemical stability:

Stable under normal storage conditions for 2 years. Avoid excessive heat sources. Store at low temperature conditions, preferably below 30˚C and not for prolonged periods in direct sunlight.

Possibility of hazardous reactions:

No information available.

Conditions to avoid:

Avoid excessive heat sources.

Incompatible materials:

Should not be applied in combination with strong acidic and strong alkaline products.

Hazardous decomposition products:

Toxic materials are formed during exposure to high temperatures, (may include but not limited to carbon monoxide and carbon dioxide).

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.

Bromopropylate tech CAS No. 18181-80-1	
Acute toxicity:	
Acute Oral LD50 (rat - male)	>5000mg/kg
Acute Dermal LD50 (rat):	10200 mg/kg
Acute Inhalation LC50 - 4 h (rat)	No data available
Eye damage / irritation (rabbits)	Not an eye irritant
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	Not classified
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.

Calcium dodecylbenzenesulphonate CAS No. 26264-06-2	
Acute toxicity:	
Acute Oral LD50 (rat - male)	1300 mg/kg
Acute Dermal LD50 (rat):	2000 mg/kg
Acute Inhalation LC50 - 4 h (rat)	0.31 mg/l
Skin irritation/ corrosion	Irritating to skin
Eye damage / irritation	Causes eye damage
Respiratory or skin sensitization	Not a respiratory or skin sensitizer
Germ cell mutagenicity	No data available
Carcinogenicity	No data available

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.

Solvesso 150# CAS No. 64742-94-5	
Acute toxicity:	
Acute Oral LD50 (rat - male)	>2000 mg/kg
Acute Dermal LD50 (rabbit)	>2000 mg/kg
Acute Inhalation LC50 - 4 h (rat)	>5.5 mg/l
Respiratory or skin sensitization	Not a respiratory or skin sensitizer
Germ cell mutagenicity	No data available
Carcinogenicity	No data available
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	May be fatal if swallowed and enters airways.

Additional Information:

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

SECTION 12. ECOLOGICAL INFORMATION

Bromopropylate tech CAS No. 18181-80-1	
Toxicity	
Birds Acute oral LD_{50} Dietary LC_{50} (8d)	 >2000 mg/kg Japanese quail; > 2000 mg/kg Bobwhite tail 600mg/kg Pekin duck; 1000mg/kg Japanese quail
Aquatic Toxicity Fish LC_{50} (96 hr) Aquatic Toxicity Daphnia EC_{50} (48 hr) Algae EC_{50} (72h) Bee Toxicity LC_{50} (24h)	0.35 mg/l (rainbow trout); 0.5 mg/l (bluegill sunfish);2.4mg/l Carp 0.17 mg/l >52mg/l (*Scenedesmus subspicatus*) 183 µg/ bee - Non-Toxic to bees
Persistence and degradability	Principal metabolite in soil is 4, 4- dibromobenzilic acid.
Bioaccumulation potential	Low bioaccumulation potential.
Mobility in soil	Low mobility (soil)

Calcium dodecylbenzenesulphonate CAS No. 26264-06-2	
Toxicity	
Aquatic Toxicity Fish LC_{50} (96 hr) Aquatic Toxicity Daphnia semi static EC_{50} (96 hr) Toxicity to algae – static test EC50 (96h) Toxicity to bacteria EC50 (3h)	1.74 -7.16 mg/l No data available 2.73 – 29 mg/l 500 – 723 mg/l
Persistence and degradability	No data available
Bioaccumulation potential	No data available
Mobility in Soil	No data available
Result of PBT and vPvB assessment	No data available

Other adverse effects	No data available

Solvesso 150# CAS No. 64742-94-5	
Toxicity	
Aquatic Toxicity Fish static test LC_{50} (96 h) Naphthalene Aquatic Toxicity Daphnia EC_{50} (48 h) Toxicity to algae –ErC50 (72h) Toxicity to bacteria–EC50 (0.5h)	31.03 mg/l mg/l Bluegill; 0.9mg/l Pink Salmon trout. 0.32 mg/l Crimson spotted Rainbow No data available No data available No data available
Persistence and degradability	Will evaporate and commence degradation on exposure to air.
Bioaccumulation potential	No data available
Mobility in Soil	Highly mobile in soil
Result of PBT and vPvB assessment	No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Product:

Keep out of drains, sewers, ditches, and waterways. Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be re-used or reprocessed. 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. Emptied containers retain vapour and product residues. Observe all labelled safeguards until container is cleaned, reconditioned, or destroyed. Rinse empty container three times with a volume of water equal to at least one tenth of that of the container. Pour rinse water into spray tank. Dispose of as hazardous waste. 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	1993
UN proper shipping name	FLAMMABLE LIQUID, N.O.S (Bromopropylate 500 g/l)
Transport hazard class	3
Packaging group	III
Marine pollutant	Yes

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 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):

Aspiration toxicity (Category 1): May be fatal if swallowed and enters airways
Eye damage (Category 1): Causes serious eye damage
Flammable liquid (Category 3): Flammable liquid and vapour.
Aquatic acute toxicity (Category 1): Very toxic to aquatic life
Aquatic chronic toxicity (Category 1): 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.

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.