

ADERRA™

240 EC

SAFETY DATA SHEET

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

Product identifiers

Product name: Aderra™ 240 EC

PMRA Registration No.: 35852

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

Crop protection product, herbicide

Details of the supplier of the safety data sheet

Company: Avesta CropScience Inc.

Address: Suite 2900, Bentall 5
550 Burrard Street
Vancouver, BC, V6C 0A3

Telephone: 1-800-607-5443

Website: <https://avestacrop.com>

Emergency telephone number: 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

Emergency overview: Brown-yellow transparent liquid, harmful when swallowed, toxic when inhaled, may cause allergic skin reactions, suspected to cause harm to fertility or the fetuses, highly toxic to aquatic organisms.

Acute Toxicity - Oral	Category 4
Skin Sensitization	Category 1
Reproductive Toxicity	Category 2
Aquatic Acute	Category 1

Signal word: Warning

Hazard description: H302 Harmful if swallowed

H332 Harmful if inhaled

H317 May cause allergic skin reaction(s)

H361 Suspected of causing harm to fertility or to the fetus

H400 Very toxic to aquatic life

Precautionary statement

Preventive measures: P203 Obtain, read and follow all safety instructions before use.

P261 Avoid breathing dust/fume/gas/mist/vapor/spray.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke while using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothes should not be taken from the workplace.

P273 Avoid release into the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response measures: P301 + P317 If swallowed: seek medical advice.

P302 + P352 IF ON SKIN: Wash thoroughly with water.

P304 + P340 If accidentally inhaled: Move the person to fresh air and maintain a comfortable position for breathing.

P316 Seek medical attention immediately.

P318 If you have been exposed or have any concerns, seek medical advice.

P321 Specific treatment (see product label).

P330 Rinse mouth.

P333 + P317 If skin irritation or rash occurs: Get medical attention.

P362 + P364 Take off contaminated clothing and wash before reuse.

P391 Collect spillage.

The main symptoms and emergency summary after personnel

exposure: After contact, mild cases may show cyanosis of lips, fingertips and earlobes. Symptoms may include dizziness, headache, fatigue, numb fingers and blurred vision. In severe cases, palpitations, chest tightness, dyspnea, confusion, nausea, vomiting, convulsions, shock and coma may occur. In case of accident or if you become unwell, seek medical help immediately. Have the product label with you when calling a poison control centre, first aid station or doctor for treatment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name: Bromoxynil octanoate

CAS No.: 1689-99-2

Specific concentration limits, MFactors, Acute Toxicity Estimates:
M=10

Content: 34% w/w

Chemical name: Other additives
Content: 10% w/w

Chemical name: Heavy aromatic solvent naphtha (petroleum)
CAS No.: 64742-94-5
Content: 56% w/w

SECTION 4: FIRST-AID MEASURES

If inhaled: Remove victim to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen administered by qualified medical personnel; if breathing is irregular or stopped, give artificial respiration. If you feel unwell, call a poison center or doctor/physician.

If on skin: Wash with soap and water while removing contaminated clothing. If exposed or concerned, get medical attention. Wash contaminated clothing before reuse, or discard.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. Flush eyes with water for at least 15 minutes and call a poison control centre or doctor/physician immediately.

If swallowed: If you feel unwell, call a poison control centre or doctor/physician. Rinse mouth out. Do not induce vomiting and do not give anything by mouth to an unconscious person.

SECTION 5: FIREFIGHTING MEASURES

Suitable extinguishing media: Extinguish with water fog, alcohol resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: For this substance/mixture, no restrictions on extinguishing agents are specified.

Specific hazards arising from the chemical: Carbon oxides. Development of hazardous gases or vapors may occur in the event of fire.

Special protective equipment and precautions for firefighters: Wear self-contained breathing apparatus and protective clothing. Avoid contact with skin and eyes. Fight fire upwind.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to a safe area. For personal protection, see Section 8.

Environmental precautions: Be careful not to allow material to enter rivers or harm the environment. Do not release into the environment.

Methods and materials for containment and cleaning up: Put inert absorbent, non-combustible material on spill. Collect material using clean, non-sparking tools and place in suitable labeled containers for subsequent recycling or disposal.

Precautions to prevent secondary hazards from occurring: Do not allow fire water to enter sewers.

SECTION 7: HANDLING AND STORAGE

Advice on safe handling: Wear appropriate protective clothing and equipment to prevent inhalation, skin and eye exposure. Handle and use this material in a well-ventilated area. Have emergency equipment on hand (for fires, spills, leaks, etc.). Maintain personal hygiene when using this product.

Storage conditions: Keep container tightly closed in a dry, cool and well-ventilated place.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: Provide effective eyewash and safety showers. Ensure adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection: Use equipment for eye protection tested and approved under official standards such as NIOSH (US) or EN 166 (EU).

Hand protection: Protective gloves (natural rubber EN374)

Skin and body protection: Choose protective measures based on the type, concentration, quantity and specific conditions.

Respiratory protection: Where engineering controls are insufficient to maintain airborne concentrations below acceptable levels, appropriate respiratory protection should be used.

Large/emergency use: If exposure limits are exceeded or irritation or other symptoms occur, use NIOSH/MSHA or European Standard EN 136 approved respirator.

Recommended filtration type: Particulate filter.

Small scale/laboratory use: Keep well ventilated. Recommended half mask particulate filter: EN149:2001.

General hygiene considerations: Pay attention to personal hygiene. Wash hands after handling.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid

Odour: Not applicable

Odour threshold: Not applicable

Colour: Brown-yellow transparent

pH value: 4.5-7.5

Density: 1.04±0.01 g/mL 20 °C

Melting point: Not applicable

Boiling point: Not applicable

Flash point: 70.3°C

Flammability: Not applicable

Relative density (Water=1): 1.04 ±0.01 g/mL

Auto-ignition temperature: Not applicable

SECTION 10: STABILITY AND REACTIVITY

Reactivity: May react violently with strong oxidants.
Chemical stability: Stable under recommended storage conditions.
Possibility of hazardous reactions: May react violently with strong oxidants.
Conditions to avoid: Incompatible materials.
Incompatible materials: Strong oxidants.
Hazardous decomposition products: In case of fire, decomposition may produce harmful substances, including carbon oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Acute toxicity: Harmful if swallowed. Harmful if inhaled.
Skin irritation or corrosion: Based on available data, the classification criteria are not met.
Eye irritation or corrosion: Based on available data, the classification criteria are not met.
Skin/respiratory sensitization: May cause allergic skin reaction.
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Suspected of causing harm to fertility or to the fetus.
Specific target organ system toxicity - single exposure: Based on available data, the classification criteria are not met.
Specific target organ system toxicity - repeated exposure: Based on available data, the classification criteria are not met.
Aspiration hazard: Based on available data, the classification criteria are not met.
Endocrine disrupting characteristics: Product did not meet the criteria.

SECTION 12: ECOLOGICAL INFORMATION

Acute toxicity: Very toxic to aquatic life.
Persistence and degradability: No data available.
Bioaccumulative potential: No data available.
Mobility in soil: No data available.
PBT: No data available.
vPvB: No data available.
Endocrine disruption: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods: Refer to the requirements of relevant laws and regulations of your country or region before disposal.
Packaging: Refer to the requirements of relevant laws and regulations of your country or region before disposal.

SECTION 14: TRANSPORTATION INFORMATION

Canada TDG
Shipment by ground via highway or rail is not regulated as a dangerous good as long as the packaging meets all the applicable TDG/UN specification requirements. No marks, labels, placards, or shipping papers apply per TDG 1.45.1, but may be used to facilitate multi-modal transport involving ICAO (IATA) or IMO. Although highly toxic to aquatic organisms, the product is not regulated as a dangerous good for ground transport under TDG.
Sea Transport
IMDG
ID number: UN3082
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bromoxynil octanoate, naphtha)
Hazard class: 9
Packing group: III
Hazard label: Class 9, Environmentally Hazardous
Marine pollutant/Environmentally Hazardous Substance: Yes
Air Transport
IATA/ICAO
ID number: UN3082
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bromoxynil Octanoate, Naphtha)
Hazardous class: 9
Packing group: III
Hazard label: Class 9, Environmentally Hazardous

SECTION 15: REGULATORY INFORMATION

GHS label elements: This safety data sheet has been prepared in accordance with the Hazardous Products Regulations (HPR) under the Canadian Hazardous Products Act and the requirements of WHMIS 2015. Hazard classification is based on the Globally Harmonized System (GHS), as adopted in Canada.
National regulations: Regulations on the Safety Management of Hazardous Chemicals (promulgated by the State Council on March 2, 2011), Regulations on the Safe Use of Chemicals in the Workplace ([1996] Ministry of Labor No. 423) and other regulations, corresponding regulations have been made for the safe use, production, storage, transportation, loading and unloading of dangerous chemicals. "Regulations on the Safety Management of Hazardous Chemicals" (Decree No. 591 of the State Council), "Law of the People's Republic of China on Occupational Disease Prevention and Control" (State Council Order No. 52) have made corresponding regulations on the safe use, production, storage, transportation, loading and unloading of chemicals.

According to the new Environmental Management Measures for Chemical Substances (Decree No. 7 of the Ministry of Environmental Protection), this product complies with the applicable management requirements.

Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

SECTION 16: OTHER INFORMATION

This SDS summarizes our current understanding of the health and safety hazards associated with the product and guides how to handle and use it safely in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace, including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact the company.