

Material Safety Data Sheet (MSDS)

Part 1 – Identification of the substance and of the company/undertaking

1.1 Product identification:

Identification on the label

/Trade name: Bromoxynil 240EC
UFI: No information

1.2. Relevant identified and recommended uses of the substance or mixture:

Purpose: Used only as a herbicide

1.3. Manufacturer Information:

Supplier(Manufacturer): Adama Hui Feng (Jiangsu) Company Ltd.
Address: South Area of Ocean Economic Development Zone, Dafeng, Yancheng
City, Jiangsu Province.
Zip code: 224145
Telephone: +86-515-8505591
Fax: +86-515-83551880

1.4 Emergency telephone Number:

Contact CHEMTREC at 1-800-424-9300 (North America)
1-703-527-3887(International)

Part 2 – Hazards Identification

Emergency Overview:

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

2.1 Classification of the substance or mixture:

GHS classification:	Acute Toxicity - Oral:	Category 4
	Skin Sensitization:	Category 1
	Reproductive toxicity:	Category 2
	Aquatic Acute:	Category 1

2.2 Label elements:

Hazard Pictograms:



Signal Word(S): Warning

Hazard Description: H302 Harmful if swallowed
H332 Harmful if inhaled
H317 May cause allergic skin reactions
H361 Suspected of causing harm to fertility or 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 working.
 P270 Do not eat, drink or smoke while using this product.
 P271 Only use outdoors or in a well-ventilated area.
 P272 Contaminated work clothes shall not be taken out of the workplace.
 P273 Avoid release into the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

Response measures:

P301 + P317 If swallowed: seek medical advice.
 P302 + P352 IF ON SKIN: Wash well 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 Specialized treatment (see this label).
 P330 Rinse mouth.
 P333 + P317 If skin irritation or rash occurs: Get medical attention.
 P362 + P364 Take off contaminated clothes and wash them before reuse.
 P391 Collect spillage.

Safe storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Waste disposal:

P405 Storage areas must be locked.
 P501 This product and container shall be disposed in accordance with local, regional, national and international regulations.

2.3 Physical and chemical hazards:

No physical or chemical hazards according to existing classification.

2.4 Health hazards:

Harmful if swallowed.
 Harmful if inhaled.
 May cause allergic skin reactions.
 Suspected of causing harm to fertility or the fetus.

2.5 Environmental hazards:

Extremely toxic to aquatic life.

2.6 Other hazards:

PBT and vPvB assessment results:

PBT: Not applicable.

vPvB: Not applicable.

Endocrine disruption characteristics:

The product does not meet the standards.

2.7 The main symptoms and emergency summary after personnel exposure:

After contact, mild cases have cyanosis of lips, fingertips and earlobes. Symptoms such as dizziness, headache, fatigue, numb fingers and blurred vision appear. In severe cases, palpitations, chest tightness, dyspnea, trance, 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 center first aid station or doctor for treatment.

Part 3 - Composition/information on ingredients

3.1 substance

3.2 mixture: This product is a mixture

Name	CAS No.	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)	Content
Bromoxynil octanoate	1689-99-2	M=10	34%
Other additives	-	-	10%
Heavy aromatic solvent naphtha (petroleum)	64742-94-5		56%

Additional Information: See Section 16 for the wording of the listed hazard statements.

Part 4 –First aid measures

4.1 Description of first aid measures:

In case of skin contact:	For skin contact, wash with soap and water while removing contaminated clothing; if exposed or concerned: Get medical attention. Wash contaminated clothing before reuse, or discard.
In case of eyes contact:	IF IN EYES: Rinse cautiously with water for several minutes, remove contact lenses, if present and easy to do, continue rinsing. Flush eyes with water for at least 15 minutes and call a poison center or doctor/physician immediately.
In case of ingestion:	IF SWALLOWED: If you feel unwell, call a poison center or doctor/physician, rinse mouth out, do not induce vomiting, and do not give anything by mouth to an unconscious person.
In case of inhalation:	IF INHALED: Remove victim to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen by qualified medical personnel; if breathing is irregular or stopped, give artificial respiration. If you feel unwell, call a poison center or doctor/physician.

4.2 The most important symptoms and effects, both acute and chronic

See Section 11 for details.

4.3 Signs of need for immediate medical treatment and special treatment

No data available.

4.4 Special tips for doctors:

Provide general supportive measures and treat symptomatically.

Part 5 - Fire-Fighting measures

5.1 Extinguishing medium:

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.

5.2 Special hazards arising from the substance or mixture: Carbon oxide
Development of hazardous gases or vapors may occur in the event of fire.

5.3 Firefighters' suggestions: Wear self-contained respirator, wear safety protective clothing, avoid contact with skin and eyes. Fight fire upwind.

Part 6 –Accidental release measures.

For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe the relevant local and international regulations.

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

6.2 Environmental precautions: Be careful not to flow into rivers, etc., and affect the environment. Do not release into the environment.

6.3 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.

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

6.4 Refer to other sections: For information on safe operation, refer to section 7.
For information on personal protective equipment, see Section 8.
See section 13 for disposal information.

Part 7 - Handling and storage

7.1 Precautions for safe operation: 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.). Please maintain personal hygiene when using this product.

7.2 Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a dry, cool and well-ventilated place.

Part 8 - Exposure control/personal protection

8.1 Occupational exposure limits: No information.

8.2 Engineering controls: Provides effective eyewash and safe bathing.
Ensure adequate ventilation.

8.3 Individual protection measures, such as personal protective equipment:

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

Respiratory system protection: Workers must use appropriate respirators when concentrations exceed exposure limits.

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.

Body protection: Choose physical protection measures based on the type, concentration, quantity, and specific workplace of harmful substances.

Hand protection: Protective gloves.(Natural rubber EN374)

Hygienic protection: Pay attention to personal hygiene. Wash hands after working.

Part 9 - Physical and chemical properties

9.1 Basic physical and chemical properties information

Appearance :	Liquid.
Color:	Brown yellow transparent.
Odor:	Not applicable.
Odor threshold:	Not applicable.
Molecular weight:	Not applicable.
Molecular formula:	Not applicable.
Molar mass:	Not applicable.
PH:	4.5-7.5.
Density:	1.04±0.01.
Melting point/range (° C):	Not applicable.
Boiling point (° C):	Not applicable.
Solidification point:	Not applicable.
Flash point:	>65°C.

Auto-ignition temperature:	Not applicable.
Ignition temperature:	Not applicable.
Ignition point:	Not applicable.
Flammability:	Not applicable.
Upper/lower flammability or explosion limit:	Not applicable.
Decomposition temperature:	Not applicable.
Relative density (Water=1) :	1.04±0.01g/mL.
Relative density (Air=1) :	Not applicable.
Volume density:	Not applicable.
Solubility:	Not applicable.
Vapor pressure:	Not applicable.
Vapor density:	Not applicable.
Volatilization rate:	Not applicable.
Viscosity:	Not applicable.
Solid content:	Not applicable.
VOC content:	Not applicable.
<u>9.2 Other information:</u>	Not applicable.

Part 10 - Stability and reactivity

<u>10.1 Stability:</u>	Stable under recommended storage conditions.
<u>10.2 Reaction:</u>	May react violently with: Strong oxidants.
<u>10.3 Conditions to be avoided:</u>	Incompatible products.
<u>10.4 Incompatibility:</u>	Strong oxidant.
<u>10.5 Possibility of dangerous reactions:</u>	May react violently with: Strong oxidants.
<u>10.6 Decomposition products:</u>	In case of fire, it will decompose producing harmful substances. - Carbon oxides.

Part 11 – Toxicological information

11.1 Information on toxicological effects:

Acute toxicity:	Product: Harmful if swallowed. Harmful if inhaled.
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Skin irritation or corrosion:	Product: Based on available data, the classification criteria are not met.
Eye irritation or corrosion:	Product: Based on available data, the classification criteria are not met.
Skin /Respiratory sensitization:	Product: May cause allergic skin reactions.
Germ cell mutagenicity:	Product: Based on available data, the classification criteria are not met.
Carcinogenicity:	Product: Based on available data, the classification criteria are not met.
Reproductive toxicity:	Product: Suspected of causing harm to fertility or the fetus.
Specific target organ system toxicity - single exposure:	Product: Based on available data, the classification criteria are not met.
Specific target organ system toxicity - repeated exposure:	Product: Based on available data, the classification criteria are not met.
Aspiration hazard:	Product: Based on available data, the classification criteria are not met.
<u>11.2 Other information:</u>	Endocrine Disrupting Characteristics: Product did not meet the criteria.

Part 12 –Ecological information

<u>12.1 Acute toxicity:</u>	Product: Extremely toxic to aquatic life.
<u>12.2 Persistence and degradability:</u>	No data available.
<u>12.3 Bioaccumulative potential:</u>	No data available.
<u>12.4 Mobility in soil:</u>	No data available.
<u>12.5 PBT and vPvB assessment results:</u>	
PBT:	No data available.
vPvB:	No data available.
<u>12.6 Endocrine Disruption Characteristics:</u>	No data available.
<u>12.6 Other adverse effects:</u>	No data available.

Part 13–Disposal considerations

<u>13.1 Waste treatment methods:</u>	Please refer to the requirements of relevant laws and regulations of your country or region before disposal.
Packaging:	Please refer to the requirements of relevant laws and regulations of your country or region before disposal.

Part 14 - Transport information

TDG

Not Regulated / Non-Hazardous when shipped in small means of containment less than or equal to 450 L

The classifications below are applicable for large means of containment >450 L each

IMDG/IMO:

UN number: 3082

UN proper shipping name: UN3082, Environmental Hazardous Substance, Liquid, nos (Bromoxynil Octanoate, Naphtha)

Transport hazard class: 9

Packing group: III

Environmental hazards: Marine pollutant

Special precautions for user: None.

Part 15 –Regulation information

15.1 GHS label elements:

This safety technical specification meets the requirements of GB/T16483-2008. GHS classification is based on chemical classification and labeling series specifications (GB30000.2-29) determined.

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) has 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 its management regulations.

15.2 Chemical safety assessment

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

Part 16 –Other information

MSDS Tabulation Date: 25th Oct.2024

Full text of hazard statements referred to in sections 2 and 3 of the SDS:

H302 Harmful if swallowed
H332 Harmful if inhaled
H317 May cause allergic skin reactions
H361 Suspected of causing harm to fertility or the fetus
H400 Very toxic to aquatic life

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
vPvB: very Persistent and very Bioaccumulative

This MSDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. Products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

END OF REPORT.