

Material Safety Data Sheet

Effective Date: 17-FEB-2004
Product: DOUBLE-UP B+D

I. IDENTIFICATION

Chemical Name: Bromoxynil + 2,4-D Ester
Chemical Family: Phenoxy Herbicides
Formula: Not applicable, formulated mixture.
Synonyms: None
CAS Number: Not applicable, formulated mixture.
EPA Number: 5905-552

II. PHYSICAL DATA

Boiling Point: Not determined
Freezing Point: Not determined
Spec Gravity: 1.162 gms/cc
Vapor Pressure: Not applicable
Vapor Density: Not applicable
Solubility: Emulsifiable
Volatiles: Not determined
Evaporation: Not determined
Melting Point: Not applicable
Appearance: Brown liquid with aromatic odor.

III. INGREDIENTS

Material	CAS Number	Percent	TLV	Hazard
Bromoxynil Octanoic Ester Tech	1689-99-2	31.70	N/E	Skin & eye irritant; toxic.
2,4-D Ester	94-75-7	32.84	10 mg/m3	Skin & eye irritant; toxic.
Inert ingredients		35.46	N/E	

IV. FIRE AND EXPLOSION HAZARD

Flash Point: >200 Degrees F.
Autoignition Temp: Not determined
Flammable Limit: Not determined
Extinguishing Media: Use carbon dioxide, dry chemical or foam
extinguishing agents.
Special Fire Fight Proc: Wear self-contained breathing apparatus and
full protective clothing. Dike area to prevent
runoff.
Fire and Expl Hazard: May emit toxic and corrosive fumes under fire
conditions.

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V. HEALTH HAZARD

Carcinogen Information: Not listed by IARC, NTP or OSHA.

ACUTE EFFECTS OF OVER EXPOSURE

- Swallowing: Toxicity data unavailable. May be fatal if swallowed. May cause headache, dizziness, nausea, vomiting, gastrointestinal irritation and central nervous system depression. May present an aspiration hazard.
- Skin Absorption: Toxicity data unavailable. Harmful if absorbed through skin.
- Inhalation: Toxicity data unavailable. May be harmful if inhaled. Excessive inhalation causes headache, dizziness, nausea and uncoordination.
- Skin contact: Toxicity data unavailable. Causes moderate skin irritation with contact.
- Eye Contact: Causes severe eye irritation with contact.
- Chronic Effects: Repeated overexposure to phenoxy herbicides may cause liver, kidney, gastrointestinal and muscular effects.
- Other Hazard: May aggravate pre-existing disorders of the central nervous system, liver and kidney.

EMERGENCY AND FIRST AID PROCEDURES

- Swallowing: Do not induce vomiting! Slowly dilute with 1 to 2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.
- Skin: Wash affected area with plenty of soap and water. Remove contaminated clothing and launder before reuse. If irritation develops, get medical attention.
- Inhalation: Remove to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen. Seek medical treatment.
- Eyes: Flush eyes with water for at least 15 minutes, holding eyelids open. Get immediate medical attention.
- Notes to Physician: There is no specific antidote for this material. Treatment should be based on the sound judgment of the physician in response to the patient's reactions.

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VI. REACTIVITY

Stability: Stable
Conditions to Avoid: Avoid fire conditions.
Polymerization: Will Not Occur
Conditions to Avoid: None currently known.
Incompatibility material: Avoid contact with strong oxidizers or acids.
Hazardous Combustion: May produce carbon dioxide, carbon monoxide,
oxides of nitrogen and hydrogen bromine under
fire conditions.

VII. SPILL OR LEAK PROCEDURES

Spill or Leak Proc: Dike spilled material using absorbent or
impervious materials, such as clay, sand or
sawdust. Collect and contain contaminated
absorbent and diking material for disposal.
Pump any free liquids into appropriate closed
containers for disposal. Large spills to soil
may require topsoil removal. Spills may be
reportable to the National Response Center
(NRC) or other agencies.
Waste Disposal Method: This material must be disposed of according to
Federal, State or Local procedures under the
Resource Conservation and Recovery Act.

VIII. SPECIAL PROTECTION INFORMATION

Respiration: Use NIOSH-approved respirator suitable for
pesticides.
Ventilation: Local exhaust normally sufficient.
Gloves: Chemical-resistant gloves.
Eyes: Safety glasses or chemical goggles.
Other: Long sleeve shirt and long pants, shoes plus
socks, eyewash station and emergency shower.

IX. SPECIAL PRECAUTIONS

Special precaution: Keep away from children. Do not store with
food, feed or other material to be used or
consumed by humans or animals. Do not
contaminate water supplies, lakes, streams or
ponds. Keep container tightly closed when not
in use. Handle containers carefully to avoid

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damage and spills.

Other precaution: Wash thoroughly after handling this or other pesticides.

X. SHIPPING INFORMATION

Shipping name: Not regulated by DOT in containers <31 gallons.
Hazard Class: None
Identification No: None
Labels Required: None required
Placarding: None
Freight Class: Compound, Weed Killing, Liquid (2,4-D, Bromoxynil Herbicide), N.O.I.

Chemical Name	Equivalent R.Q.
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2,4-D Ester	100 lbs (3.179 #/gallon)

TRANSPORTATION NOTE:

Containers >= 31.4 gallons, ship as follows:
RQ, Environmentally Hazardous Substance, Liquid, n.o.s. (2,4-D Ester), 9, UN3082, PG III "ERG # 171"
Bulk containers (>119 gallons) and IMDG, ship as follows:
RQ, Environmentally Hazardous Substance, Liquid, n.o.s. (2,4-D Ester, Bromoxynil), 9, UN3082, PG III, Marine Pollutant "ERG # 171"
IATA Shipping Description:
Pesticides, Liquid, Toxic, n.o.s. (Bromoxynil, 2,4-D Ester), 6.1, UN2902, PG III "ERG # 151"

XI. GENERAL PRODUCT INFORMATION

National Fire Protection Association Rating:
(Rating level: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

Health: 2 Fire: 2 Reactivity: 0

S.A.R.A. Title III Hazard Classification: (Yes/No)

Immediate (Acute) Health: Y Delayed (Chronic) Health: Y
Sudden Release of pressure: N Fire: Y
Reactive: N

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