

M A T E R I A L S A F E T Y D A T A S H E E T

RHONE-POULENC AG COMPANY

P.O. Box 12014, T.W. Alexander Drive, Research Triangle Park, NC 27709
24-HOUR EMERGENCY TELEPHONE 1-800-334-7577 OR CHEMTREC 1-800-424-9300

Effective Date: APR 7, 1989

Date Printed: APR 7, 1989

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PRODUCT NAME: BUCTRIL(R) BRAND HERBICIDE

II. HAZARDOUS INGREDIENTS

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MATERIAL-----	-----WEIGHT %----
(1) Octanoic acid ester of bromoxynil (3,5-dibromo-4-hydroxybenzotrile)	33.4
(2) Petroleum distillates (Trade Secret) containing:	
Xylene (CAS # 1330-20-7)	11.0
Ethyl benzene (CAS # 100-41-4)	2.2
(3) Other ingredients (Trade Secret)	

EXPOSURE LIMITS:

Xylene:	100 ppm TWA (OSHA PEL & ACGIH TLV)
	150 ppm STEL (ACGIH & OSHA)
Ethyl benzene:	100 ppm TWA (OSHA PEL & ACGIH TLV)
	125 ppm STEL (ACGIH & OSHA)

III. PHYSICAL DATA

SPECIFIC GRAVITY:	1.04
BOILING POINT, 760 mm Hg, Degrees C (F):	148.9 (300)
MELTING POINT, Degrees C (F):	Not known
FREEZING POINT, Degrees C (F):	-16 to -20 (+3 to -4)
VAPOR PRESSURE, Degrees C:	Negligible
VAPOR DENSITY (air=1):	3.5 (petroleum distillate)
pH:	Not applicable
SOLUBILITY IN WATER:	Insoluble
APPEARANCE AND ODOR:	Dark brown liquid; Aromatic odor

IV. HEALTH HAZARD DATA

TOXICOLOGY DATA:

Oral LD50 (rats):	780 mg/kg body weight
Dermal LD50 (rabbits):	2000 mg/kg body weight
Inhalation LC50 (rats - 4 Hour Exposure):	>1.1 mg/L (highest attainable conc)
Skin Effects (rabbits):	Moderate irritation
Eye Effects (rabbits):	Moderate irritation

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IV. HEALTH HAZARD DATA (continued)

CARCINOGENICITY, TERATOGENICITY, MUTAGENICITY:

EPA has classified bromoxynil as a Class C oncogen. R
Based upon the results of rat and rabbit teratogenicity studies,
bromoxynil phenol is considered to be a developmental toxicant.
This product contains a bromoxynil ester. Although three "in vitro"
genetic toxicity studies were positive for bromoxynil phenol, four
additional "in vitro" studies and two "in vivo" studies were negative.
Therefore, the weight of the evidence indicates that bromoxynil
phenol does not produce genetic toxicity.

EFFECTS OF SINGLE OVEREXPOSURE:

Swallowing:

Harmful if swallowed. (See TOXICOLOGY DATA)
May cause nausea, vomiting, abdominal pains, weakness, dizziness and
unsteady gait.
This product contains petroleum distillates. Aspiration may occur
after swallowing of this product and may result in chemical pneumonitis.

Skin Absorption:

Harmful if absorbed through skin. (See TOXICOLOGY DATA)

Inhalation:

Harmful if inhaled. (See TOXICOLOGY DATA)
May cause dizziness, headaches, nausea, disturbed vision and
CNS depression.
May be irritating to the respiratory tract causing coughing,
wheezing and expectoration.

Skin Irritation:

May cause skin irritation, redness and swelling. (See TOXICOLOGY DATA).

Eye Contact:

Causes eye irritation, tearing and redness. (See TOXICOLOGY DATA).
Vapors or sprays (mists) may be irritating to the eyes.

EFFECTS OF REPEATED OVEREXPOSURE:

Repeated exposure may lead to contact dermatitis. R
Prolonged or repeated overexposure to petroleum distillates can cause
dizziness, weakness, weight loss, anemia, nervousness, plus pain,
numbness, and a tingling sensation in the limbs.

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IV. HEALTH HAZARD DATA (continued)

OTHER EFFECTS OF OVEREXPOSURE:

See Notes To Physician.

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This product contains an active ingredient that has been shown to produce a dermal sensitization reaction in laboratory animals. In cases of severe overexposure, can cause central nervous system depression.

EXISTING MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:

Skin irritation may be aggravated in persons with existing skin lesions.

Breathing of vapor or sprays (mists) may aggravate acute or chronic asthma and chronic pulmonary disease such as emphysema or bronchitis.

EMERGENCY AND FIRST AID PROCEDURES:

Remove the patient from immediate source of exposure and assure that the individual is breathing. If not breathing, use cardio-pulmonary resuscitation or artificial respiration. GET MEDICAL ATTENTION.

Swallowing:

If patient is conscious and alert, give 2-3 glasses of water to drink. Do not induce vomiting. GET MEDICAL ATTENTION.

PRECAUTION: To prevent aspiration of swallowed product, lay patient on side with head lower than waist.

Skin:

Immediately wash skin with plenty of soap and water, while removing contaminated clothing and shoes. Wash clothing separately before reuse.

Inhalation:

Remove victim to fresh air. If not breathing, administer cardio-pulmonary resuscitation or artificial respiration. If breathing is difficult, administer oxygen. GET MEDICAL ATTENTION.

Eyes:

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. GET MEDICAL ATTENTION.

NOTES TO PHYSICIAN:

No specific antidote is available.

Treat symptomatically. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

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IV. HEALTH HAZARD DATA (continued)

This product contains petroleum distillates. Because of the toxicity of the bromoxynil, the stomach should be evacuated by gastric intubation with the aid of a cuffed endotracheal tube to prevent aspiration of petroleum distillates. After removal of stomach contents, wash stomach by instilling 30-50 g. of activated charcoal in 3-4 ounces of water through the stomach tube and again remove stomach contents. Avoid oily laxatives.

V. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT Degrees C (F): 38.9 (102) Tagliabue Closed Cup

FLAMMABLE LIMITS IN AIR (% by volume):

Lower: 1
Upper: 6

AUTOIGNITION TEMPERATURE Degrees C (F): 454.4 (850) (petroleum distillate)

EXTINGUISHING MEDIA: Use carbon dioxide or dry chemical for small fires.
Use foam (alcohol, polymer, or ordinary) for large fires.
Water spray may be used to cool containers, but a water stream may spread flames.

SPECIAL FIRE FIGHTING PROCEDURES: Provide for the protection of employees R and residents:

- a) Evacuate residents who are downwind of fire.
- b) Prevent unauthorized entry to fire area.
- c) Persons who may have been exposed to contaminated smoke should be examined by a physician and treated appropriately.
- d) Dike area to prevent runoff and contamination of water sources.

Notify local authorities that firemen should:

- a) Wear protective clothing and use self-contained breathing apparatus.
- b) Be immediately relieved from duty, if exposed to contaminated smoke, and checked for symptoms of poisoning. These should not be mistaken for heat exhaustion or smoke inhalation. See Section IV, Health Hazard Data for symptoms of poisoning, first aid procedures, and notes to physician.

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V. FIRE AND EXPLOSION HAZARD DATA (continued)

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Thermal decomposition products may be hazardous. These may include hydrogen bromide, carbon oxides, nitrogen oxides and sulfur oxides. Vapors form from this product and may travel or be moved by air currents and ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharges or other ignition sources at locations distant from product handling point. Use electrical equipment suitable for atmospheres that may contain flammable gases or vapors.

VI. REACTIVITY DATA

STABILITY:

Stable

CONDITIONS TO AVOID:

Keep away from heat, sparks, open flame and other ignition sources. Prolonged storage at or below 3 Degrees F (-16 C).

MATERIALS TO AVOID:

Mineral acids, strong bases, oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS:

Decomposition products may be hazardous. These may include hydrogen bromide, carbon oxides, nitrogen oxides and sulfur oxides.

HAZARDOUS POLYMERIZATION:

Will not occur.

VII. SPILL OR LEAK PROCEDURES

COMBUSTIBLE LIQUID: Extinguish and do not turn on any ignition source until the area is determined to be free from explosion or fire hazards.

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Dike large spills using absorbent or impervious materials such as sand or clay. Recover and contain as much free liquid as possible. Recover remaining spilled material as appropriate. Collect and contain contaminated absorbent and dike material for disposal. Absorb small spills on sand or vermiculite. Place contaminated material in appropriate container for disposal.

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VII. SPILL OR LEAK PROCEDURES (continued)

If spilled on the ground, the affected area should be removed to a depth of one or two inches and placed in an appropriate container for disposal.

Do not flush material to public sewer systems or any waterways.

Wear appropriate protective clothing and equipment (see below) during cleanup activities.

Use spark resistant tools.

Ensure adequate decontamination of tools and equipment following cleanup.

WASTE DISPOSAL METHOD:

Dispose of in accordance with local, state and federal regulations.

NOTE: This product is RCRA hazardous waste D001, ignitable, when disposed.
Spills are subject to CERCLA reporting requirement: RQ = 100 lbs

VIII. SPECIAL PROTECTION INFORMATION

PROTECTIVE EQUIPMENT SHOULD BE USED DURING THE FOLLOWING PROCEDURES:

- Manufacture or formulation of this product
- Repair and maintenance of contaminated equipment
- Clean-up of leaks and spills

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirator for organic vapors. Use positive pressure self-contained breathing apparatus for emergency conditions or when material is present as a mist.

VENTILATION: Local exhaust ventilation when necessary.

PROTECTIVE GLOVES: Chemical-resistant gloves, i.e. nitrile. R

EYE PROTECTION: Face shield, goggles, eye bath.

OTHER PROTECTIVE EQUIPMENT: Full-body protective clothing, safety shower.

IX. SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Do not breathe vapor or spray (mists). Do not ingest.
Do not get in eyes, on skin or on clothing.

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IX. SPECIAL PRECAUTIONS (continued)

Store in closed containers in a cool well ventilated area. Stable in storage at 55 Degrees C (131 F) for eight weeks in original container.

Discolors but does not pit steel.

Keep away from heat, sparks, open flame and other ignition sources.

Store at temperatures above 3 Degrees F (-16 C)., If allowed to freeze, remix before using.

Do not store near food, feedstuffs, fertilizers, or seed.

Do not contaminate water, food, or feed by storage or disposal.

X. REGULATORY STATUS

A

EPA Registration No.:

264-437

RCRA Hazardous Waste:

D001, ignitable
U239, xylene

SARA Title III

Section 302 Extremely Hazardous Substance List:

Not listed

Section 313 Toxic Chemicals:

xylene, ethyl benzene

Reportable Quantity (RQ), under U.S. EPA CERCLA:

100 lbs product
1000 lbs xylene
1000 lbs ethyl benzene

California Proposition 65:

Not listed

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A in margin indicates additional information since last revision.

R in margin indicates a revision.

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