

MATERIAL SAFETY DATA SHEET

WINFIELD SOLUTIONS, LLC

PRODUCT NAME(S)For Medical Emergency Call: 877-424-7452-
or Chem Trec: 800-424-9300**MOXY 2E**

Effective Date: 09/14/07

I. IDENTIFICATION

CHEMICAL NAME OF PRIMARY COMPONENT(S): Octanoic ester of 3,5 dibromo-4-hydroxybenzotrile

FORMULA: C₁₅H₁₇Br₂NO₂ **MOLECULAR WEIGHT:** 403.13

SYNONYMS: Bromoxynil octanoate **CAS # & NAME:** 1689-99-2 Octanoic acid, 2,6-dibromo-4-cyanophenylester

EPA Reg No. 9779-346

II. INGREDIENTS/SUMMARY OF HAZARDS

(H)/INGREDIENT(S)	CAS NUMBER	OSHA HAZARD NON-HAZARD (NH)	PERCENT
Bromoxynil octanoate	1689-99-2	H	33.4 %
Xylene	1330-20-7	H	1.8 %
Formulation aids		NH	64.8 %

	NFPA ^{1/}	HMIS ^{2/}
HEALTH	2	2
FIRE	2	2
REACTIVITY	0	0

1/ National Fire Protection Association Rating

2/ Hazardous Materials Identification System

(4 = Extreme/Severe 3 = High/Serious 2 = Moderate 1 = Slight 0 = Minimum)

SARA TITLE III HAZARD CLASSIFICATION

IMMEDIATE (ACUTE) HEALTH	Yes
DELAYED (CHRONIC) HEALTH	Yes
FIRE	Yes
SUDDEN RELEASE OF PRESSURE	No
REACTIVE	No

III. PHYSICAL DATA

SPECIFIC GRAVITY: 1.04
BOILING POINT: 300 F (148.9° C)
FREEZING POINT: -4 to +3 F (-16 to -20° C)
VAPOR PRESSURE: Negligible
VAPOR DENSITY: 3.5 (air = 1)
SOLUBILITY IN WATER: Insoluble
APPEARANCE: Dark brown liquid
ODOR: Typical aromatic odor

IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 102° F (TCC)
FLAMMABLE LIMITS IN AIR: Lower: 1 Upper: 6
AUTOIGNITION TEMPERATURE: Not determined
EXTINGUISHING MEDIA: Use carbon dioxide or dry chemical for small fires and water fog or foam (alcohol, polymer or ordinary) for large fires. Water stream may spread flames.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Noxious fumes may be emitted under fire conditions.
SPECIAL FIRE FIGHTING PROCEDURES: Fire fighters should use self contained breathing apparatus and full turnout gear. Prevent runoff of fire water. Avoid exposure to smoke.

V. REACTIVITY DATA

STABILITY: Stable under normal conditions
CONDITIONS TO AVOID: Ignition sources. Prolonged storage at or below 3°F (-16°C)
MATERIALS TO AVOID: Strong bases, mineral acids and oxidizers
HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride, carbon oxides.
HAZARDOUS POLYMERIZATION: Will not occur

VI. HEALTH HAZARD DATA/FIRST AID PROCEDURES

TOXICOLOGY DATA:
Acute Oral LD₅₀ (rat): 780 mg/kg
Acute Dermal LD₅₀ (rabbit): 2000 mg/kg
Acute Inhalation(4hr rat): >1.1 mg/L (highest attainable concentration)
Eye Irritation (rabbit): Moderate irritation
Dermal Irritation (rabbit): Moderate irritation.
Dermal Sensitization: May cause dermal sensitization.

EXPOSURE LIMITS:

CHEMICAL NAME(S)	ACGIH (TLV)	OSHA (TWA)
Bromoxynil octanoate	Not established	Not established
Xylene	100 ppm	100 ppm

CARCINOGENICITY, TERATOGENICITY, MUTAGENICITY: The EPA has classified Bromoxynil as a Class C oncogen. Based upon the results of rat and rabbit teratology studies, bromoxynil phenol is considered to be a developmental toxicant. Women of childbearing age should be particularly careful when handling this product to avoid ingestion and skin contact.

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.

SIGNS OF POISONING: nausea, dizziness, headaches, CNS depression

PRIMARY ROUTES OF ENTRY: Skin and/or eye contact

EFFECTS OF SINGLE OVEREXPOSURE:

Swallowing: May cause nausea, vomiting, abdominal pain, weakness, dizziness and unsteady gait.

Skin Absorption: May cause skin irritation, redness and swelling.

Inhalation: May cause dizziness, headaches, nausea, disturbed vision, and CNS depression. May be irritating to the respiratory tract causing coughing, wheezing and expectoration.

Eye Contact: Causes eye irritation, tearing and redness. Vapors and/or mists(spray) may be irritating to the eyes.

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

OTHER EFFECTS OF OVEREXPOSURE: See notes to physician.

EXISTING MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE: Skin contact may aggravate preexisting skin conditions. Inhalation of mists may aggravate preexisting respiratory conditions.

EMERGENCY AND FIRST AID PROCEDURES:

Swallowing: Call a physician or poison control center. If patient is conscious and alert, give 2-3 glasses of water to drink. Do not induce vomiting.

Skin: Wash affected area with plenty of soap and water. Remove contaminated clothing. Launder contaminated clothing separately. Get medical attention if irritation develops and persists.

Inhalation: Remove victim to fresh air. If not breathing, give artificial respiration. GET MEDICAL ATTENTION.

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

NOTE TO PHYSICIAN:

No specific antidote is available. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. 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.

VII. PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Dike the area using absorbent or materials such as sand or clay. Recover and contain as much product as possible using absorbent. Clean spill area using a solution of water and detergent. Collect and contain wash water and all contaminated absorbent for disposal. If spilled on the ground, the affected area should be excavated to a depth of 1 - 2 inches. Prevent the spilled product or washings from reaching public sewers or waterways. Wear appropriate protective equipment during the cleanup. Ensure that tools and equipment are adequately decontaminated.

WASTE DISPOSAL METHOD: Dispose of in accordance with federal, state and local regulations.

CONTAINER DISPOSAL: Dispose of in an approved facility according to federal, state and local regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: store in a cool dry, secure area away from sources of heat or ignition.

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.
- Any other activity that may result in hazardous exposures.
- Refer to product label for PPE required for labeled use.

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirator for organic vapors. Use positive pressure self contained breathing apparatus for emergency conditions where exposure limits are exceeded.

VENTILATION: Local exhaust

PROTECTIVE CLOTHING: Chemical resistant gloves, coveralls, apron and foot coverings.

EYE PROTECTION: Safety goggles

USER SAFETY RECOMMENDATIONS: Safety showers and eye wash should be easily accessible.

IX. REGULATORY STATUS

TSCA INVENTORY STATUS:**TRANSPORTATION STATUS:****DOT INFORMATION:**

Container Capacity	DOT Basic Description and Technical Name	Placard
119 gallons or less	Not DOT hazardous by ground mode	N/A
Greater than 119 gallons	Combustible Liquid, n.o.s.(Xylene range solvents), NA1993, PG III	COMBUSTIBLE

One package containing 5555 lbs. (641 gallons) or more contains a 100 lb. RQ of xylene.

SARA TITLE III

Section 302-304 (40 CFR 350):

Extremely Hazardous Substance (EHS): Not listed

Section 312, Reporting (40 CFR 370):

SARA/OSHA Hazardous Chemical Reporting Quantity: Not applicable

Section 313, Toxic Chemicals: Bromoxynil, Xylene

Reportable Quantity (RQ): Xylene 100 lbs

RCRA HAZARDOUS WASTE: Xylene: U239

International Right-To-Know Regulations:

X. REFERENCES

THE INFORMATION HEREIN IS GIVEN IN GOOD FAITH,
BUT, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE.