



The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries.

DuPont
Material Safety Data Sheet

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M0000664 "DuPont" "BREAKFREE" HERBICIDE
Revised 14-NOV-2006

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

"DuPont", "BREAKFREE" are trademarks of DuPont.

Tradenames and Synonyms

DPX-A3049 EC
ACETOCHLOR

Company Identification

MANUFACTURER/DISTRIBUTOR
DuPont
1007 Market Street
WILMINGTON, DE 19898

PHONE NUMBERS

Product Information : 1-(800)441-7515
Transport Emergency : CHEMTREC: 1-800-424-9300
Medical Emergency : 1-(800)441-3637 (outside of U.S.
302-774-1000)

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
ACETOCHLOR	34256-82-1	70.9
2-Chloro-2'methyl-6'-ethyl-N-ethoxymethylacetanilide		
INERT INGREDIENTS, INCLUDING:		29.1
Dichlormid	37764-25-3	
Aromatic 100	64742-95-6	
*Xylene	1330-20-7	
*1,2,4-Trimethylbenzene	95-63-6	
*Cumene	98-82-8	
Ethyltoluene	25550-14-5	

* Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

HAZARDS IDENTIFICATION

Emergency Overview

Warning! Causes substantial but temporary eye irritation.
Harmful if swallowed, inhaled, or absorbed through skin.
Do not get on skin, in eyes, or on clothing. Avoid
breathing spray mist.

Potential Health Effects

Based on components, skin contact with Breakfree may cause skin irritation with discomfort or rash. Atrazine has been infrequently associated with skin sensitization in humans.

Based on components, eye contact with Breakfree may cause eye irritation with discomfort, tearing, or blurring of vision.

An ingestion hazard is aspiration (liquid entering the lungs during ingestion or vomiting) which may result in "chemical pneumonia". Symptoms include coughing, gasping, choking, shortness of breath, bluish discoloration of the skin, rapid breathing and heart rate, and fever. Ingestion of large amounts may cause irritation of the mouth and stomach with nonspecific discomfort, such as nausea, or weakness; or gastrointestinal irritation abdominal pain, nausea, vomiting, and diarrhea; or central nervous system depression.

Inhalation may cause irritation of the upper respiratory passages, with coughing and discomfort; temporary nervous system depression with anaesthetic effects such as dizziness, headache, confusion, incoordination, and loss of consciousness.

Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

FIRST AID MEASURES

First Aid

IF ON SKIN OR CLOTHING: Take off contaminated clothing.
Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

(FIRST AID MEASURES - Continued)

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-441-3637 for emergency medical treatment information.

FIRE FIGHTING MEASURES

Flammable Properties

FIRE AND EXPLOSION:

Flash Point (Test Method): 165.2°F (74°C)
Method Use: TCC

UNUSUAL FIRE, EXPLOSION AND REACTIVITY HAZARDS:

If heated above the flashpoint, heavy vapors can flow along surfaces to distant ignition sources and flash back.

Extinguishing Media

Water Fog, "Alcohol" Foam, CO2, Dry Chemical.

Fire Fighting Instructions

Wear self-contained breathing apparatus (SCBA) and full protective equipment.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Spill Clean Up

In case of spill or leak on floor or paved surfaces, soak up with vermiculite, earth, or synthetic absorbent.

HANDLING AND STORAGE

Handling (Personnel)

Avoid contact with eyes or skin. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

USERS SHOULD: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Handling (Physical Aspects)

Keep container tightly closed. Keep away from heat, sparks and flames.

Storage

Do not contaminate water, food or feed by storage. Store in original container only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with vermiculite, earth, or synthetic absorbent.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Personal Protective Equipment

Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants.
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride.
- Chemical-resistant footwear plus socks.
- Protective eyewear.
- Chemical-resistant headgear for overhead exposure.

(EXPOSURE CONTROLS/PERSONAL PROTECTION - Continued)

- Chemical-resistant apron when cleaning equipment, mixing, or loading.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls over short-sleeved shirt and short pants.
- Chemical-resistant gloves made of any waterproof material.
- Chemical-resistant footwear plus socks.
- Protective eyewear.
- Chemical-resistant headgear for overhead exposure.

Exposure Guidelines

Applicable Exposure Limits

Aromatic 100

PEL (OSHA)	: None Established
TLV (ACGIH)	: None Established
AEL * (DuPont)	: 50 ppm, 8 Hr. TWA

Xylene

PEL (OSHA)	: 100 ppm, 435 mg/m ³ , 8 Hr. TWA
TLV (ACGIH)	: 100 ppm, 8 Hr. TWA, A4 STEL 150 ppm, A4
AEL * (DuPont)	: 100 ppm, 8 & 12 Hr. TWA 150 ppm, 15 minute TWA

1,2,4-Trimethylbenzene

PEL (OSHA)	: 25 ppm, 125 mg/m ³ , 8 Hr. TWA
TLV (ACGIH)	: 25 ppm, 123 mg/m ³ , 8 Hr. TWA
AEL * (DuPont)	: None Established

Cumene

PEL (OSHA)	: 50 ppm, 245 mg/m ³ , 8 Hr. TWA, Skin
TLV (ACGIH)	: 50 ppm, 8 Hr. TWA
AEL * (DuPont)	: None Established

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Appearance: Dark amber to purple liquid
Odor: Aromatic
Boiling Point: Not determined
Specific Gravity: 1.1086 g/mL @ 25°C
Density @68°F (20°C): 9.199 lbs/gal
pH: 6
Viscosity @68°F (20°C): 50 cP
Solubility in water: Emulsifiable

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal conditions.

Incompatibility with Other Materials

Incompatibility: Oxidizing agents

Decomposition

Hazardous Decomposition Products: If product is involved in a fire, carbon dioxide, carbon monoxide, hydrogen chloride, nitrogen dioxide, and sulfur dioxide may be formed.

Polymerization

Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data

Breakfree

Oral LD50: 1942 mg/kg in male rats
Oral LD50: 1426 mg/kg in female rats
Skin Absorption LD50: > 2240 mg/kg in rats
Inhalation 4 hour LC50: > 2.10 mg/L in rats

Aromatic 100 has caused birth effects in animals but only at maternally toxic dose levels. Animal data for xylene show developmental effects only at or near levels producing other toxic effects in the adult animal. In animals, trimethylbenzene has been toxic to the fetus at doses non-toxic to the mother. Aromatic 100 and trimethylbenzene caused reproductive effects in animals only at doses that produced significant toxicity to the adult animal. Dichlormid did not interfere with reproduction in animal studies.

(TOXICOLOGICAL INFORMATION - Continued)

ACETOCHLOR

A 3-month feeding study in rats caused body weight loss and decreased food consumption. The no-observable-effect-level was 40 mg/kg.

Acetochlor has produced tumors in some laboratory animals. Tests in animals indicate developmental toxicity but only at maternally toxic dose level. Reproduction toxicity was only observed with maternal toxicity. Acetochlor is not mutagenic based on the weight of evidence; it was negative in some tests and positive in others.

ECOLOGICAL INFORMATION

Ecotoxicological Information

AQUATIC TOXICITY:

ACETOCHLOR

96 hour LC50 - Bluegill sunfish: 1.3 mg/L.

96 hour LC50 - Rainbow trout: 0.36 - 1.2 mg/L.

48 hour LC50 - Daphnia magna: 8.6 - 16 mg/L

AVIAN TOXICITY:

Acetochlor

Acute LD50 is 501 to 2000 mg/kg: Slightly toxic to birds

Dietary LC50 is > 5000 mg/kg: practically non-toxic

AQUATIC TOXICITY:

Dichlormid

LC50 or EC50 is > 100 mg/L in most sensitive tested

AQUATIC TOXICITY:

Aromatic 100

LC50 or EC50 is 1 to 10 mg/L in most sensitive tested

DISPOSAL CONSIDERATIONS

Waste Disposal

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

ENVIRONMENTAL HAZARDS:

(DISPOSAL CONSIDERATIONS - Continued)

This product is toxic to fish. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

Container Disposal

Triple rinse (or equivalent); then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

For Bulk and Mini-Bulk Container Disposal and Refilling, refer to the product label for instructions and additional precautions.

Do not refill or transport damaged or leaking containers.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!

TRANSPORTATION INFORMATION

Shipping Information

DOT:

For Non-bulk Shipments: Material is not regulated for transportation.

For Bulk Domestic Shipments by Land, Rail, or Vessel:
Combustible liquid, N.O.S. (contains Naptha solvent),
Combustible liquid, NA 1993, PG III

REGULATORY INFORMATION

U.S. Federal Regulations

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

Acute : Yes
Chronic : Yes
Fire : No
Reactivity : No

In the United States this product is regulated by the US Environmental Protection Agency under the Federal Insecticide, Fungicide and Rodenticide Act. It is a violation of federal law to use this product in a manner inconsistent with its labeling.

EPA Reg. No. 352-722

(REGULATORY INFORMATION - Continued)

Section 313 Toxic Chemicals:

1,2,4-Trimethylbenzene (CAS 95-63-6), 1.5%

State Regulations (U.S.)

California Prop 65:

This product contains the chemical Acetochlor, known to
the State of California to cause cancer.-----
OTHER INFORMATION

NFPA, NPCA-HMIS

NFPA Rating	
Health	: 2
Flammability	: 2
Reactivity	: 0

The data in this Material Safety Data Sheet relates only to the
specific material designated herein and does not relate to use in
combination with any other material or in any process.Responsibility for MSDS: DuPont Crop Protection
Address : Wilmington, DE 19898
Telephone : 1-888-638-7668This information is based upon technical information believed to be
reliable. It is subject to revision as additional knowledge and
experience is gained.

End of MSDS