ACCLAIM® EXTRA HERBICIDE

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: ACCLAIM® EXTRA HERBICIDE
Chemical Name: fenoxaprop-p-ethyl:(+)-ethyl 2-fenoxaprop-p-ethyl:(+)-ethyl 2- {4-[6-chloro-2-benzoxazolyl]oxy}phenoxylpropanoate
Synonym: 
MSDS Number: 2
Chemical Family: benzoxazole
EPA Registration No.: 432-950
Canadian Registrat. No.: 

Bayer Environmental Science
95 Chestnut Ridge Road
Montvale, NJ 07645
USA

For Product Use Information: (800)331-2867 Monday through Friday
8:00AM-4:30PM
For Medical Emergency contact DART: (800) 334-7577  24 Hours/Day
For Transportation Emergency CHEMTREC: (800) 424-9300  24 Hours/Day

Product Use Description: For selective postemergence Annual & Perennial Grass Control in Turfgrass.

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component Name</th>
<th>CAS No.</th>
<th>Concentration % by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fenoxaprop-p-ethyl</td>
<td>71283-80-2</td>
<td>Minimum: 6.9200</td>
</tr>
<tr>
<td>Inert ingredients, including:</td>
<td></td>
<td>Maximum: 93.0800</td>
</tr>
<tr>
<td>NAPHTHALENE</td>
<td>91-20-3</td>
<td>Minimum: 6.0000</td>
</tr>
<tr>
<td>AROMATIC HYDROCARBONS</td>
<td>64742-95-6</td>
<td>Minimum: 35.2000</td>
</tr>
<tr>
<td>Glycol ethers</td>
<td>123-81-9</td>
<td>Maximum: 6.3000</td>
</tr>
</tbody>
</table>

NOTE: Only the regulated inert ingredients are listed.
SECTION 3. HAZARDS IDENTIFICATION

NOTE: Please refer to Section 11 for detailed toxicological information.

Emergency Overview
Caution. Causes moderate eye injury. Harmful if swallowed. Inhalation of vapor may cause headache, loss of appetite and nausea. Vapors may cause eye irritation.

Physical State
liquid

Appearance
White to beige

Routes of Exposure
Skin absorption and mist or vapor inhalation.

Immediate Effects
Eye
Causes moderate eye irritation. Vapors may cause eye irritation.

Skin
A slight skin irritant.

Ingestion
Harmful if swallowed. Small amounts of the solvent in this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury.

Inhalation
High vapor/aerosol concentrations (greater than approximately 1,000 ppm) are irritating to the eyes and the respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects.

Signs and Symptoms
Symptoms of overexposure include headache, nausea, loss of appetite. Ingestion may induce CNS depression-like symptoms and other adverse health effects.

SECTION 4. FIRST AID MEASURES

Eye
Flush with plenty of water. Get medical attention.

Skin
Wash with soap and water.

Ingestion
If swallowed, do not induce vomiting. Call a physician. Do not induce vomiting or give anything by mouth to an unconscious person.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point
212 °C / 414 °F
Method: Closed Cup

Suitable Extinguishing Media
Small Fires:; dry chemical, carbon dioxide (CO2)
Large Fires: foam, water. Move containers from fire area if without risk. Cool containers with water from maximum distance.

**Fire Fighting Instructions**

Keep upwind. Isolate hazard area. Avoid inhalation of smoke and fumes. Use water or foam to reduce fumes. Do not touch spilled material.

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

**General and Disposal**

Use proper protective equipment to minimize personal exposure (see Section 8). Take all necessary action to prevent and to remedy the effects of the spill. Ensure that the disposal is in compliance with Federal or local disposal regulations. Notify the appropriate authorities immediately. See Section 13 for any applicable Reportable Quantity (RQ) and other federal regulatory information.

**Land Spill or Leaks**

Do not touch spilled material. Take up with sand, earth, or other non-combustible absorbent material or dike for later disposal. Avoid flame or sparks.

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**SECTION 7. HANDLING AND STORAGE**

**Handling Procedures**

Caution. Causes moderate eye injury. Harmful if swallowed. Avoid contact with eyes or clothing. Use the recommended equipment when handling this product (see Section 8).

**Storing Procedures**

Do not contaminate water, food, or feed by storage or disposal. Do not use or store near heat or open flame. Store in original container. Do not put concentrate or diluted product into food or drink containers. Store product in a secure storage area.

**Work/Hygienic Procedures**

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.

Follow manufacturer’s instructions for cleaning/maintaining Personal Protective Equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**Min/Max Storage**

-12 °C / 38 °C
SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls  Control airborne concentrations below the exposure guidelines. Use with adequate ventilation. Local exhaust ventilation may be necessary, when used in a confined area. Handle only in ventilated areas.

Eye/Face Protection  goggles or face-shield

Body Protection  Impermeable rubber gloves (such as neoprene or PVC). Wear apron when handling product.

FOR APPLICATORS AND HANDLERS (AGRICULTURAL USES):
The personal protective equipment (PPE) for agricultural uses are specified under the Subtitle: "Note to Applicators and Handlers of Agricultural Products."

NOTE TO APPLICATORS AND HANDLERS OF AGRICULTURAL PRODUCTS:
For agricultural products which are within the scope of the EPA Worker Protection Standards (WPS) (40 CFR Part 170) all users must refer to the statement below or the Product Label for WPS-specified Personal Protective Equipment (PPE), Restricted Entry Interval (REI), and other Precautionary Statements.

PERSONAL PROTECTIVE EQUIPMENT FOR APPLICATORS AND HANDLERS:
Applicators and handlers must wear:
- Long-sleeved shirts and long pants
- Shoes plus socks

PERSONAL PROTECTIVE EQUIPMENT REQUIRED FOR EARLY ENTRY INTO TREATED AREAS:
For entry into treated areas during the restricted entry interval (REI) of 24 hours that involves contact with anything that has been treated such as plants, soil, or water, the PPE required is:
- Coveralls
- Waterproof gloves
- Shoes plus socks

Exposure Limits

<table>
<thead>
<tr>
<th>NAPHTHALENE</th>
<th>ACGIH</th>
<th>TWA</th>
<th>10 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ACGIH</td>
<td>STEL</td>
<td>15 ppm</td>
</tr>
<tr>
<td></td>
<td>NIOSH</td>
<td>REL</td>
<td>10 ppm</td>
</tr>
<tr>
<td></td>
<td>NIOSH</td>
<td>STEL</td>
<td>15 ppm</td>
</tr>
<tr>
<td></td>
<td>OSHA Z1</td>
<td>PEL</td>
<td>10 ppm</td>
</tr>
<tr>
<td></td>
<td>OSHA Z1A</td>
<td>TWA</td>
<td>10 ppm</td>
</tr>
<tr>
<td></td>
<td>OSHA Z1A</td>
<td>STEL</td>
<td>15 ppm</td>
</tr>
<tr>
<td></td>
<td>US CA OEL</td>
<td>TWA PEL</td>
<td>10 ppm</td>
</tr>
<tr>
<td></td>
<td>US CA OEL</td>
<td>STEL</td>
<td>15 ppm</td>
</tr>
</tbody>
</table>
### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White to beige</td>
</tr>
<tr>
<td>Physical State</td>
<td>liquid</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not measured</td>
</tr>
<tr>
<td>Density</td>
<td>1.04 g/cm³ at 20 °C</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not Established</td>
</tr>
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</table>

### SECTION 10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Stability</td>
<td>Stable -12 - 38 °C</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>Will not occur</td>
</tr>
</tbody>
</table>

### SECTION 11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Oral Toxicity</td>
<td>Male Rat: LD50: 4,410 mg/kg Low toxicity. Harmful if swallowed.</td>
</tr>
<tr>
<td></td>
<td>Female Rat: LD50: &gt; 5,000 mg/kg Low toxicity. Harmful if swallowed.</td>
</tr>
<tr>
<td>Acute Dermal Toxicity</td>
<td>Rat: LD50: &gt; 5,000 mg/kg Low toxicity.</td>
</tr>
<tr>
<td>Acute Inhalation Toxicity</td>
<td>LC50: &gt; 7.6 mg/l 4 h Low toxicity.</td>
</tr>
<tr>
<td>Skin Irritation</td>
<td>A slight skin irritant.</td>
</tr>
<tr>
<td>Eye Irritation</td>
<td>Causes moderate eye injury.</td>
</tr>
<tr>
<td>Chronic Toxicity</td>
<td>This product contains fenoxaprop-p-ethyl as the active ingredient. Reduced blood lipids and cholesterol and increased liver weights were adaptive and reversible changes induced by fenoxaprop-p-ethyl in sub-chronic studies in rats and mice. These findings were not apparent in lifetime feeding studies in rats and mice confirming their transient nature. Lifetime feeding studies produced no carcinogenic response in rats or mice.</td>
</tr>
</tbody>
</table>
Assessment Carcinogenicity
ACGIH
NAPHTHALENE 91-20-3 Group A4
NTP
NAPHTHALENE 91-20-3
IARC
None
OSHA
None

Reproductive & Developmental Toxicity
FENOXAPROP-P-ETHYL: Reduced pup body weight gain during lactation was observed at high doses in a two generation reproduction study in rats. There were no effects on fertility in this study.

Teratogenicity
FENOXAPROP-P-ETHYL: Teratology studies were performed on fenoxaprop-p-ethyl in mice, rats, rabbits and monkeys by both oral and dermal route of exposure. No embryotoxic or fetotoxic effects were seen at doses non-toxic to the mothers.

Mutagenicity
FENOXAPROP-P-ETHYL: A variety of mutagenicity studies in bacteria and mammalian cells in vitro and in vivo have shown fenoxaprop-p-ethyl is non-mutagenic.

SECTION 12. ECOLOGICAL INFORMATION
Environmental Precautions
This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor runoff or drift. Do not contaminate arable land and/or water when disposing of equipment washwaters.

SECTION 13. DISPOSAL CONSIDERATIONS
General Disposal Guidance
Pesticide Disposal: 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.

Container Disposal
Empty containers should be triple rinsed into the spray tank during operation. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

RCRA Classification
SECTION 14. TRANSPORT INFORMATION

Not Regulated for Domestic Transportation.

SECTION 15. REGULATORY INFORMATION

US Federal

EPA Registration No. 432-950
TSCA list
NAPHTHALENE 91-20-3
AROMATIC HYDROCARBONS 64742-95-6
Glycol ethers 123-81-9

TSCA 12b export notification
None

SARA Title III - section 302 - notification and information
None

SARA Title III - section 313 - toxic chemical release reporting
NAPHTHALENE 91-20-3 1.0%

US States Regulatory

CA Prop65
This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State right-to-know ingredients
NAPHTHALENE 91-20-3 CA, CT, IL, MN, NJ, PA, RI
Glycol ethers 123-81-9 PA

Canadian Regulations

Canadian Registrat. No.
Canadian Domestic Substance List
NAPHTHALENE 91-20-3
AROMATIC HYDROCARBONS 64742-95-6
Glycol ethers 123-81-9

Environmental

CERCLA
NAPHTHALENE 91-20-3 100 lbs

Clean Water Section 307 Priority Pollutants
NAPHTHALENE 91-20-3

Safe Drinking Water Act Maximum Contaminant Levels
NAPHTHALENE 91-20-3

International Regulations
EU Classification

NAPHTHALENE: 91-20-3 Harmful Dangerous for the environment

R Phrases: Harmful if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S Phrases: Keep out of the reach of children. Wear suitable protective clothing and gloves. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheets.

European Inventory of Existing Commercial Substances (EINECS)

NAPHTHALENE: 91-20-3, AROMATIC HYDROCARBONS: 64742-95-6, Glycol ethers: 123-81-9

SECTION 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFPA</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

MSDS REVISION INDICATOR: Company name change.

Print Date: 12/03/2002
Supersedes MSDS, which is older than: 12/03/2002

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