1. PRODUCT IDENTIFICATION

<table>
<thead>
<tr>
<th>Product Name: FUSILADE DX</th>
<th>Product No.: A12460A</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA Signal Word: Caution</td>
<td></td>
</tr>
<tr>
<td>Active Ingredient(%): Fluazifop-P-Butyl Technical (24.5%)</td>
<td>CAS No.: 79241-46-6</td>
</tr>
<tr>
<td>Chemical Name: Butyl(RS)-2-[4-[[5-(trifluoromethyl)-2-pyridinyl]oxy]phenox]propanoate</td>
<td></td>
</tr>
<tr>
<td>Chemical Class: A post emergence herbicide</td>
<td></td>
</tr>
</tbody>
</table>

EPA Registration Number(s): 100-1070

Section(s) Revised: All sections

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Material</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other</th>
<th>NTP/IARC/OSHA Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum Solvent</td>
<td>Not Established</td>
<td>Not Established</td>
<td>100 ppm*</td>
<td>No</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>10 ppm</td>
<td>10 ppm (STEL= 15 ppm)</td>
<td>Not Established</td>
<td>No</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>25 ppm TWA</td>
<td>25 ppm TWA</td>
<td>Not Established</td>
<td>No</td>
</tr>
<tr>
<td>Fluazifop-P-Butyl Technical (24.5%)</td>
<td>Not Established</td>
<td>Not Established</td>
<td>0.5 mg/m³ TWA***</td>
<td>No</td>
</tr>
</tbody>
</table>

* recommended by manufacturer

*** Syngenta Occupational Exposure Standard (OES)

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

3. HAZARDS IDENTIFICATION

Symptoms of Acute Exposure
Can cause eye, skin and respiratory passage irritation. Allergic reactions are possible. Harmful if inhaled or swallowed. Exposure to high vapor levels may cause headache, dizziness, numbness, nausea, incoordination, or other central nervous system effects.

Hazardous Decomposition Products
Mists from heated solution may cause respiratory irritation.
Can decompose at high temperatures forming toxic gases.

Physical Properties
Appearance: Dark brown liquid, free of sediment
Odor: Aromatic

Unusual Fire, Explosion and Reactivity Hazards
During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

4. FIRST AID MEASURES

Have the product container, label or Material Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

Ingestion: If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment
5. FIRE FIGHTING MEASURES

Eye Contact: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Skin Contact: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Inhalation: 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 Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak
Warning - flammable vapors may be present. Eliminate sources of ignition and ventilate spill area. Use non-sparking clean-up equipment to prevent vapor ignition.
Control the spill at its source. Contain the spill to prevent it from spreading, contaminating soil, or entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. If a solid, sweep up material and place in a compatible disposal container. If a liquid, cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THE PRODUCT.
FOR COMMERCIAL APPLICATIONS AND ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.
11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies (Finished Product)

<table>
<thead>
<tr>
<th>Mode of Exposure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion:</td>
<td>Practically Non-Toxic</td>
</tr>
<tr>
<td>Oral (LD50 Rat):</td>
<td>&gt; 5,000 mg/kg body weight</td>
</tr>
<tr>
<td>Dermal:</td>
<td>Practically Non-Toxic</td>
</tr>
<tr>
<td>Dermal (LD50 Rat):</td>
<td>&gt; 2,000 mg/kg body weight</td>
</tr>
<tr>
<td>Inhalation:</td>
<td>Slightly Toxic</td>
</tr>
<tr>
<td>Inhalation (LC50 Animal Not Available):</td>
<td>0.54 mg/l air - 4 hours</td>
</tr>
<tr>
<td>Eye Contact:</td>
<td>Slightly Irritating (Rabbit)</td>
</tr>
<tr>
<td>Skin Contact:</td>
<td>Moderately Irritating (Rabbit)</td>
</tr>
<tr>
<td>Skin Sensitization:</td>
<td>See &quot;Other Toxicity Information&quot;, Sec. 11</td>
</tr>
</tbody>
</table>

Neurotoxicity

Fluazifop-P-Butyl Technical: No specific neurotoxicity tests have been conducted on fluazifop-p-butyl. However, there was no evidence of neurotoxicity in acute, subchronic or chronic studies.

Reproductive Effects

Fluazifop-P-Butyl: In a 3-generation reproductive study in rats, effects included reductions in weight gain, fetal...
Technical: weight, ossification, testicular weight, spleen weight, increased prostate weight and gestation length. No Effect Level (NEL) was 1 mg/kg/day. Fetotoxic effects seen in the rabbit, including reduced fetal weight and reduced ossification at higher doses. No Effect Level (NEL) was 30 mg/kg/day in rabbits. The NEL for teratogenic effects is at least 10/mg/day in the rat, with diaphragmatic hernia at higher doses. Not teratogenic at highest dose tested in rabbits (90 mg/kg/day). While fluazifop-p-butyl is fetotoxic when fed to pregnant rats, human exposure data has concluded that female formulation workers are not at increased risk of fetotoxic effects when skin protection measures are applied.

Chronic/Subchronic Toxicity Studies

Fluazifop-P-Butyl Technical: Chronic toxicity studies in rodents have shown liver changes (cellular hypertrophy). The No Effect Level (NEL) in rats is 10 ppm (0.5 mg/kg/day). Long term feeding studies in dogs produced a range of potentially serious effects at high dose rates (red cell, bone marrow and lymphadenopathy changes and liver and spleen damage) with a No Effect Level of 25 mg/kg/day.

Carcinogenicity

Fluazifop-P-Butyl Technical: Laboratory studies show no evidence that fluazifop-p-butyl is a carcinogen. Specific rat and mouse lifetime studies on fluazifop butyl (a related compound) showed no carcinogenic effects (highest doses 250 ppm rat and 80 ppm mouse).

Other Toxicity Information

Repeated and/or prolonged contact may cause skin sensitization.

Toxicity of Other Components

Petroleum Solvent

Slightly irritating to the eyes but does not injure eye tissue. Frequent or prolonged skin contact may irritate and cause dermatitis. Skin contact may aggravate an existing dermatitis condition. High vapor/aerosol concentrations (greater than approximately 1000 ppm) are irritating to the eyes and the respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death.

Target Organs

Active Ingredients

Fluazifop-P-Butyl Technical: Liver, skin, kidney, eye, bone marrow, blood, reproductive system

Inert Ingredients

Petroleum Solvent: Respiratory tract, CNS, skin

12. ECOLOGICAL INFORMATION

Summary of Effects

Fluazifop-P-Butyl Technical: Toxic to fish.

Eco-Acute Toxicity

Fluazifop-P-Butyl Technical: Rainbow Trout 96-hour LC50 1.3 mg/l

Mallard Oral LD50 >3,500 mg/kg

Daphnia magna 48 hours EC50 >1.0 mg/l

Eco-Chronic Toxicity

Fluazifop-P-Butyl Technical: Not Available

Environmental Fate

Fluazifop-P-Butyl Technical: No data available for the formulation. The information presented here is for the active ingredient, fluazifop-p-butyl. A thorough review of environmental information is not possible in this document. For additional information call the toll free number listed in Section 16.

Soil/Environment: Koc 5800. In moist soils, rapid degradation of fluazifop-p-butyl occurs, DT50 <24 h. The major degradation product is fluazifop-p, which is hydrolysed to 5-trifluoromethylpyrid-2-one, and 2-(4-hydroxyphenoxy)propionic acid, both of which are further degraded, ultimately to CO2.
13. DISPOSAL CONSIDERATIONS

Disposal
Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable
Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification
Not regulated by DOT.

B/L Freight Classification
Herbicides, NOIBN

Comments
None

15. REGULATORY INFORMATION

EPCRA SARA Title III Classification
Section 311/312 Hazard Classes: Acute Health Hazard
Chronic Health Hazard

Section 313 Toxic Chemicals: 1,2,4-Trimethylbenzene (CAS No. 95-63-6)
Naphthalene (CAS No. 91-20-3)

California Proposition 65
Not Applicable

CERCLA/SARA 302 Reportable Quantity (RQ)
> 4,800 lbs (based on naphthalene, CAS # 91-20-3 [RQ = 100 lbs] in the formulation)

RCRA Hazardous Waste Classification (40 CFR 261)
Not Applicable

TSCA Status
Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

NFPA Hazard Ratings
Health: 2
Flammability: 1
Instability: 0

HMIS Hazard Ratings
Health: 2
Flammability: 1
Reactivity: 0

For non-emergency questions about this product call:
1-800-334-9481

Original Issued Date: 10/19/1998
Revision Date: 01/21/2002
Replaces:

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.