1. CHEMICAL IDENTIFICATION

Product Name: Larvadex® 2SL
Product No: 54910

EPA Signal Word: Caution

Active Ingredient (%): Cyromazine (2%)
CAS No.: 66215-27-8

Chemical Name: N-cyclopropyl-1,3,5-triazine-2,4,6-triamine

Chemical Class: Substituted Melamine (triazine) Insect Growth Regulator

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Materials</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other</th>
<th>NTP/IARC/OSHA Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyromazine</td>
<td>None</td>
<td>None</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Acetic Acid, Glacial</td>
<td>25 mg/m³</td>
<td>25 mg/m³</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Lactic Acid</td>
<td>None</td>
<td>None</td>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

Notes to Physician:
There is no specific antidote if Larvadex 2SL is ingested. If a large amount has been ingested and emesis is inadequate, lavage stomach. The active ingredient of this product has a high affinity for activated carbon. Five g/kg body weight of activated carbon suspension (50 g/400 ml water) can be given to absorb remaining toxicant.

Based on the acute oral LD₅₀ in rats, ingestion of one cup or more of Larvadex 2SL may be fatal to an adult human.

Symptoms of Acute Exposure:
Causes moderate eye irritation. Harmful if swallowed, absorbed through the skin or or inhaled.

Hazardous Decomposition Products:
None known
Physical Properties:
Appearance: Pale Yellow Liquid
Odor: Vinegar-Like

Unusual Fire, Explosion and Reactivity Hazards:
None Known

4. FIRST AID MEASURES

If poisoning is suspected, immediately contact a physician, the nearest hospital, or nearest Poison Control Center. Tell the person contacted the complete product name and type and amount of exposure. Describe any symptoms and follow the advice given.

Ingestion: If victim is fully conscious, immediately give 1 or 2 glasses of water to drink and induce vomiting. Never give anything by mouth to an unconscious person.

Eye Contact: Flush with plenty of water. If irritation develops or persists, get medical attention.

Skin Contact: Wash with plenty of soap and water. If irritation develops or persists, get medical attention.

Inhalation: Move victim from contaminated area to fresh air. Apply artificial respiration if necessary.

Notes to Physician:
There is no specific antidote if Larvadex 2SL is ingested. If a large amount has been ingested and emesis is inadequate, lavage stomach. The active ingredient of this product has a high affinity for activated carbon. Five g/kg body weight of activated carbon suspension (50 g/400 ml water) can be given to absorb remaining toxicant.

Medical Conditions Likely to be Aggravated by Exposure:
None Known

5. FIRE FIGHTING MEASURES

Fire and Explosion:
<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point (Test Method)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flammable Limits (% in Air)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>
Unusual Fire, Explosion and Reactivity Hazards:
None Known

In Case of Fire:
Use dry chemical, foam, or CO₂ extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes, or products of combustion. Prevent use of contaminated buildings, areas and equipment until decontaminated.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak:
Wear chemical safety glasses or goggles, rubber gloves, rubber boots, long-sleeved shirt, long pants, head covering and NIOSH-approved dust respirator. For small spills, sweep up the material, keeping dust to a minimum, and place in an approved chemical container. Wash the spill area with water containing a strong detergent, absorb with pet litter or other absorbent material, sweep up and place in a chemical container. Seal container and handle in an approved manner. Flush the spill area with water to remove any residue. Do not allow wash water to contaminate water supplies.

7. HANDLING AND STORAGE

Avoid contact with eyes, skin or clothing. Do not breathe vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

Do not contaminate water, food, or feed by storage and disposal, or cleaning of equipment.

Store at temperatures above 32° F. Crystals may form at lower temperatures. If crystallization occurs, place the product in a warm room (72° F or above) and shake the container at frequent intervals until all crystals are dissolved. Since this product contains water, it can also freeze solid at temperatures below 32° F. However, when reconstituted and crystals re-dissolve, product performance is not affected.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to material.

Eye Contact: To avoid eye contact, wear chemical safety glasses or goggles.

Skin Contact: To avoid skin contact, wear rubber gloves, rubber boots, long-sleeved shirt, long pants and head covering. Always wash thoroughly after handling.

Inhalation: To avoid breathing spray or mist, wear a NIOSH-approved pesticide respirator.
9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Pale Yellow Liquid
Odor: Vinegar-Like
Melting Point: Not Applicable
Boiling Point: 100°C
Specific Gravity/Density: 101 @ 20°C (Technical)
pH: Not Applicable
Evaporation Rate: Not Applicable
Solubility in Water: 1.1% @ 20°C (Technical)
Vapor Pressure: <10⁻⁶ Torr @ 20°C (Technical)

10. STABILITY AND REACTIVITY

Reactivity:
Stability: Stable at normal temperatures.
Hazardous polymerization: Will Not Occur.
Conditions to Avoid: Corrosive to tin. Store at temperatures above 32°F.

Hazardous Decomposition Products:
None Known

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies
Ingestion: Practically nontoxic. Oral LD₅₀ (Rat) = >5,010 mg/kg body weight.
Dermal: Slightly toxic. Dermal LD₅₀ (Rabbit) = >2,010 mg/kg body weight.
Inhalation: Slightly toxic. Inhalation LC₅₀ (Rat) = 2.9 mg/l air -4 hours.
Eye Contact: Mildly irritating (Rabbit)
Skin Contact: Slightly irritating (Rabbit)

Skin Sensitization: Not a sensitizer (Guinea Pig)

Mutagenic Potential:
Cyromazine: None Observed

Reproductive Hazard Potential:
Cyromazine: None Observed
Chronic/Subchronic Toxicity Studies:
Cyromazine: None Observed

Carcinogenic Potential:
Cyromazine Technical was not onogenic or carcinogenic in lifetime feeding studies with rats and mice.

Other Toxicity Information: None Available

Toxicity of Other Components:
Larvadex 2SL contains small amounts of glacial acetic acid and lactic acid. These acids in concentrate form are corrosive to skin, eyes and mucous membranes, producing serious burns. However, Larvadex 2SL is only mildly irritating to eyes and skin.

Target Organs:
Active Ingredients:
Cyromazine: None Observed

Other Ingredients:
Glacial acetic acid: Skin, eyes and mucous membranes.
Lactic acid: Skin, eyes and mucous membranes.

12. ECOLOGICAL INFORMATION

Summary of Effects:
Cyromazine Slightly toxic to birds and fish, and moderately toxic to aquatic invertebrates

Eco-Acute Toxicity:
Cyromazine Rainbow Trout 96-hour LC\textsubscript{50} = 51 mg/l
Bluegill Sunfish 96-hour LC\textsubscript{50} = 90 mg/l
\textit{Daphnia magna} 48-hour LC\textsubscript{50} = 9.1 mg/l
Bobwhite Quail Oral LD\textsubscript{50} = 1,785 mg/kg
Mallard Duck Oral LD\textsubscript{50} = 2,510 mg/kg
Bobwhite Quail 8-Day Dietary LC\textsubscript{50} = >5,620 ppm
Mallard Duck 8-Day LC\textsubscript{50} = >5,620 ppm

Eco-Chronic Toxicity:
Cyromazine Fish (Flathead Minnow) Early Life Stage MATC = 22 mg/l
Invertebrate (\textit{Daphnia magna}) Life Cycle MATC = 0.45 mg/l

Environmental Fate:
Cyromazine Not Available

13. DISPOSAL CONSIDERATION

Product Name: Larvadex 2SL Novartis Animal Health US Inc.
Disposal:
Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of federal law. Pesticide, spray mixture, or rinsate that cannot be used according to label instruction must be disposed of according to federal, state and local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office.

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

Container Disposal:
Do not reuse empty container. Triple rinse (or equivalent) and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration, or by open burning if allowed by state and local authorities. If burned, keep out of smoke.

14. TRANSPORT INFORMATION

DOT Classification:
Not Applicable; No Label or Placard Required

B/L Freight Classification:
Insecticide or Fungicide, N.O.S.

International Transportation:
Not Applicable

15. REGULATORY INFORMATION

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

Section 313 chemical(s): Cyromazine (1%) (CAS 66215-27-8)

Proposition 65:
Not Determined

CERCLA Reportable Quantity (RQ):
None

RCRA Classification:
None
16. OTHER INFORMATION

NFPA Hazard Ratings:

<table>
<thead>
<tr>
<th></th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1</td>
</tr>
<tr>
<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
</tbody>
</table>

Questions concerning the safe handling of the product should be referred to:

Novartis Animal Health US, Inc.

1-800-637-0281

Issued Date 10/24/86
Revised Date 04/20/99

This 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.