MATERIAL SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

2. COMPOSITION/INFORMATION ON INGREDIENTS

3. HAZARDS IDENTIFICATION

Product No.: A12690A EPA Signal Word: Caution Symptoms of Acute Exposure

May cause eye and skin irritation. Allergic skin reactions are possible.

May cause temporary itching, tingling, burning or numbness of exposed skin, called paresthesia.

Exposure to high vapor levels may cause headache, dizziness, numbness, nausea, incoordination, or other central nervous

system effects.

Hazardous Decomposition Products

Can decompose at high temperatures forming toxic gases.

Physical Properties

Appearance: Off-white liquid

Odor: Slight odor/typical aromatic solvent Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or

combustion.

Product Name: EXILE CS

EPA Registration Number(s): 100-1066-10504

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

Hazard Category: C, S Section(s) Revised: 14 Agripharm Products 7 Village Circle-Suite 200 Westlake, Texas 76262

In Case of Emergency, Call

1-800-888-8372

CAS No.: 91465-08-6

Chemical Name: [1a(S*),3a(Z)]-cyano(3-phenoxyphenyl)methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-

2,2-

dimethylcyclopropanecarboxylate

Chemical Class: A pyrethroid insecticide

Active Ingredient(%): Lambda-Cyhalothrin Technical (9.7%)

Material

NTP/IARC/OSHA

Other Carcinogen

OSHA

PEL

ACGIH

TLV

Cumene (< 1%) 50 ppm TWA (skin) 50 ppm TWA Not Established No

Petroleum Solvent Not Established Not Established 100 mg/m³ (19 ppm) No

TWA*

1,2,4-Trimethylbenzene (<= 2.2%) Not Established 25 ppm TWA 25 ppm TWA** No

Xylene (<= 1%) 100 ppm TWA 100 ppm TWA; 150 ppm IARC Group 3

STEL

100 ppm TWA**

Lambda-Cyhalothrin Technical No

(9.7%)

Not Established Not Established 0.04 mg/m³ TWA

(skin)***

- * recommended by manufacturer
- ** recommended by NIOSH
- *** Occupational Exposure Limit (OEL)

Product Name: EXILE CS Page: 1

Lower: % Not Applicable Upper: % Not Applicable

4. FIRST AID MEASURES

5. FIRE FIGHTING MEASURES

Have the product container, label or Material Safety Data Sheet with you when calling 911, a poison contol center or doctor, or going for treatment.

If swallowed: Call 911 immediately, a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so after calling 911 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

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 911, a poison control center or doctor for treatment advice.

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 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.

Notes to Physician

Medical Condition Likely to be Aggravated by Exposure

None known.

Fire and Explosion

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

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, area, and equipment until decontaminated. Water runoff can cause

environmental damage. If water is used to fight fire, dike and collect runoff.

Flammability: Not Applicable

> 212°F (Setaflash)

Not Available

Flash Point (Test Method):

Flammable Limits (% in Air):

Autoignition Temperature:

Ingestion:

Eye Contact:

Skin Contact:

Inhalation:

6. ACCIDENTAL RELEASE MEASURES

7. HANDLING AND STORAGE

In Case of Spill or Leak

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.

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage

and drainage systems or any body of water. Clean up spills immediately, observing precautions in Protective Equipment

Section. 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.

There is no specific antidote if this product is ingested.

Treat symptomatically.

Skin contact paresthesia effects (itching, tingling, burning or numbness) are transient, lasting up to 24 hours. Treat

symptomatically.

Contains petroleum distillate - vomiting may cause aspiration pneumonia.

Product Name: EXILE CS Page: 2

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies (Finished Product)

Reproductive/Developmental Effects

Ingestion:

Dermal:

Inhalation:

Eye Contact:

Skin Contact:

Skin Sensitization:

Practically Non-Toxic

Slightly Toxic

Practically Non-Toxic

Oral (LD50 Rat):

Mildly Irritating (Rabbit)

Moderately Irritating (Rabbit)

A weak skin sensitizer in animal tests.

Dermal (LD50 Rat):

Inhalation (LC50 Rat):

> 5,000 mg/kg body weight

> 2,000 mg/kg body weight

> 4.62 mg/l air - 4 hours

9. PHYSICAL AND CHEMICAL PROPERTIES

Off-white liquid

Slight odor/typical aromatic solvent

10. STABILITY AND REACTIVITY

Stability: Stable under normal use and storage conditions.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None known.

Can decompose at high temperatures forming toxic gases.

Melting Point:

Boiling Point:

Specific Gravity/Density:

Not Applicable

212°F

1.04 @ 68°F (20°C)

Appearance:

Odor:

pH: 7.3 (1% w/w dilution in deionized water)

Solubility in H2O

Vapor Pressure

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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.

Where eye contact is likely, use chemical splash goggles.

Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

Stringent housekeeping measures are necessary to prevent translocation of the material from contaminated work surfaces to uncontaminated surfaces (railings, doors, etc.). Unprotected contact with such translocated material can result in paresthesia effects (see Section 11).

A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

In case of emergency spills, use a NIOSH approved respirator with any R, P or HE filter.

Ingestion:

Eye Contact:

Skin Contact: Inhalation:

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR

THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT. FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Hazardous Decomposition Products:

Materials to Avoid: None known.

Lambda-Cyhalothrin Technical: 0.004 mg/l

Lambda-Cyhalothrin Technical: 1.5 x 10(-9) mmHg @ 68°F (20°C)

Product Name: EXILE CS Page: 3 12. ECOLOGICAL INFORMATION Chronic/Subchronic Toxicity Studies

Carcinogenicity

Toxicity of Other Components

Summary of Effects **Eco-Acute Toxicity**

Target Organs

Other Toxicity Information

In humans, contact with exposed skin may result in temporary itching, tingling, burning or numbness, called paresthesia.

The effect may result from splash, aerosol, or hot vapor contact, or transfer to the face from contaminated gloves and

hands. The symptoms normally disappear within 24 hours. Face and genital areas are especially susceptible to this effect.

Paresthesia involving the face is also known as "subjective facial sensation" or SFS.

Active Ingredients

Inert Ingredients

Eco-Chronic Toxicity

Lambda-Cyhalothrin

Technical:

Not a developmental or reproductive toxicant.

Lambda-Cyhalothrin

Technical:

Reversible paresthesia (abnormal skin sensation).

Reversible clinical signs of neurotoxicity in mammals.

Lambda-Cvhalothrin

Technical:

No treatment-related tumors in rats or mice.

Test results reported in Section 11 for the final product take into account any acute hazards related to the 1,2,4trimethylbenzene in the formulation.

1,2,4-Trimethylbenzene (<= 2.2%)

Exposure to cumene vapors may cause irritation to eyes, skin, and respiratory tract. Cumene may also cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects.

Prolonged exposure to high concentrations (>100 PPM) may result in liver, kidney or lung damage.

Cumene (< 1%)

The supplier reports that high vapor/aerosol concentrations (> 1000 ppm) are irritating to the eyes and the respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central

nervous system effects.

Petroleum Solvent

Test results reported in Section 11 for the final product take into account any acute hazards related to the xylene

in the formulation.

Xylene (<= 1%)

Slightly toxic to birds. Highly toxic to fish, invertebrates and bees.

Lambda-Cyhalothrin Technical:

Lambda-

Cyhalothrin

Technical:

Bees LC50/EC50 0.038 ug/bee

Invertebrates (Water Flea) LC50/EC50 0.00036 ppm

Fish (Trout) LC50/EC50 0.00024 ppm Fish (Bluegill) LC50/EC50 0.00021 ppm

Birds (8-day dietary - Bobwhite Quail) LC50/EC50 > 5,300 ppm Birds (8-day dietary - Mallard Duck) LC50/EC50 > 3,948 ppm

Lambda-Cyhalothrin Technical: Liver, nervous system

1,2,4-Trimethylbenzene: Not Applicable

Cumene: Skin, eye, liver, respiratory tract, kidney, CNS

Petroleum Solvent: Eye, respiratory tract, CNS

Xylene: Not Applicable

Product Name: EXILE CS Page: 4
13. DISPOSAL CONSIDERATIONS
14. TRANSPORT INFORMATION

15. REGULATORY INFORMATION

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

DOT Classification

Ground Transport - NAFTA

Containers < 450 liters: Not regulated.

Containers > 450 liters:

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Lambda-Cyhalothrin)

Hazard Class or Division: Class 9 Identification Number: UN 3082

Packing Group: PG III Air Transport - NAFTA

Containers < 450 liters: Not regulated. Containers > 450 liters: Prohibited.

B/L Freight Classification

Insecticides, NOIBN, O/T Poison

Comments

Water Transport - International

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Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Lambda-Cyhalothrin),
 Marine Pollutant
 Hazard Class or Division: Class 9
 Identification Number: UN 3082
 Packing Group: PG III
 IMDG EMS #: F-A, S-F
 Air Transport - International
 Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Lambda-Cyhalothrin)
 Hazard Class or Division: Class 9
 Identification Number: UN 3082
 Packing Group: PG III
 Packing Auth.: 914
 Note: Max. inner packages 5 liters
 Max. single packages 450 liters
 EPCRA SARA Title III Classification
 Section 311/312 Hazard Classes:
 Section 313 Toxic Chemicals:
Environmental Fate
Disposal
 Acute Health Hazard
 Chronic Health Hazard
Cumene (< 1%) (CAS No. 98-82-8)
The information presented here is for the active ingredient, lambda-cyhalothrin.
Not persistent in soil or water. Immobile in soil. Sinks in water (after 24 h).
Lambda-Cyhalothrin Technical:
Lambda-
Cyhalothrin
Technical:
Not available at this time.
Product Name: EXILE CS Page: 5
2
1
0.0
California Proposition 65
Not Applicable
RCRA Hazardous Waste Classification (40 CFR 261)
Not Applicable
TSCA Status
Exempt from TSCA, subject to FIFRA
16. OTHER INFORMATION
NFPA Hazard Ratings
07/14/1999
03/31/2005 02/21/2005
Health:
Flammability:
Instability:
Replaces:
Original Issued Date:
Revision Date:
CERCLA/SARA 302 Reportable Quantity (RO)
Report product spills > 520 gal. (based on xylene [RQ = 100 lbs.] content in the formulation)
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
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information contained herein.

0 Minimal

- 1 Slight
- 2 Moderate
- 3 Serious
- 4 Extreme

HMIS Hazard Ratings

Health:

Flammability:

Reactivity:

1,2,4-Trimethylbenzene (<= 2.2%) (CAS No. 95-63-6)

Xylene (<= 1%) (CAS No. 1330-20-7)

For non-emergency questions about this product call:

1-800-334-9481

RSVP#: SCP-955-00303F

End of MSDS

Product Name: EXILE CS Page: 6