

Syngenta Crop Protection, Inc.  
 Post Office Box 18300  
 Greensboro, NC 27419

In Case of Emergency, Call  
 1-800-888-8372

**1. PRODUCT IDENTIFICATION**

Product Name: **SCIMITAR CS** Product No.: A12690A  
 EPA Signal Word: Caution  
 Active Ingredient(%): Lambda-Cyhalothrin (9.7%) 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  
 EPA Registration Number(s): 100-1078; 100-1081 Section(s) Revised: 2, 8

**2. HAZARDS IDENTIFICATION**

Health and Environmental

Harmful if inhaled. May be harmful in contact with skin. May cause an allergic skin reaction. Causes mild skin irritation. Vapors may cause drowsiness and dizziness. May be harmful if swallowed and enters airway. May cause temporary itching, tingling, burning or numbness of exposed skin, called paresthesia.

Hazardous Decomposition Products

None known.

Physical Properties

Appearance: Off-white liquid  
 Odor: Slight odor/typical aromatic petroleum

Unusual Fire, Explosion and Reactivity Hazards

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

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
Cumene (< 1%)	50 ppm TWA (skin)	50 ppm TWA	Not Established	No
Petroleum Solvent	Not Established	Not Established	100 mg/m <sup>3</sup> (19 ppm) TWA *	No
Propylene Glycol	Not Established	Not Established	10 mg/m <sup>3</sup> TWA ****	No
1,2,4-Trimethylbenzene (< 2.5%)	Not Established	25 ppm TWA	25 ppm TWA **	No
Xylene (< 1%)	100 ppm TWA	100 ppm TWA; 150 ppm STEL	100 ppm TWA **	IARC Group 3
Lambda-Cyhalothrin (9.7%)	Not Established	Not Established	0.04 mg/m <sup>3</sup> TWA (skin) ***	No

\* recommended by manufacturer

\*\* recommended by NIOSH

\*\*\* Syngenta Occupational Exposure Limit (OEL)

\*\*\*\* Recommended by AIHA (American Industrial Hygiene Association)

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.  
Syngenta Hazard Category: C, S

#### 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 advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
- 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.

##### Notes to Physician

There is no specific antidote if this product is ingested.

Treat symptomatically.

Persons suffering a temporary allergic reaction may respond to treatment with antihistamines or steroid creams and/or systemic steroids.

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.

##### Medical Condition Likely to be Aggravated by Exposure

None known.

#### 5. FIRE FIGHTING MEASURES

##### Fire and Explosion

- Flash Point (Test Method): > 212°F (Setaflash)
- Flammable Limits (% in Air): Lower: Not Applicable Upper: Not Applicable
- Autoignition Temperature: Not Available
- Flammability: Not Applicable

##### 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.

#### 6. ACCIDENTAL RELEASE MEASURES

##### In Case of Spill or Leak

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.

## 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, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR 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.
- Eye Contact: Where eye contact is likely, use chemical splash goggles.
- Skin Contact: Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber or Viton), coveralls, socks and chemical-resistant footwear. 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).
- Inhalation: A combination particulate/organic vapor respirator should be used until effective engineering controls are installed to comply with occupational exposure limits, or until exposure limits are established. Use a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE filter.

Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance: Off-white liquid
- Odor: Slight odor/typical aromatic petroleum
- Melting Point: Not Applicable
- Boiling Point: 212 °F
- Specific Gravity/Density: 1.04 @ 68°F (20°C)
- pH: 7.3 (1% w/w dilution in deionized water)

### Solubility in H<sub>2</sub>O

Lambda-Cyhalothrin : 0.004mg/l

### Vapor Pressure

Lambda-Cyhalothrin : 1.5 x 10<sup>(-9)</sup> mmHg @ 68°F (20°C)

## 10. STABILITY AND REACTIVITY

- Stability: Stable under normal use and storage conditions.
- Hazardous Polymerization: Will not occur.
- Conditions to Avoid: None known.
- Materials to Avoid: None known.
- Hazardous Decomposition Products: None known.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity/Irritation Studies (Finished Product)

Ingestion:	Oral (LD50 Rat) :	> 5000 mg/kg body weight
Dermal:	Dermal (LD50 Rat) :	> 2000 mg/kg body weight
Inhalation:	Inhalation (LC50 Rat) :	> 4.62 mg/l air - 4 hours
Eye Contact:	Non-Irritating (Rabbit)	
Skin Contact:	Practically Non-Irritating (Rabbit)	
Skin Sensitization:	A weak skin sensitizer in animal tests.	

### Reproductive/Developmental Effects

Lambda-Cyhalothrin : Not a developmental or reproductive toxicant.

### Chronic/Subchronic Toxicity Studies

Lambda-Cyhalothrin : Reversible paresthesia (abnormal skin sensation).  
Reversible clinical signs of neurotoxicity in mammals.

### Carcinogenicity

Lambda-Cyhalothrin : No treatment-related tumors in rats or mice.

### 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.

### Toxicity of Other Components

#### 1,2,4-Trimethylbenzene (< 2.5%)

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

#### Cumene (< 1%)

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.

#### Petroleum Solvent

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.

#### Propylene Glycol

Test results reported in Section 11 for the final product take into account any acute hazards related to the propylene glycol in the formulation.  
Reported to cause central nervous system depression (anesthesia, dizziness, confusion), headache and nausea. Chronic dietary exposure caused kidney and liver injury in experimental animals.

#### Xylene (< 1%)

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

### Target Organs

#### Active Ingredients

Lambda-Cyhalothrin : Liver, nervous system

#### Inert Ingredients

1,2,4-Trimethylbenzene: Not Applicable

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

Petroleum Solvent: Eye, respiratory tract, CNS  
Propylene Glycol: CNS, kidney, liver  
Xylene: Not Applicable

## 12. ECOLOGICAL INFORMATION

### Summary of Effects

Lambda-Cyhalothrin :

Very toxic to aquatic life.

### Ecotoxicity Effects

Lambda-Cyhalothrin :

Fish (Rainbow Trout) 96-hour LC50 0.19 ppb

Bird (Mallard Duck) LD50 Oral > 3950 mg/kg

Invertebrate (Water Flea) 48-hour EC50 0.04 ppb

### Environmental Fate

Lambda-Cyhalothrin :

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).

## 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: Contains Cumene U055; Contains Xylene U239

## 14. TRANSPORT INFORMATION

### 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

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

## 15. REGULATORY INFORMATION

### EPCRA SARA Title III Classification

Section 311/312 Hazard Classes: Acute Health Hazard  
 Chronic Health Hazard

Section 313 Toxic Chemicals: Cumene (< 1%) (CAS No. 98-82-8)  
 1,2,4-Trimethylbenzene (< 2.5%) (CAS No. 95-63-6)  
 Xylene (< 1%) (CAS No. 1330-20-7)

### California Proposition 65

Not Applicable

### CERCLA/SARA 302 Reportable Quantity (RQ)

Report product spills > 520 gal. (based on xylene [RQ = 100 lbs.] content 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

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 11/25/1998

Revision Date: 1/21/2009

Replaces: 6/13/2007

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.

End of MSDS



# MATERIAL SAFETY DATA SHEET #4020

15885 Sprague Road, Strongsville, Ohio 44136-1799  
Emergency Phone: LESCO: (800) 321-5325  
CHEMTREC: (800) 424-9300

DATE ISSUED: 11/28/00  
SUPERSEDES: 04/03/00

## I. PRODUCT IDENTIFICATION

**Product:** LESCO Momentum™ Premium Selective Herbicide **Chemical Family:** Mixture  
**Chemical Name/Synonyms:** Triclopyr, 2,4-D, Clopyralid

## II. PRODUCT INFORMATION: INGREDIENTS

Chemical Name	TLV/TWA	%(by wt.)	CAS#
Triisopropanolamine Salt of 2,4-Dichlorophenoxyacetic Acid	10 mg/m <sup>3</sup> (for acid)	50.70%	32341-80-3
Triethylamine Salt of 3,5,6-Trichloro-2-Pyridmyloxyacetic Acid	NA	3.80%	57213-69-1
3,6-Dichloro-2-Pyridinecarboxylic Acid	10 mg/m <sup>3</sup> (Dow)	1.30%	1702-17-6
Inert Ingredients	NA	44.20%	NA

## III. PHYSICAL AND CHEMICAL CHARACTERISTICS

<b>Boiling Point:</b>	>212° F	<b>Specific Gravity (water = 1):</b>	1.170
<b>Melting Point:</b>	Liquid	<b>Density (lb/gal):</b>	9.75
<b>Vapor Pres. (mm Hg):</b>	ND	<b>Evaporation Rate:</b>	NA
<b>Vapor Density (air = 1):</b>	NA	<b>Percent Volatile:</b>	NA
<b>Solubility in Water:</b>	100%	<b>Appearance and Odor:</b>	Amber liquid, slight amine odor
<b>pH:</b>	6.8		

## IV. FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point (method Used):</b> None - aqueous solution	<b>Auto Ignition Temperature:</b>	NA
<b>Lower Explosion Limits:</b> NA	<b>Upper Explosion Limits:</b>	NA
<b>NFPA/HMIS RATING:</b> HEALTH 2 FIRE 1	<b>REACTIVITY</b>	0
<b>Extinguishing Media:</b> <input type="checkbox"/> Foam <input type="checkbox"/> Alcohol Foam <input checked="" type="checkbox"/> Water Spray <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Dry Chemical <input checked="" type="checkbox"/> CO <sub>2</sub>	

**Special Fire-Fighting Procedures:** Wear NIOSH approved positive pressure, self-contained breathing apparatus, and acid-resistant protective clothing. Prevent run-off from entering drains, sewers or bodies of water.

**Unusual Fire and Explosion Hazards:** Will produce toxic and noxious fumes under extreme fire conditions. Drums of product will burst from steam pressure under extreme and prolonged fire conditions.

## V. HEALTH HAZARDS

**Primary Route(s) of Entry:** Skin, eyes, ingestion.

### Signs & Symptoms of Exposure

#### Acute:

**Inhalation:** Avoid inhaling vapors or mists. May irritate the upper respiratory tract, but single exposures are not likely to be hazardous.

**Eyes:** May cause slight eye irritation or slight corneal injury.

**Skin:** This product is considered a minimal skin irritant. Harmful is absorbed through the skin. A single prolonged exposure is not likely to result in the product being absorbed in harmful amounts.

**Ingestion:** May cause muscle weakness, nausea, vomiting, abdominal pain, diarrhea, fall in blood pressure or myotonia (prolonged muscular spasm) under extreme exposure conditions.

**Chronic:** Repeated or prolonged overexposure to the active ingredients may cause liver, kidney, gastrointestinal or muscular system effects. The EPA's Science Advisory Panel has given 2,4-D a class D classification (not classifiable as to human carcinogenicity). Various epidemiological studies have yielded conflicting results with the majority being negative. The current scientific consensus is that there is no proven causal association between 2,4-D and cancer. Recent studies have not shown 2,4-D to be a mutagen or teratogen. Animal studies on triclopyr have indicated that it is not carcinogenic or teratogenic, and that it does not interfere with reproduction. Mutagenicity tests on triclopyr have been negative. Clopyralid did not cause cancer in long-term studies. It was a teratogen at doses severely toxic to the mother, but does not at doses still several times greater than those expected during normal exposure.

### Emergency First-Aid Procedures

**Eyes:** Hold eyelids open and flush entire eye with a steady, gentle stream of water for 15 minutes. Get medical attention.

**Skin:** Wash affected area with soap and water. If irritation persists, get medical attention.

**Inhalation:** Remove victim to fresh air. If not breathing, give artificial respiration preferably by mouth to mouth. Get medical attention.

**Ingestion:** Call a physician or Poison Control Center. Do not induce vomiting. Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol. Do not give anything by mouth to an unconscious person.

**Notes to Physician:** Probable mucosal damage may contraindicate gastric lavage. If large amounts of product were

ingested, the stomach should be emptied by gastric intubation.

**Toxicity Information:**

Oral LD<sub>50</sub>: >1500 mg/kg (rat)

Dermal LD<sub>50</sub>: >2000 mg/kg (rabbit)

Inhalation LC<sub>50</sub>: ND

Eye Irritation: slight eye irritation; slight corneal injury

Skin Irritation: essentially non-irritating to skin Dermal Sensitization: ND

**Positive Teratogen or Mutagen Carcinogen(NTP): No Potential Carcinogen (IARC or OSHA): No**

**VI. REACTIVITY**

Stability:  Stable  Unstable

Conditions to Avoid: Avoid heat conditions.

Incompatibility: Alkalies, strong acids or oxidizers.

Hazardous Decomposition Products: None.

Hazardous Polymerization:  Will not occur  Will occur

**VII. SPILL, LEAK, AND DISPOSAL PROCEDURES**

**If material is spilled:** When cleaning large spills, wear recommended safety equipment (see section VII). Surround spill with impervious material such as dirt to prevent run-off. Absorb product with an inert absorbent such as clay granules or wood shavings. Contain all affected material in a closed, labeled container for proper disposal.

**Waste Disposal Method:** Dispose according to Federal EPA procedures as outlined in the Resource Conservation Recovery Act (RCRA) and follow state and local guidelines. Triple rinse and puncture containers as required.

**VIII. SPECIAL PROTECTION INFORMATION**

**Protective Equipment Suggested for Outdoor Application:**

Impervious Gloves  Dust Mask  Respirator(use NIOSH/MSHA approved)

Impervious Boots  Clean Clothing  Eye Goggles / Safety Glasses

**Protective Equipment Suggested for Confined Areas:**

Sufficient Ventilation  Respirator(use NIOSH/MSHA approved)

Dust Mask  Splash Goggles/Safety Glasses

Eyewash Station  Emergency Shower  Impervious Apron

**IX. STORAGE AND HANDLING**

**Precautions:** Always store product in original container in a secured warehouse or storage building. Store in a cool, dry place if possible. Separate from other pesticides, fertilizers, seed, feed, foodstuffs, and away from drains, sewers, and water sources.

**Other Precautions:** Keep out of reach of children. Practice good care and good safety precautions when handling this product. Avoid contact with eyes, skin and clothing. Store in temperatures above 32° F(0° C). If allowed to freeze, remix before using. Freezing does not alter this product. Containers should be opened in a well-ventilated area. Wash thoroughly with soap and water after handling.

**X. FEDERAL REGULATORY INFORMATION:**

**SARA TITLE III; SEC. 311/312 HAZARD CATEGORIES**

Immediate (acute Health

Delayed (Chronic) Health

Fire

Sudden Release of Pressure

Reactivity

**D.O.T. SHIPPING INFORMATION**

**PROPER SHIPPING NAME:** 55 gal, 220 gal 260 gal (all smaller sizes are not regulated) RQ Environmentally Hazardous Substances, Liquid (2,4-D Salt)

**HAZARD CLASS:** 9

**I.D. NUMBER** UN308

**ERG NUMBER:** 171

**SEC. 313:** This product contains the following substances subject to the reporting requirements of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: Triclopyr triethylammonium salt, CAS #57213-69-1.

**CERCLA** RQ=100 lb 2,4-D or 37.45 gal of Momentum. For releases greater than the RQ, contact the National Response Center at 800-424-8802.

**EPA Reg. No.** 228-321-10404

NA = Not Applicable

ND = Not Determined

Preparation and distribution of this Material Safety Data Sheet done by LESCO, Inc., 15885 Sprague Road, Strongsville, Ohio 44136-1799, pursuant to the OSHA Hazard Communication Standard (29 CFR §1910.1200).

The information contained herein is based on available data. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof; and you should make your investigation to determine safety for the use you contemplate. LESCO, Inc. makes no warranty of merchantability of fitness for a particular use, nor is there any other express or implied warranty except as may be specifically provided otherwise on product.

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**For further information, contact: LESCO, Inc., • 15885 Sprague Road • Strongsville, Ohio 44136-1799 or (800) 321-5325.**