SAFETY DATA SHEET

Lambda-Cyhalothrin Liquid Formulation

Version 5.9  Revision Date: 10/01/2022  SDS Number: 1133927-00017  Date of last issue: 04/09/2022  Date of first issue: 12/02/2016

SECTION 1. IDENTIFICATION

Product name : Lambda-Cyhalothrin Liquid Formulation
Other means of identification : No data available

Manufacturer or supplier's details
Company name of supplier : Merck & Co., Inc
Address : 126 E. Lincoln Avenue
Rahway, New Jersey U.S.A. 07065
Telephone : 908-740-4000
Emergency telephone : 1-908-423-6000
E-mail address : EHSDATASTEWARD@merck.com

Recommended use of the chemical and restrictions on use
Recommended use : Veterinary product
Restrictions on use : Not applicable

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations
Acute toxicity (Inhalation) : Category 4
Skin irritation : Category 2
Eye irritation : Category 2B
Specific target organ toxicity - single exposure : Category 1 (Nervous system)
Specific target organ toxicity - single exposure : Category 3
Aspiration hazard : Category 1

GHS label elements
Hazard pictograms :  

Signal Word : Danger

Hazard Statements : H304 May be fatal if swallowed and enters airways.
H315 + H320 Causes skin and eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H370 Causes damage to organs (Nervous system).

Precautionary Statements : Prevention:
P260 Do not breathe mist or vapors.
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves.

Response:  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER.  
P302 + P352 IF ON SKIN: Wash with plenty of water.  
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308 + P311 IF exposed or concerned: Call a doctor.  
P331 Do NOT induce vomiting.  
P332 + P313 IF skin irritation occurs: Get medical attention.  
P337 + P313 IF eye irritation persists: Get medical attention.  
P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:  
P405 Store locked up.

Disposal:  
P501 Dispose of contents and container to an approved waste disposal plant.

Other hazards  
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common Name/Synonym</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>Benzene, 1,2,4-trimethyl-</td>
<td>95-63-6</td>
<td>&gt;= 80 - &lt;= 100 *</td>
</tr>
<tr>
<td>lambda-cyhalothrin (ISO)</td>
<td>A mixture of: α-cyano-3-phenoxybenzyl (Z)-(1R,3R)-[(S)-3-(2-chloro-3,3,3-trifluoro-prop-1-enyl)]-2,2-dimethylcyclopropanecarboxylate</td>
<td>91465-08-6</td>
<td>&gt;= 5 - &lt; 10 *</td>
</tr>
</tbody>
</table>

* Actual concentration or concentration range is withheld as a trade secret
SECTION 4. FIRST AID MEASURES

**General advice**
In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.

**If inhaled**
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**In case of skin contact**
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**In case of eye contact**
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lens, if worn. Get medical attention.

**If swallowed**
If swallowed, DO NOT induce vomiting. If vomiting occurs have person lean forward. Call a physician or poison control center immediately. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed**
May be fatal if swallowed and enters airways. Causes skin and eye irritation. Harmful if inhaled. May cause respiratory irritation. Causes damage to organs.

**Protection of first-aiders**
First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

**Notes to physician**
Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**
- Water spray
- Alcohol-resistant foam
- Carbon dioxide (CO2)

**Unsuitable extinguishing media**
- Dry chemical

**Specific hazards during firefighting**
- Exposure to combustion products may be a hazard to health.

**Hazardous combustion products**
- Carbon oxides
- Nitrogen oxides (NOx)
- Chlorine compounds
- Fluorine compounds

**Specific extinguishing methods**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do
Evacuate area.
In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- **Personal precautions, protective equipment and emergency procedures**: Use personal protective equipment.
  Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).

- **Environmental precautions**: Avoid release to the environment.
  Prevent further leakage or spillage if safe to do so.
  Prevent spreading over a wide area (e.g., by containment or oil barriers).
  Retain and dispose of contaminated wash water.
  Local authorities should be advised if significant spillages cannot be contained.

- **Methods and materials for containment and cleaning up**: Soak up with inert absorbent material.
  For large spills, provide diking or other appropriate containment to keep material from spreading.
  If diked material can be pumped, store recovered material in appropriate container.
  Clean up remaining materials from spill with suitable absorbent.
  Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.
  Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

- **Technical measures**: See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

- **Local/Total ventilation**: If sufficient ventilation is unavailable, use with local exhaust ventilation.

- **Advice on safe handling**: Do not get on skin or clothing.
  Do not breathe mist or vapors.
  Do not swallow.
  Do not get in eyes.
  Wash skin thoroughly after handling.
  Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment.
  Keep container tightly closed.
  Already sensitized individuals, and those susceptible to asthma, allergies, chronic or recurrent respiratory disease, should consult their physician regarding working with respiratory irritants or sensitizers.
  Do not eat, drink or smoke when using this product.
  Take care to prevent spills, waste and minimize release to the environment.
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Conditions for safe storage:
- Keep in properly labeled containers.
- Store locked up.
- Keep tightly closed.
- Keep in a cool, well-ventilated place.
- Store in accordance with the particular national regulations.

Materials to avoid:
- Do not store with the following product types:
  - Strong oxidizing agents
  - Self-reactive substances and mixtures
  - Organic peroxides
  - Explosives
  - Gases

SECTION 8. EXPOSURE CONTROLS/PERSOAL PROTECTION

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>95-63-6</td>
<td>TWA</td>
<td>25 ppm / 123 mg/m³</td>
<td>CA AB OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>25 ppm</td>
<td>CA QC OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>25 ppm</td>
<td>CA BC OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>10 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>10 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td>lambda-cyhalothrin (ISO)</td>
<td>91465-08-6</td>
<td>TWA</td>
<td>5 µg/m³ (OEB 4)</td>
<td>Internal</td>
</tr>
</tbody>
</table>

Further information: Skin

- Wipe limit 50 µg/100 cm² Internal

Engineering measures:
- All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment.
- Essentially no open handling permitted.
- Use closed processing systems or containment technologies.
- If handled in a laboratory, use a properly designed biosafety cabinet, fume hood, or other containment device if the potential exists for aerosolization. If this potential does not exist, handle over lined trays or benchtops.

Personal protective equipment

Respiratory protection:
- If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.
  - Filter type: Combined particulates and organic vapor type

Hand protection:
- Material: Chemical-resistant gloves

Eye protection:
- Remarks: Wear safety glasses with side shields or goggles.
  - If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles.
  - Wear a faceshield or other full face protection if there is a
potential for direct contact to the face with dusts, mists, or aerosols.

Skin and body protection: Work uniform or laboratory coat. Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces. Use appropriate degowning techniques to remove potentially contaminated clothing.

Hygiene measures: If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use. The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the use of administrative controls.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid
Color: off-white
Odor: solvent
Odor Threshold: No data available
pH: No data available
Melting point/freezing point: No data available
Initial boiling point and boiling range: > 100 °C
Flash point: > 100 °C
Evaporation rate: No data available
Flammability (solid, gas): Not applicable
Flammability (liquids): No data available
Upper explosion limit / Upper flammability limit: No data available
Lower explosion limit / Lower flammability limit: No data available
Vapor pressure: No data available
Relative vapor density: No data available
### Relative density
- No data available

### Density
- 1.036 g/cm³

### Solubility(ies)
- Water solubility: dispersible

### Partition coefficient: n-octanol/water
- No data available

### Autoignition temperature
- No data available

### Decomposition temperature
- No data available

### Viscosity
- Viscosity, kinematic: No data available

### Explosive properties
- Not explosive

### Oxidizing properties
- The substance or mixture is not classified as oxidizing.

### Molecular weight
- Not applicable

### Particle size
- Not applicable

### SECTION 10. STABILITY AND REACTIVITY

**Reactivity**: Not classified as a reactivity hazard.

**Chemical stability**: Stable under normal conditions.

**Possibility of hazardous reactions**: Can react with strong oxidizing agents.

**Conditions to avoid**: None known.

**Incompatible materials**: Oxidizing agents

**Hazardous decomposition products**: No hazardous decomposition products are known.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure
- Inhalation
- Skin contact
- Ingestion
- Eye contact

**Acute toxicity**: Harmful if inhaled.

**Product**:
- **Acute oral toxicity**: LD50 (Rat): > 5,000 mg/kg
- **Acute inhalation toxicity**: LC50 (Rat): > 4.62 mg/l
  - Exposure time: 4 h
- **Acute dermal toxicity**: LD50 (Rat): > 2,000 mg/kg
Components:

1,2,4-Trimethylbenzene:
- Acute oral toxicity: LD50 (Rat): 3,280 mg/kg
- Acute inhalation toxicity: LC50 (Rat): > 10.2 mg/l
  Exposure time: 4 h
  Test atmosphere: vapor
  Remarks: Based on data from similar materials
- Acute dermal toxicity: LD50 (Rat): > 3,160 mg/kg

lambda-cyhalothrin (ISO):
- Acute oral toxicity: LD50 (Rat): 56 - 79 mg/kg
  LD50 (Mouse): 20 mg/kg
- Acute inhalation toxicity: LC50 (Rat): 0.06 mg/l
  Exposure time: 4 h
  Test atmosphere: dust/mist
- Acute dermal toxicity: LD50 (Rat): 632 - 696 mg/kg
- Acute toxicity (other routes of administration): LD50 (Rat): 250 - 750 mg/kg
  Application Route: Intraperitoneal

Skin corrosion/irritation
Causes skin irritation.

Product:
Species: Rabbit
Result: irritating

Components:

1,2,4-Trimethylbenzene:
Species: Rabbit
Result: Skin irritation
Remarks: Based on data from similar materials

lambda-cyhalothrin (ISO):
Species: Rabbit
Result: No skin irritation

Serious eye damage/eye irritation
Causes eye irritation.

Product:
Species: Rabbit
Result: Mild eye irritation
Components:

1,2,4-Trimethylbenzene:
Species: Rabbit
Result: No eye irritation
Remarks: Based on data from similar materials

Lambda-cyhalothrin (ISO):
Species: Rabbit
Result: Mild eye irritation

Respiratory or skin sensitization

Skin sensitization
Not classified based on available information.

Respiratory sensitization
Not classified based on available information.

Product:
Species: Rabbit
Result: Weak sensitizer

Components:

1,2,4-Trimethylbenzene:
Test Type: Maximization Test
Routes of exposure: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: negative

Lambda-cyhalothrin (ISO):
Test Type: Magnusson-Kligman-Test
Routes of exposure: Dermal
Species: Guinea pig
Result: Not a skin sensitizer.

Germ cell mutagenicity
Not classified based on available information.

Components:

1,2,4-Trimethylbenzene:
Genotoxicity in vitro: Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative
Remarks: Based on data from similar materials

Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative

Test Type: Mutagenicity (in vitro mammalian cytogenetic test)
Result: negative
Remarks: Based on data from similar materials

Genotoxicity in vivo:

Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
Species: Mouse
Application Route: Intraperitoneal injection
Result: negative
Remarks: Based on data from similar materials

**lambda-cyhalothrin (ISO):**

Genotoxicity in vitro:

Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Test Type: Chromosomal aberration
Test system: Human lymphocytes
Result: negative

Test Type: unscheduled DNA synthesis assay
Test system: rat hepatocytes
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Test system: mouse lymphoma cells
Result: negative

Genotoxicity in vivo:

Test Type: Micronucleus test
Species: Mouse
Cell type: Bone marrow
Application Route: Intraperitoneal
Result: negative

Carcinogenicity:
Not classified based on available information.

**Components:**

**lambda-cyhalothrin (ISO):**

<table>
<thead>
<tr>
<th>Species</th>
<th>Mouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Route</td>
<td>oral (feed)</td>
</tr>
<tr>
<td>Exposure time</td>
<td>2 Years</td>
</tr>
<tr>
<td>Result</td>
<td>negative</td>
</tr>
<tr>
<td>Remarks</td>
<td>Based on data from similar materials</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Species</th>
<th>Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Route</td>
<td>oral (feed)</td>
</tr>
<tr>
<td>Exposure time</td>
<td>2 Years</td>
</tr>
<tr>
<td>Result</td>
<td>negative</td>
</tr>
<tr>
<td>Remarks</td>
<td>Based on data from similar materials</td>
</tr>
</tbody>
</table>
Reproductive toxicity
Not classified based on available information.

Components:

1,2,4-Trimethylbenzene:

Effects on fertility:
- Test Type: Three-generation reproduction toxicity study
  - Species: Rat
  - Application Route: inhalation (vapor)
  - Result: negative
  - Remarks: Based on data from similar materials

Effects on fetal development:
- Test Type: Embryo-fetal development
  - Species: Rat
  - Application Route: inhalation (vapor)
  - Method: OECD Test Guideline 414
  - Result: negative

Lambda-cyhalothrin (ISO):

Effects on fertility:
- Test Type: Three-generation study
  - Species: Rat
  - Application Route: oral (feed)
  - General Toxicity Parent: NOAEL: 2 mg/kg body weight
  - General Toxicity F1: LOAEL: 6.7 mg/kg body weight
  - Symptoms: Reduced offspring weight gain.
  - Result: No effects on fertility.
  - Remarks: Based on data from similar materials

Effects on fetal development:
- Test Type: Development
  - Species: Rat
  - Application Route: Oral
  - General Toxicity Maternal: NOAEL: 10 mg/kg body weight
  - Developmental Toxicity: LOAEL: 15 mg/kg body weight
  - Result: No effects on fetal development., Reduced maternal body weight gain., Reduced fetal weight.
  - Remarks: Based on data from similar materials

  Test Type: Development
  - Species: Rabbit
  - Application Route: Oral
  - General Toxicity Maternal: NOAEL: 10 mg/kg body weight
  - Developmental Toxicity: NOAEL: 30 mg/kg body weight
  - Result: No effects on fetal development., Reduced maternal body weight gain., Reduced fetal weight.
  - Remarks: Based on data from similar materials

STOT-single exposure
May cause respiratory irritation.
Causes damage to organs (Nervous system).

Components:

1,2,4-Trimethylbenzene:

Assessment:
- May cause respiratory irritation.
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Target Organ: Nervous system
Assessment: Causes damage to organs.

STOT-repeated exposure
Not classified based on available information.

Repeated dose toxicity

Components:

1,2,4-Trimethylbenzene:
Species: Rat
NOAEL: 600 mg/kg
Application Route: Ingestion
Exposure time: 90 Days
Method: OECD Test Guideline 408
Remarks: Based on data from similar materials

Species: Rat
NOAEL: 1230 mg/m3
Application Route: Inhalation (vapor)
Exposure time: 90 Days

lambda-cyhalothrin (ISO):
Species: Dog
NOAEL: 2.5 mg/kg
LOAEL: 12.5 mg/kg
Application Route: Oral (feed)
Exposure time: 90 d
Symptoms: reduced body weight gain, reduced food consumption

Species: Rat
NOAEL: 10 mg/kg
LOAEL: 50 mg/kg
Application Route: Dermal
Exposure time: 21 d
Target Organs: Nervous system

Species: Rat
NOAEL: 0.08 mg/kg
LOAEL: 0.9 mg/kg
Application Route: Inhalation
Exposure time: 21 d
Target Organs: Nervous system

Species: Dog
NOAEL: 0.1 mg/kg
LOAEL: 0.5 mg/kg
Application Route: Oral
Exposure time: 1 y
Target Organs: Nervous system
Symptoms: Gastrointestinal disturbance, Vomiting, Convulsions, ataxia, Liver effects

**Aspiration toxicity**
May be fatal if swallowed and enters airways.

**Product:**
The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

**Components:**
1,2,4-Trimethylbenzene:
The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

**Experience with human exposure**

**Product:**
Inhalation: Symptoms: Respiratory disorder, Central nervous system depression
Skin contact: Symptoms: tingling, Itching, Burn, Skin irritation
Eye contact: Symptoms: Eye irritation
Ingestion: Symptoms: Gastrointestinal disturbance, Breathing difficulties

**Components:**
lambda-cyhalothrin (ISO):
Inhalation: Symptoms: Cough, Local irritation, sneezing
Skin contact: Symptoms: Skin irritation, tingling, superficial burning sensation, Local irritation
Eye contact: Symptoms: Eye irritation
Ingestion: Symptoms: Gastrointestinal disturbance

**Ecotoxicity**

**Components:**
1,2,4-Trimethylbenzene:
Toxicity to fish: LC50 (Pimephales promelas (fathead minnow)): 7.72 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 3.6 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants: EC50 (Desmodesmus subspicatus (green algae)): 2.356 mg/l
Exposure time: 96 h
Chronic aquatic toxicity: Toxic to aquatic life with long lasting effects.

**lambda-cyhalothrin (ISO):**

**Toxicity to fish:**
- LC50 (Oncorhynchus mykiss (rainbow trout)): 0.00019 mg/l
  - Exposure time: 96 h
  - Method: OECD Test Guideline 203
  - Remarks: Based on data from similar materials
- LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.00021 mg/l
  - Exposure time: 96 h
  - Method: OECD Test Guideline 203
  - Remarks: Based on data from similar materials

**Toxicity to daphnia and other aquatic invertebrates:**
- EC50 (Daphnia magna (Water flea)): 0.00004 mg/l
  - Exposure time: 48 h
  - Method: OECD Test Guideline 202
  - Remarks: Based on data from similar materials

**Toxicity to fish (Chronic toxicity):**
- NOEC (Pimephales promelas (fathead minnow)): 0.000062 mg/l
  - Exposure time: 32 d
  - Method: OECD Test Guideline 210
  - Remarks: Based on data from similar materials

**Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):**
- NOEC (Daphnia magna (Water flea)): 0.0035 µg/l
  - Exposure time: 21 d
  - Method: OECD Test Guideline 211
  - Remarks: Based on data from similar materials

**Persistence and degradability**

**Components:**

**1,2,4-Trimethylbenzene:**
- Biodegradability: Result: Readily biodegradable.
  - Biodegradation: 60%
  - Exposure time: 28 d

**Bioaccumulative potential**

**Components:**

**lambda-cyhalothrin (ISO):**
- Bioaccumulation: Bioconcentration factor (BCF): 2,240
  - Method: OECD Test Guideline 305
- Partition coefficient: n-octanol/water: log Pow: 7.0 (20 °C)

**Mobility in soil**

**Components:**

**lambda-cyhalothrin (ISO):**
SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues: Dispose of in accordance with local regulations.
Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG
UN number: UN 3082
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (lambda-cyhalothrin (ISO))
Class: 9
Packing group: III
Labels: 9

IATA-DGR
UN/ID No.: UN 3082
Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (lambda-cyhalothrin (ISO))
Class: 9
Packing group: III
Labels: Miscellaneous
Packing instruction (cargo aircraft): 964
Packing instruction (passenger aircraft): 964
Environmentally hazardous: yes

IMDG-Code
UN number: UN 3082
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (lambda-cyhalothrin (ISO))
Class: 9
Packing group: III
Labels: 9
EmS Code: F-A, S-F
Marine pollutant: yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

Domestic regulation
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TDG
UN number: UN 3082
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (lambda-cyhalothrin (ISO))

Class: 9
Packing group: III
ERG Code: 171
Marine pollutant: yes (lambda-cyhalothrin (ISO))

Special precautions for user
The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

The ingredients of this product are reported in the following inventories:
AICS: not determined
DSL: not determined
IECSC: not determined

SECTION 16. OTHER INFORMATION

Full text of other abbreviations
ACGIH: USA. ACGIH Threshold Limit Values (TLV)
CA BC OEL: Canada. British Columbia OEL
CA QC OEL: Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
ACGIH / TWA: 8-hour, time-weighted average
CA AB OEL / TWA: 8-hour Occupational exposure limit
CA BC OEL / TWA: 8-hour time weighted average
CA QC OEL / TWAEV: Time-weighted average exposure value

AIIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemi-

Revision Date: 10/01/2022
Date format: mm/dd/yyyy

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user’s end product, if applicable.

CA / Z8