

Safety Data Sheet

PT 221L

Revision date : 2013/12/26
Version: 4.0

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(30472231/SDS_CPA_US/EN)

1. Product and Company Identification

Company
BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Registrant:
Whitmire Micro-Gen Research Laboratories, Inc.
3568 Tree Court Industrial Blvd.
St. Louis, MO 63122

Substance number: 000000397433
Synonyms: lambda-Cyhalothrin

2. Hazards Identification

Emergency overview

CAUTION:
KEEP OUT OF REACH OF CHILDREN.
KEEP OUT OF REACH OF DOMESTIC ANIMALS.
HARMFUL IF SWALLOWED.
Moderately irritating to the eyes.
Avoid contact with the skin, eyes and clothing.
Wash thoroughly after handling.
Flammable Liquid
Aerosol container contains flammable gas under pressure.

See Product Label for additional precautionary statements.

State of matter: liquid
Colour: clear
Odour: mild

Potential health effects

Primary routes of exposure:

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Acute toxicity:

Relatively nontoxic after single ingestion. Relatively nontoxic after short-term skin contact. Relatively nontoxic after short-term inhalation.

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Irritation / corrosion:

Causes substantial but temporary eye injury. May cause slight irritation to the skin.

Sensitization:

Skin sensitizing effects were not observed in animal studies.

Signs and symptoms of overexposure:

Vomiting may cause aspiration pneumonia due to the ingredients.

3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
91465-08-6	0.05 %	Lambda-Cyhalothrin
64742-47-8	> 10.0 %	Distillates (petroleum), hydrotreated light
67-63-0		2-Propanol
124-38-9		carbon dioxide
	<= 89.95 %	Proprietary ingredients

4. First-Aid Measures

General advice:

First aid providers should wear personal protective equipment to prevent exposure. Remove contaminated clothing. Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or physician for treatment advice. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

If inhaled:

Remove the affected individual into fresh air and keep the person calm.

If on skin:

Rinse skin immediately with plenty of water for 15 - 20 minutes.

If in eyes:

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing.

If swallowed:

Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Do not induce vomiting. Have person sip a glass of water if able to swallow.

Note to physician

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote. Aspiration of this product during induced emesis can result in lung injury. If evacuation of stomach contents is considered necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation.

5. Fire-Fighting Measures

Flash point:

approx. 18 °C

(Tag closed cup)

Lower explosion limit:

As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.

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Upper explosion limit: As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use. (ASTM D 3065)

Flammability of Aerosol > 18 in
Products: no flashback
NFPA 30B flammability: Level 3 Aerosol

Suitable extinguishing media:
foam, dry powder, carbon dioxide

Hazards during fire-fighting:
carbon monoxide, carbon dioxide, Hydrogen chloride, hydrogen fluoride, halogenated hydrocarbons, acid halides, nitrogen oxides
The substances/groups of substances mentioned can be released in case of fire. Aerosol container contains flammable gas under pressure. Risk of explosion at excessive temperatures.

Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:
Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.

6. Accidental release measures

Personal precautions:
Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions:
Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water. A spill of or in excess of the reportable quantity requires notification to state, local and national emergency authorities.

Cleanup:
Dike spillage. Pick up with suitable absorbent material. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. Handling and Storage

Handling

General advice:
RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS & WORKERS must refer to the Product Label and Directions for Use attached to the product. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect against heat. Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used as soon as possible. Provide means for controlling leaks and spills. Follow label warnings even after container is emptied. The substance/ product may be handled only by appropriately trained personnel. Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapours. Wear suitable personal protective clothing and equipment.

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Protection against fire and explosion:

Aerosol container contains flammable gas under pressure. The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme heat. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

Storage

General advice:

Protect containers from physical damage. Store in a cool, dry, well-ventilated area. Avoid all sources of ignition: heat, sparks, open flame.

Storage incompatibility:

General advice: Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

Storage stability:

May be kept indefinitely if stored properly. If an expiry date is mentioned on the packaging/label this takes priority over the statements on storage duration in this safety data sheet.

Temperature tolerance

Protect from temperatures above: 130 °F
Explosive at or above indicated temperature.

8. Exposure Controls and Personal Protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Components with occupational exposure limits

2-Propanol	OSHA PEL	PEL 400 ppm 980 mg/m3 ;
	ACGIH TLV	TWA value 200 ppm ; STEL value 400 ppm ;
carbon dioxide	OSHA PEL	PEL 5,000 ppm 9,000 mg/m3 ;
Distillates (petroleum), hydrotreated light	ACGIH TLV	TWA value 200 mg/m3 Non-aerosol (total hydrocarbon vapor); Application restricted to conditions in which there are negligible aerosol exposures. Skin Designation Non-aerosol (total hydrocarbon vapor); The substance can be absorbed through the skin.

Advice on system design:

Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:

Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

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Eye protection:

Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:**RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS**

Wear long sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance with good industrial hygiene and safety practice. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. No eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Form:	aerosol	
Odour:	mild	
Colour:	clear	
pH value:	10.5	(1 %(m), approx. 25 °C)
Vapour pressure:	6205 - 6895 hPa	(20 °C)
Density:	0.78 g/cm ³	(20 °C)
Vapour density:		not determined
Viscosity, dynamic:	approx. 1 mPa.s	(approx. 25 °C)
Solubility in water:		slightly soluble, Information based on the main components.

10. Stability and Reactivity

Conditions to avoid:

Avoid all sources of ignition: heat, sparks, open flame. Avoid prolonged storage. Avoid electro-static discharge. Avoid contamination. Avoid prolonged exposure to extreme heat. Avoid extreme temperatures.

Substances to avoid:

strong oxidizing agents

Hazardous reactions:

The product is chemically stable.

Decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated., Prolonged thermal loading can result in products of degradation being given off.

Thermal decomposition:

Possible thermal decomposition products:

carbon monoxide, carbon dioxide, halogenated hydrocarbons, Hydrogen chloride, hydrogen fluoride, nitrogen dioxide, nitrogen oxide

Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released. To avoid thermal decomposition, do not overheat.

Corrosion to metals:

Corrosive effects to metal are not anticipated.

11. Toxicological information

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Acute toxicity

Oral:

Type of value: LD50
Species: rat
Value: > 5,000 mg/kg

Inhalation:

Type of value: LC50
Species: rat
Value: > 2.40 mg/l

Dermal:

Type of value: LD50
Species: rabbit
Value: > 5,000 mg/kg

Irritation / corrosion

Skin:

Species: rabbit
Result: non-irritant
May cause slight irritation to the skin.

Eye:

Species: rabbit
Result: Slightly irritating.
May cause slight irritation to the eyes.

Sensitization:

Species: guinea pig
Result: Skin sensitizing effects were not observed in animal studies.

Genetic toxicity

Information on: lambda-cyhalothrin
No mutagenic effects reported.

Information on: 2-Propanol
The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture.
The substance was not mutagenic in a test with mammals.

Information on: Distillates (petroleum), hydrotreated light
The substance was not mutagenic in bacteria. The substance was not genotoxic in mammalian cell culture. The substance was not mutagenic in mammalian cell culture. The substance was not genotoxic in a test with mammals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Carcinogenicity

Information on: lambda-cyhalothrin
The US EPA has classified this substance with the rating of 'D', not classifiable as to human carcinogenicity.

Reproductive toxicity

Information on: lambda-cyhalothrin
No reproductive toxic effects reported.

Development:

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Information on: lambda-cyhalothrin
No indications of a developmental toxic / teratogenic effect were seen in animal studies.
Information on: 2-Propanol
Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.
Information on: Distillates (petroleum), hydrotreated light
No indications of a developmental toxic / teratogenic effect were seen in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

12. Ecological Information

Fish

Information on: lambda-cyhalothrin
Acute:
OECD Guideline 203 Flow through.
Oncorhynchus mykiss/LC50 (96 h): 0.00024 mg/l

Information on: 2-Propanol
Acute:
EPA 72-1 Flow through.
Pimephales promelas/LC50 (96 h): 9,640 mg/l
The statement of the toxic effect relates to the analytically determined concentration. Literature data.

Information on: Distillates (petroleum), hydrotreated light
Acute:
OECD Guideline 203 semistatic
Oncorhynchus mykiss/LL50 (96 h): 2 - 5 mg/l
The product has low solubility in the test medium. A saturated solution has been tested. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.
Nominal values (confirmed by concentration control analytics)

Aquatic invertebrates

Information on: lambda-cyhalothrin
Acute:
OECD Guideline 202, part 1 static
Daphnia magna/EC50 (48 h): 0.00036 mg/l

Information on: 2-Propanol
Acute:
OECD Guideline 202, part 1 static
Daphnia magna/LC50 (24 h): > 10,000 mg/l
The details of the toxic effect relate to the nominal concentration.

Information on: Distillates (petroleum), hydrotreated light
Acute:
OECD Guideline 202, part 1 static
Daphnia magna/EL50 (48 h): 1.4 mg/l
The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. A saturated solution has been tested. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aquatic plants

Information on: lambda-cyhalothrin
Toxicity to aquatic plants:
green algae/EC50 (96 h): > 0.3 mg/l

Information on: 2-Propanol

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*Toxicity to aquatic plants:
other static
green algae/Toxic limit concentration (7 d): 1,800 mg/l
Literature data.*

Information on: Distillates (petroleum), hydrotreated light

Toxicity to aquatic plants:

OECD Guideline 201 static

green algae/EL50 (72 h): 1 - 3 mg/l

The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. A saturated solution has been tested. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

OECD Guideline 201 static

green algae/No observed effect concentration (72 h): 1 mg/l

The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. A saturated solution has been tested. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

13. Disposal considerations

Waste disposal of substance:

Pesticide wastes are regulated. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container disposal:

Do not cut, puncture, crush, or incinerate empty aerosol containers. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Empty aerosol cans may meet the definition of RCRA D003. Consult local and/or regional EPA for further guidance.

14. Transport Information

Land transport

USDOT

Hazard class: 2.1
ID number: UN 1950
Hazard label: 2.1
Proper shipping name: AEROSOLS

Sea transport

IMDG

Hazard class: 2.1
ID number: UN 1950
Hazard label: 2.1
Marine pollutant: NO
Proper shipping name: AEROSOLS

Air transport

IATA/ICAO

Hazard class: 2.1
ID number: UN 1950
Hazard label: 2.1

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Proper shipping name: AEROSOLS, FLAMMABLE

Further information

DOT: This product may be classified as ORM-D (Consumer Commodity) or Limited Quantity. After 12/31/2020, ORM-D will not apply.

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US blocked / not listed

Crop Protection TSCA, US released / exempt

OSHA hazard category: Chronic target organ effects reported; ACGIH TLV established; Flammable Liquid

EPCRA 311/312 (Hazard categories): Acute; Fire; Sudden release of pressure

<u>CERCLA RQ</u>	<u>CAS Number</u>	<u>Chemical name</u>
100 LBS	67-63-0	2-Propanol

State regulations

State RTK

<u>State RTK</u>	<u>CAS Number</u>	<u>Chemical name</u>
NJ	91465-08-6	Lambda-Cyhalothrin
MA, NJ, PA	64742-47-8	Distillates (petroleum), hydrotreated light
MA, NJ, PA	67-63-0	2-Propanol
MA, NJ, PA	124-38-9	carbon dioxide

CA Prop. 65:

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

16. Other Information

Refer to product label for EPA registration number.

Recommended use: insecticide

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

SDS Prepared by:
BASF NA Product Regulations
msds@basf.com
SDS Prepared on: 2013/12/26

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