

United Phosphorus, Inc.

Preparation Date 30-Apr-2015

Revision date 31-Dec-2018

Revision Number: 3

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier Product Description:

Lambda-Cy EC - RUP

Other means of identification Product code UN/ID no. Registration number(s)

12U-153 UN3352 70506-121

Recommended use of the chemical and restrictions on useRecommended useInsecticide.Uses advised againstActivities contrary to label recommendation

Details of the Supplier of the Safety Data Sheet Supplier Address UPL NA Inc. 630 Freedom Business Center Suite 402 King of Prussia, PA 19406

Emergency telephone number1-800Company Phone Number1-800Emergency telephone numberChemMadia

1-800-438-6071 Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887 Medical: Rocky Mountain Poison Control Center (866) 673-6671 (24hrs)

2. Hazards Identification

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

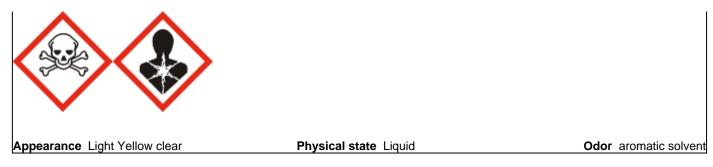
Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Vapors)	Category 2
Aspiration toxicity	Category 1

Label elements

EMERGENCY OVERVIEW

DANGER

Hazard Statements Toxic if swallowed Harmful in contact with skin Fatal if inhaled May be fatal if swallowed and enters airways



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Wear protective gloves/protective clothing/eye protection/face protection Do not breathe dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area In case of inadequate ventilation wear respiratory protection

IF ON SKIN: Wash with plenty of soap and water Call a POISON CENTER or doctor if you feel unwell Wash contaminated clothing before reuse IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Immediately call a POISON CENTER or doctor/physician IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician Rinse mouth Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)

OTHER INFORMATION

Very toxic to aquatic life with long lasting effects

Very toxic to aquatic life

3. Composition/information on Ingredients

Chemical name	CAS No	Weight-%
lambda-cyhalothrin (ISO)	91465-08-6	11.4
Solvesso 200	64742-94-5	78

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. First aid measures		
FIRST AID MEASURES		
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a poison control center or doctor for treatment advice.	
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. Call a poison control center or doctor for treatment advice.	

Inhalation	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 physician or poison control center immediately.	
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Call a physician or poison control center immediately.	
Protection of First-aiders	Use personal protective equipment.	
Most Important Symptoms and Effects, Both Acute and Delayed		
Most Important Symptoms and Effects	no data available.	
Indication of Any Immediate Media	al Attention and Special Treatment Needed	

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician

Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

Use:. Dry chemical. Carbon dioxide (CO2). Water spray. alcohol-resistant foam.

Unsuitable extinguishing media no data available.

Specific hazards arising from the chemical

Combustible material. Keep product and empty container away from heat and sources of ignition.

Hazardous combustion products Irritating gases may be formed if product is involved in a fire.

Explosion data

Protective equipment and precautions for firefighters

Use personal protective equipment. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protective equipment. Avoid contact with skin and eyes. Wear protective gloves/protective clothing and eye/face protection. Wash thoroughly after handling. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).	
Environmental Precautions		
Environmental precautions	Prevent further leakage or spillage if safe to do so. Keep material out of lakes, streams, ponds and sewer drains. Dike to confine spill and absorb with an absorbant such as clay, sand or soil. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.	
Methods and material for containment and cleaning up		
Methods for Clean-Up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Remove all ignition sources. Use non-sparking tools. Take up mechanically and collect in suitable container for disposal.	

7. Handling and Storage

Precautions for safe handling

Handling	Wear personal protective equipment. Keep away from open flames, hot surfaces and sources of ignition. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Do not eat, drink or smoke when using this product. Keep out of reach of children. Wash thoroughly after handling.	
Conditions for safe storage, inclue	ling any incompatibilities	
Storage	Keep in properly labelled containers. Keep containers tightly closed in a cool, well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur.	
incompatible materials	No materials to be especially mentioned.	
8. Exposure Controls/Personal Protection		
Exposure guidelines	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.	
Engineering controls	Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.	
Personal protective equipment		
Eye/Face Protection	Use eye protection to avoid eye contact. Where there is potential for eye contact have eye	
Skin protection	flushing equipment available. If splashes are likely to occur, wear:. Goggles. Face-shield. Wear protective gloves/clothing. Long sleeved clothing. Chemical resistant gloves.	
Respiratory protection	Chemical resistant footwear plus socks. Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134.	

General hygiene considerations

When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Wear suitable gloves and eye/face protection. Wash hands and face before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state Appearance color	Liquid Light Yellow clear No information available	Odor	aromatic solvent
Property pH Melting point/freezing point Boiling Point/Range Flash Point Evaporation Rate Flammability (solid, gas) Flammability limit in air Upper Flammability Limit Lower Flammability Limit vapor pressure Vapor Density	VALUES 7 8 °C / 46 °F No information available 80 C / 176 F No information available No information available No information available No information available No information available No information available	<u>Remarks/ • Method</u>	

Specific gravity	No information available
Water solubility	No information available
Solubility in Other Solvents	No information available
Partition coefficient: n-octanol/water	rNo information available
Autoignition temperature	no data available
Decomposition temperature	No information available
Viscosity, kinematic	No information available
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

OTHER INFORMATION

Softening point molecular weight VOC Content Liquid Density No information available No information available No information available No information available

10. Stability and Reactivity

Reactivity

no data available

Chemical stability

Hazardous polymerisation does not occur. Stable under normal conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

incompatible materials

No materials to be especially mentioned.

Hazardous decomposition products

Carbon oxides.

11. Toxicological Information

Information on Likely Routes of Exposure

Product information	Lambda-Cy EC Acute oral LD50 (rat) = 81 mg/kg Acute dermal LD50 (rat) = $> 2,000$ mg/kg Acute inhalation LC 50 = 0.622 mg/L - 4 hr Eye irritation = Mildly irritating (rabbit) Skin irritation = Slightly irritating (rabbit)
Inhalation	Harmful by inhalation.
Eye contact	Moderately irritating to the eyes.
Skin contact	May be harmful in contact with skin. May be harmful if absorbed through the skin.
Ingestion	MAY BE FATAL IF SWALLOWED.

Information on Toxicological Effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No information available.	
Mutagenic effects	no data available.	
Carcinogenicity	Lambda-Cy tech:	
	Not a developmental or reproductive toxicant	
	No treatment related tumors in rats or mice.	
Reproductive effects	Not Available.	
STOT - Single Exposure	no data available.	
STOT - Repeated Exposure	no data available.	
Chronic toxicity	Avoid repeated exposure.	
Aspiration hazard	No information available.	
Numerical Measures of Toxicity - Product information		

LD50 Oral	81 mg/kg (rat)	
LD50 Dermal	> 2000 mg/kg (rat)	
LC50 Inhalation	LC50/inhalation/4h/rat = 0.622	mg/l (4-hr)

12. Ecological Information

Marine Pollutant.

ecotoxicity

Extremely toxic to fish and other aquatic organisms. Toxic to bees exposed to direct treatment. Do not apply while bees are actively visiting the treated area.

Persistence/Degradability

no data available.

Bioaccumulation/Accumulation

Bioaccumulative potential.

Chemical name	Log Pow
Solvesso 200	2.9 - 6.1
64742-94-5	

Other Adverse Effects

no data available

13. Disposal Considerations

Waste Treatment Methods	
Waste Disposal Method	Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.
Contaminated packaging	Refer to product label.

14. Transport Information

DOT
UN/ID no.
Proper shipping name

UN3352 Pyrethroid pesticide, liquid, toxic (Lambda-Cyhalothrin)

Hazard class	6.1
Packing group	PG III
IMDG - Marine Pollutant	Marine Pollutant.

ICAO UN/ID no. Proper shipping name Hazard class Packing group Description	UN3352 Pyrethroid pesticide, liquid, toxic (Lambda-cyhalothrin) 6.1 PG III IMDG - Marine Pollutant
IATA UN/ID no. Proper shipping name Hazard class Packing group Description	UN3352 Pyrethroid pesticide, liquid, toxic (Lambda-cyhalothrin) 6.1 PG III IMDG - Marine Pollutant
IMDG UN/ID no. Proper shipping name Hazard class Packing group EmS No.	UN3352 Pyrethroid pesticide, liquid, toxic (Lambda-cyhalothrin) 6.1 PG III F-A, S-A

Yes

15. Regulatory Information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

signal word	WARNING
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Environmental hazards

Ventilation Control PESTICIDE APPLICATORS & WORKERS THESE WORKERS MUST REFER TO PRODUCT LABELING AND DIRECTIONS FOR USE IN ACCORDANCE WITH EPA WORKER PROTECTION STANDARD 40 CFR PART 170.

Restricted Use Pesticide. Keep out of Reach of Children. May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Causes moderate eye irritation. COMBUSTIBLE.

International Inventories

USINV	Present
DSL/NDSL	Not present
EINECS/	Not Present
ELINCS	
ENCS	Not Present
China	Present
KECL	Present
PICCS	Present
AICS	Present
TSCA	Not Present

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances **ENCS** - Japan Existing and New Chemical Substances IECSC - China Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances AICS - Australian Inventory of Chemical Substances

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Federal Regulations

<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

CERCLA Not applicable

CERCLA SARA Product RQ

RCRA Pesticide Information

State Regulations

State Right-to-KnowNot applicableInternational regulationsU.S. EPA Label informationEPA Pesticide registration number70506-121

16. Other Information					
<u>NFPA</u>	HEALTH 3	flammability 2	Instability 0	Physical hazard -	
Preparation Date	30-Apr-2015				
Revision date	31-Dec-2018				
Revision Summary					
Update logo Update section 1 Update Section 16***					
Disclaimer					

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End of SDS