

# SAFETY DATA SHEET



Revision date 06-Aug-2024

Revision Number 4

## 1. Identification

### Product identifier

Product Name Lancer 2EC

### Other means of identification

Product Code(s) 000045

UN number or ID number UN3352

Synonyms None

Registration Number(s) 42750-368

### Recommended use of the chemical and restrictions on use

Recommended use Insecticide

Restrictions on use Follow label instructions

### Details of the supplier of the safety data sheet

#### Company Address

ALBAUGH LLC  
1525 NE 36th St,  
Ankeny, IA 50021 USA

#### Emergency telephone number

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident:

- Call CHEMTREC Day or Night within USA and Canada: 1-800-424-9300, Outside USA and Canada: +1 703-741-5970

(collect calls accepted)

For Medical Emergencies Only:

- Call Albaugh LLC Day or Night within USA and Canada: 1-888-347-6732

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by US EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

## 2. Hazard(s) identification

### Classification

Acute toxicity - Oral	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1B
Carcinogenicity	Category 2
Reproductive toxicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 1
Aspiration hazard	Category 1

**Hazards not otherwise classified (HNOC)**

Not applicable

**Label elements****Danger****Hazard statements**

Toxic if swallowed  
 Harmful if inhaled  
 Causes skin irritation  
 Causes serious eye irritation  
 May cause an allergic skin reaction  
 Suspected of causing cancer  
 May damage fertility or the unborn child  
 Causes damage to organs through prolonged or repeated exposure  
 May be fatal if swallowed and enters airways

**Appearance** No information available**Physical state** Liquid**Odor** Pungent**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Wear protective gloves/clothing and eye/face protection  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Use only outdoors or in a well-ventilated area  
 Contaminated work clothing must not be allowed out of the workplace  
 Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 IF ON SKIN: Wash with plenty of water and soap  
 Take off contaminated clothing and wash it before reuse  
 If skin irritation or rash occurs: Get medical advice/attention  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 IF SWALLOWED: Immediately call a doctor  
 Do NOT induce vomiting  
 Rinse mouth

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other information**

Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

**3. Composition/information on ingredients**

**Substance**

Not applicable.

**Mixture**

Chemical name	CAS No	Weight-%	Active Ingredient
Solvent Naphtha, Heavy Aromatic	64742-94-5	50.4-53.5	
Bifenthrin	82657-04-3	24.4-25.9	X
NMP (N-methyl-2-pyrrolidone)	872-50-4	15.2-16.8	
Other Ingredients	PROPRIETARY	>5.0	

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. First-aid measures

**Description of first aid measures****General advice**

Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention. Immediate medical attention is required.

**Inhalation**

Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical attention. Delayed pulmonary edema may occur.

**Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

**Skin contact**

May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician. Wash off immediately with soap and plenty of water for at least 15 minutes.

**Ingestion**

Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get immediate medical attention.

**Self-protection of the first aider**

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. See section 8 for more information.

**Most important symptoms and effects, both acute and delayed****Symptoms**

Itching. Rashes. Hives. Difficulty in breathing. Coughing and/ or wheezing. Dizziness. May cause redness and tearing of the eyes. Burning sensation.

**Indication of any immediate medical attention and special treatment needed****Note to physicians**

May cause sensitization in susceptible persons. Treat symptomatically. Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.

## 5. Fire-fighting measures

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the

<b>Large Fire</b>	surrounding environment. CAUTION: Use of water spray when fighting fire may be inefficient.
<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.
<b>Specific hazards arising from the chemical</b>	Product is or contains a sensitizer. May cause sensitization by skin contact.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	None.
<b>Sensitivity to static discharge</b>	None.
<b>Special protective equipment and precautions for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid breathing vapors or mists.
<b>Other information</b>	Refer to protective measures listed in Sections 7 and 8.

### Methods and material for containment and cleaning up

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Pick up and transfer to properly labeled containers.

## 7. Handling and storage

### Precautions for safe handling

<b>Advice on safe handling</b>	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes. Avoid breathing vapors or mists.
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### Conditions for safe storage, including any incompatibilities

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up. Store away from other materials.
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## 8. Exposure controls/personal protection

### Control parameters

<b>Exposure Limits</b>	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
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### **Biological occupational exposure limits**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Chemical name	ACGIH
NMP (N-methyl-2-pyrrolidone) 872-50-4	100 mg/L - urine (5-Hydroxy-N-methyl-2-pyrrolidone) - end of shift

### Appropriate engineering controls

**Engineering controls**                      Showers  
 Eyewash stations  
 Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection**                      Wear safety glasses with side shields (or goggles).

**Hand protection**                              Wear suitable gloves. Impervious gloves.

**Skin and body protection**                      Wear suitable protective clothing. Long sleeved clothing.

**Respiratory protection**                      No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations**                      Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

## **9. Physical and chemical properties**

### Information on basic physical and chemical properties

**Physical state**                                      Liquid  
**Appearance**                                      No information available  
**Color**    Amber  
**Odor**    Pungent  
**Odor threshold**                                      No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	4.5 - 5.5	@ 24 °C
<b>pH (as aqueous solution)</b>		
<b>Melting point / freezing point</b>	No data available	
<b>Initial boiling point and boiling range</b>	No data available	
<b>Flash point</b>	93.8 °C / 200.8 °F	Pensky-Martens Closed Cup (PMCC)
<b>Evaporation rate</b>	No data available	
<b>Flammability</b>	No data available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability or explosive limits</b>	No data available	
<b>Lower flammability or explosive limits</b>	No data available	
<b>Vapor pressure</b>	No data available	
<b>Relative vapor density</b>	No data available	
<b>Relative density</b>	No data available	
<b>Water solubility</b>	No data available	
<b>Solubility(ies)</b>	No data available	
<b>Partition coefficient</b>	No data available	
<b>Autoignition temperature</b>	No data available	
<b>Decomposition temperature</b>		
<b>Kinematic viscosity</b>	9.2 mm <sup>2</sup> /s	@ 20 °C
<b>Dynamic viscosity</b>	No data available	

**Other information**

<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available
<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC content</b>	No information available
<b>Liquid Density</b>	1.043*
<b>Bulk density</b>	No information available

\*Listed density is an approximate value and does not necessarily represent that of a specific batch

**10. Stability and reactivity**

<b>Reactivity</b>	No information available.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	None under normal processing.
<b>Conditions to avoid</b>	Excessive heat.
<b>Incompatible materials</b>	Strong acids. Strong bases. Strong oxidizing agents.
<b>Hazardous decomposition products</b>	None known based on information supplied.

**11. Toxicological information****Information on likely routes of exposure****Product Information**

<b>Inhalation</b>	Specific test data for the substance or mixture is not available. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract. Harmful by inhalation. (based on components).
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. May cause irritation. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
<b>Skin contact</b>	May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Repeated exposure may cause skin dryness or cracking. Causes skin irritation.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. (based on components).

**Symptoms related to the physical, chemical and toxicological characteristics**

<b>Symptoms</b>	Itching. Rashes. Hives. Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Redness. May cause redness and tearing of the eyes.
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**Acute toxicity****Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

<b>Oral LD50</b>	262 mg/kg
<b>Dermal LD50</b>	> 2000 mg/kg

Inhalation LC50 1.86 mg/l

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Solvent Naphtha, Heavy Aromatic 64742-94-5	> 5000 mg/kg ( Rat )	> 2 mL/kg ( Rabbit )	> 590 mg/m <sup>3</sup> ( Rat ) 4 h
Bifenthrin 82657-04-3	= 47 mg/kg ( Rat ) = 54.5 mg/kg ( Rat )	= 790 mg/kg ( Rat ) > 2 g/kg ( Rabbit )	= 1010 mg/m <sup>3</sup> ( Rat ) 4 h
NMP (N-methyl-2-pyrrolidone) 872-50-4	= 3914 mg/kg ( Rat )	= 8 g/kg ( Rabbit )	> 5.1 mg/L ( Rat ) 4 h

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Skin corrosion/irritation** Irritating to skin.**Serious eye damage/eye irritation** Causes serious eye irritation.**Respiratory or skin sensitization** May cause sensitization by skin contact.**Germ cell mutagenicity** No information available.**Carcinogenicity** Contains a known or suspected carcinogen. Classification based on data available for ingredients. Suspected of causing cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Bifenthrin 82657-04-3	-	Group 2A	-	-

**Legend****IARC (International Agency for Research on Cancer)**

Group 2A - Probably Carcinogenic to Humans

**Reproductive toxicity** Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. May damage fertility or the unborn child.**STOT - single exposure** No information available.**STOT - repeated exposure** Causes damage to organs through prolonged or repeated exposure.**Aspiration hazard** May be fatal if swallowed and enters airways.**Other adverse effects** No information available.**Interactive effects** No information available.**12. Ecological information****Ecotoxicity** Very toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Solvent Naphtha, Heavy Aromatic 64742-94-5	EC50: =2.5mg/L (72h, Skeletonema costatum)	LC50: =19mg/L (96h, Pimephales promelas) LC50: =2.34mg/L (96h, Oncorhynchus mykiss) LC50: =1740mg/L (96h, Lepomis macrochirus) LC50: =45mg/L (96h, Pimephales promelas) LC50: =41 mg/L (96h, Pimephales promelas)	-	EC50: =0.95mg/L (48h, Daphnia magna)

Bifenthrin 82657-04-3	-	LC50: 0.0001 - 0.00019mg/L (96h, Oncorhynchus mykiss) LC50: 0.0003 - 0.00038mg/L (96h, Lepomis macrochirus)	-	EC50: 0.00135 - 0.00195mg/L (48h, Daphnia magna)
NMP (N-methyl-2-pyrrolidone) 872-50-4	EC50: >500mg/L (72h, Desmodesmus subspicatus)	LC50: =832mg/L (96h, Lepomis macrochirus) LC50: =1072mg/L (96h, Pimephales promelas) LC50: =1400mg/L (96h, Poecilia reticulata) LC50: =4000mg/L (96h, Leuciscus idus)	-	EC50: =4897mg/L (48h, Daphnia magna)

**Persistence and degradability** No information available.

**Bioaccumulation** There is no data for this product.

#### Component Information

Chemical name	Partition coefficient
Solvent Naphtha, Heavy Aromatic 64742-94-5	6.1
NMP (N-methyl-2-pyrrolidone) 872-50-4	-0.46

**Other adverse effects** No information available.

### 13. Disposal considerations

#### Disposal methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

**California Hazardous Waste Status** This product contains one or more substances that are listed with the State of California as a hazardous waste.

### 14. Transport information

**TDG** Not regulated

#### DOT

**Notes** UN3352, Pyrethroid Pesticide, Liquid, Toxic, (Bifenthrin), 6.1, PG III  
**UN number or ID number** UN3352  
**Proper shipping name** Ethanol  
**Transport hazard class(es)** 6.1  
**Packing group** III  
**Special Provisions** This product qualifies for limited quantity status in packages of less than 5L (1.3 gallons)

**IATA** Not regulated

**ICAO (air)** Not regulated

#### IMDG

**UN number or ID number** UN3352  
**Transport hazard class(es)** 6.1  
**Packing group** III



Marine pollutant

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**15. Regulatory information****U.S. EPA Label Information****EPA Pesticide Registration Number** 42750-368**EPA Pesticide Label** WARNING. May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Causes moderate eye irritation.**International Inventories**

<b>TSCA</b>	Does not comply
<b>DSL/NDSL</b>	Does not comply
<b>EINECS/ELINCS</b>	Does not comply
<b>ENCS</b>	Does not comply
<b>IECSC</b>	Does not comply
<b>KECL</b>	Does not comply
<b>PICCS</b>	Does not comply
<b>AIIC</b>	Does not comply

**Legend:****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 Chemical Substances/European 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**AIIC** - Australian Inventory of Industrial Chemicals**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Bifenthrin - 82657-04-3	1.0
NMP (N-methyl-2-pyrrolidone) - 872-50-4	1.0

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals:.

Chemical name	California Proposition 65
NMP (N-methyl-2-pyrrolidone) - 872-50-4	Developmental

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Bifenthrin 82657-04-3	X	-	-
NMP (N-methyl-2-pyrrolidone) 872-50-4	X	X	X

**16. Other information**

<b>NFPA</b>	<b>Health hazards</b> 3	<b>Flammability</b> 1	<b>Instability</b> 0	<b>Special hazards</b> -
<b>HMIS</b>	<b>Health hazards</b> 3*	<b>Flammability</b> 1	<b>Physical hazards</b> 0	<b>Personal protection</b> X

*Chronic Hazard Star Legend*      \* = Chronic Health Hazard

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend Section 8: Exposure controls/personal protection**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGl(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
Japan GHS Classification  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Revision date** 06-Aug-2024  
**Revision Note** No information available.

**Disclaimer**

**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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

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information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

**End of Safety Data Sheet**