



Safety Data Sheet (SDS)

Issue Date: 19-Nov-2021

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Version 1

1. IDENTIFICATION

Product identifier

Product name Zivata

Other means of identification

SDS number ADAMA-008B
Registration number(s) 32427 (*Pest Control Products Act*)
66222-223 (EPA)
UN/ID number UN3325

Recommended use of the chemical and restrictions on use

Recommended Use Pesticide

Supplier's details

Registrant

ADAMA Agricultural Solutions Canada Ltd.
300-191 Lombard Avenue
Winnipeg, Manitoba R3B 0X1
1-855-264-6262

Emergency telephone number

Emergency telephone For fire, spill and/or leak contact INFOTRAC:
1-800-535-5053 (North America) 1-352-323-3500 (International)
For medical emergencies and health/safety inquiries, contact ProPharma Group:
1-877-250-9291

2. HAZARD IDENTIFICATION

This chemical is a product registered under the *Pest Control Products Act* (PCPA) of Canada and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-PCPA registered chemicals. Please see Section 15 for additional information. This product has been classified according to Canada's *Hazardous Product Regulations* (WHMIS 2015).

Appearance: Light yellow liquid

Physical state: Liquid

Odour: Mild organic

Classification of the substance or mixture

Acute toxicity – Oral	Category 4
Acute toxicity – Inhalation (dusts/mists)	Category 2
Skin sensitization	Category 1

Hazard pictogram(s)



Signal word(s)

Danger

Hazard statement(s)

Harmful if swallowed.
 Fatal if inhaled.
 May cause an allergic skin reaction.

Precautionary statements – Prevention

Use personal protective equipment as required.
 Wash face, hands and any exposed skin thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Do not breathe dust/fume/gas/mist/vapours/spray.
 Use only outdoors or in a well-ventilated area.
 Wear respiratory protection.
 Contaminated clothing must not be allowed out of the workplace.

Precautionary statements – Response

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison centre or doctor/physician.
 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician. Rinse mouth.
 IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

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.

Other hazards

Very toxic to aquatic life with long lasting effects.

Hazards not otherwise classified (HNOC)

May be harmful in contact with skin.
 Causes mild skin irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS number	Weight %
Cyhalothrin, lambda-	91465-08-6	12.5-13.78
Proprietary solvent	Proprietary	1.5-1.67

If chemical name/CAS number is "proprietary" and/or weight % is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

Description of necessary first-aid measures

General advice	When possible, have the product container or label with you when calling a poison control centre or doctor or going for treatment.
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. Seek immediate medical attention if adverse effect occurs.
Skin contact	Take off immediately all contaminated clothing. Drench affected area with water for at least 15 minutes. If skin irritation occurs: Get medical advice/ attention. Effects may be reduced by applying an oil-based cream.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen if breathing is difficult. If breathing has stopped, call 911, give artificial respiration. Seek immediate medical attention/advice.
Ingestion	Immediately call a poison control centre or doctor/physician. DO NOT induce vomiting.

If conscious, drink 8-10 oz. of water promptly. Never give anything by mouth to an unconscious person. Obtain medical attention. Do not induce vomiting unless directed by medical personnel.

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

Contact with skin can cause irritation, (minor itching, burning and/or redness), tingling. May cause an allergic skin reaction.

Indication of immediate medical attention and special treatment needed, if necessary**Notes to physician**

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Foam. Dry chemical. Water spray (fog). Foam or dry chemical systems are preferred to prevent environmental damage from excessive water runoff.

Unsuitable extinguishing media: Not determined.

Specific hazards arising from the chemical

Product is not flammable.

Hazardous combustion products

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

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate area of unprotected personnel. Remain upwind of fire to avoid hazardous vapours and decomposition products. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures**Personal precautions**

Wear protective clothing as described in Section 8 EXPOSURE CONTROLS/ PERSONAL PROTECTION of this safety data sheet. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

Environmental precautions**Environmental precautions**

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12 ECOLOGICAL INFORMATION. See Section 13 DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up**Methods for containment**

Prevent further leakage or spillage if safe to do so. Stop spill at source, dike area of spill to prevent spreading.

Methods for clean-up

For small spills, absorb with sand, clay, or other inert absorbent. Place in appropriate containers for disposal. For large spills: recover free product. Dike for later disposal. Absorb with inert material, and then place in suitable container for chemical waste. Wash spill area with a strong detergent and water solution; rinse with water, but minimize water use during clean-up. Do not flush to sewer. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not contaminate water, food or feed by storage, disposal or by cleaning equipment. Keep containers closed when not in use. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep out of the reach of children. Store away from incompatible materials. Keep/store only in original container. Store locked up. Store at ambient conditions. Protect from freezing.

Incompatible materials

None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

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

Appropriate engineering controls

Engineering controls

Please refer to the product label. Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Use splash goggles or face shield when contact may occur.

Skin and body protection

Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Viton or other impervious gloves are required. Long sleeve shirt, trousers, and safety shoes.

Respiratory protection

Ensure adequate ventilation, especially in confined areas. Wear an appropriate NIOSH/MSHA approved respirator if ventilation is inadequate.

General hygiene considerations

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Wash at the end of each work shift and before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated. Discard contaminated leather articles. Launder or discard contaminated clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state

Liquid

Odour

Mild organic

Appearance

Light yellow liquid

Odour threshold

Not determined

Colour

Light yellow

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	4.8	(1% dispersion)
Melting point/freezing point	Not determined	
Boiling point/boiling range	Not determined	
Flash point	>110°C (>230°F)	
Evaporation rate	Not determined	
Flammability (solid, gas)	Not applicable	
Flammability limits in air		

Upper flammability limits	Not determined
Lower flammability limit	Not applicable
Vapour pressure	Not determined
Vapour density	Not determined
Specific gravity	Not determined
Relative density	Not determined
Water solubility	Not determined
Solubility in other solvents	Not determined
Partition coefficient	Not determined
Auto-ignition temperature	Not determined
Decomposition temperature	Not determined
Kinematic viscosity	Not determined
Dynamic viscosity	12.0 centipoise at 23°C; 7.63 centipoise at 39°C
Explosive properties	Not determined
Oxidizing properties	Not determined
Bulk density	0.94 g/ml

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization

Not known to occur.

Conditions to avoid

Contact with incompatible materials. Keep out of reach of children. Excessive heat and freezing temperature. Open flames. See Section 7 HANDLING AND STORAGE.

Incompatible materials

None known.

Hazardous decomposition products

Thermal decomposition can lead to release of irritating and toxic gases and vapours.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact

Avoid contact with eyes.

Skin contact

Causes mild skin irritation. May be harmful in contact with skin.

Inhalation

Fatal if inhaled.

Ingestion

Harmful if swallowed.

Component Information

Chemical name	Oral LD ₅₀	Dermal LD ₅₀	Inhalation LC ₅₀
Cyhalothrin, lambda- (CAS No. 91465-08-6)	= 56 mg/kg (rat)	= 632 mg/kg (rat)	-
Proprietary solvent	1,516-2,774 mg/kg (rat)	-	-

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

See Section 4 FIRST-AID MEASURES.

Delayed and immediate effects and also chronic effects from short and long term exposure**Carcinogenicity**

Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Skin sensitization

May cause an allergic skin reaction.

Numerical measures of toxicity**Acute inhalation LC₅₀ (rat):** >2.14 mg/L (4-hr)**Eye irritation:** Moderately irritating.**Acute oral LD₅₀ (rat):** 1,530 mg/kg**Dermal irritation:** Mildly irritating.**Acute dermal LD₅₀ (rabbit):** >10,000 mg/kg**Dermal sensitization:** May cause an allergic skin reaction.**12. ECOLOGICAL INFORMATION****Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. Do not apply this product directly to water, to areas where surface water is present, or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

This product may contaminate water through drift or spray in wind. This product has a potential for runoff for several days to weeks after application. Poorly draining soil with shallow water tables is more prone to produce runoff. A level, well-maintained vegetative (grass) buffer strip between areas to which this product is applied and the surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

Component information

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Proprietary solvent	11.5: 72 h <i>Desmodesmus subspicatus</i> mg/L EC ₅₀	32-37: 96 h <i>Oncorhynchus mykiss</i> mg/L LC ₅₀ static 7.5: 96 h <i>Oncorhynchus mykiss</i> mg/L LC ₅₀ 27 - 29.5: 96 h <i>Pimephales promelas</i> mg/L LC ₅₀ flow-through 29.7: 96 h <i>Pimephales promelas</i> mg/L LC ₅₀ static 10.0 - 33.0: 96 h <i>Lepomis macrochirus</i> mg/L LC ₅₀ static		39: 48 h <i>Daphnia magna</i> mg/L EC ₅₀

Persistence and degradability

Not determined.

Bioaccumulative potential

Not determined.

Mobility in soil

Chemical name	Partition coefficient
Proprietary solvent	3.1

Other adverse effects

Not determined.

13. DISPOSAL CONSIDERATIONS**Disposal methods****Disposal of wastes**

Do not contaminate water, food, or feed by storage or disposal. END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.

Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use 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

Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical name	California hazardous waste status
Cyhalothrin, lambda- (CAS No. 91465-08-6)	Toxic

14. TRANSPORT INFORMATION

Note: The transport classification(s) and information provided in this section are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by mode of transportation, container volume and package sizes. The transportation of materials and related activities are subject to all applicable laws, rules and requirements of regional and/or country regulations. Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

TDG**UN/ID number****Proper shipping name****Hazard class****Packing group****Marine pollutant****D.O.T.**

Note: Packages with inner packaging not over 5 L (1.3 gallon) each may be reclassified as Limited Quantity.

Inner packages greater than 5 L/ 1.3 gallon:

UN/ID number UN3352
UN proper shipping name Pyrethroid pesticide, liquid, toxic
Transport hazard class(es) 6.1
Packing group III
Marine pollutant Yes, if inner package is greater than 119 gallons

IATA

UN number UN3352
Proper shipping name Pyrethroid pesticide, liquid, toxic
Transport hazard class(es) 6.1
Packing group III
Marine pollutant Yes

IMDG code

UN number UN3352
Proper Shipping Name Pyrethroid pesticide, liquid, toxic
Transport hazard class(es) 6.1
Packing group III
Marine pollutant Yes

15. REGULATORY INFORMATION

International inventories

Chemical name	TSCA	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Cyhalothrin, lambda- (CAS No. 91465-08-6)	X							

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

AICS – Australian Inventory of Chemical Substances

US Federal regulations

SARA 311/312

Acute health hazard	Yes
Chronic health hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive hazard	No

SARA 311/312

Not determined

US State regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State 'Right-to-Know' regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Proprietary solvent		X	X

EPA pesticide registration number 66222-223

EPA statement

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:

EPA Pesticide Label

Signal Word: Caution

Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Wear appropriate protective clothing.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Skin exposure may also result in a sensation described as tingling, itching, burning, or prickly feeling. Onset may occur immediately to 4 hours after exposure and may last 2-30 hours, without damage. Wash exposed areas once with soap and water. Relief from the skin sensation may be obtained by applying an oil-based cream.

Difference between SDS and EPA pesticide label

	EPA	OSHA
Signal Word	Caution	Danger
Acute toxicity – Oral	Harmful if swallowed	Harmful if swallowed

Acute toxicity – Dermal	Harmful if absorbed through the skin	May be harmful in contact with skin
Acute toxicity – Inhalation (Dusts/Mists)	N/A	Fatal if inhaled
Skin corrosion/irritation	N/A	Causes mild skin irritation
Serious eye damage/eye irritation	Causes moderate eye irritation	N/A
Skin sensitization	Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals	May cause an allergic skin reaction

Canadian regulations

There are Canada-specific environmental requirements for handling, use and disposal of this pest control product that are indicated on the product label.

Hazardous Products Regulations Information

This product has been classified in accordance with the amended *Hazardous Products Act* (HPA) and the *Hazard Criteria of the Hazardous Products Regulations* (HPR), and the SDS contains all the information required by the HPR.

Hazardous Products Act Information

Pest control products, as defined in subsection 2(1) of the *Pest Control Products Act* (PCPA), are excluded from the application of the Hazardous Products Act (that is, pest control products are exempt from the supplier labelling and SDS requirements of the Hazardous Products Act and Regulations). This product is exempt under WHMIS 2015 but has voluntarily been classified according to the WHMIS 2015 standard.

Pest Control Products Act registration number: 32427

Read the approved label, authorized under the *Pest Control Products Act*, prior to using or handling the pest control product.

Product statement

This chemical is a pest control product registered and regulated by Health Canada's Pest Management Regulatory Agency (PMRA) and is subject to certain labelling requirements under the Pest Control Products Act. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets, and for workplace labels of non-PCPA registered chemicals. Read the approved label, authorized under the Pest Control Products Act, prior to using or handling the pest control product. The following is the hazard information required on the pest control product label:

PCPA label hazard communications

SIGNAL WORD & HAZARDS: (CAUTION, WARNING or DANGER)

KEEP OUT OF REACH OF CHILDREN

READ THE LABEL BEFORE USING

e.g., May be harmful if swallowed, inhaled or absorbed through skin. Avoid breathing spray mist. Use with adequate ventilation. Avoid contact with skin, eyes and clothing.

Difference between SDS and Pest Control Products Act label

	PCPA	SDS
Signal word	Warning Poison	Danger
Acute toxicity – Inhalation	N/A	Fatal if inhaled.
Acute toxicity – Oral	Harmful or fatal if swallowed.	Harmful if swallowed.
Acute toxicity – Dermal	N/A	N/A
Serious eye damage/eye irritation	May irritate eyes.	N/A
Skin corrosion/irritation	N/A	N/A
Skin sensitization	Potential skin sensitizer.	May cause an allergic skin reaction.

16. OTHER INFORMATION**NFPA****Health hazards**

1

Flammability

0

Instability

0

Special hazards

None

HMIS**Health hazards**

1

Flammability

0

Physical hazards

0

Personal protection

See Section 8

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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.

End of Safety Data Sheet