

MATERIAL SAFETY DATA SHEET

Tenkoz Cypermethrin Insecticide

Revision: 6

Date Issued: 11/19/12

SECTION 1

PRODUCT AND COMPANY IDENTIFICATION

Company:

Tenkoz, Inc.
1725 Windward Concourse, Ste 410
Alpharetta, GA 30005

Product Information:

www.tenkoz.com

Product Name:

Tenkoz Cypermethrin Insecticide

EPA Reg. No:

70506-20-55467

Product Use:

Insecticide

FOR MEDICAL EMERGENCIES, contact the Rocky Mountain Poison Control Center at 1-866-673-6671 (24 hrs)

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300 (24 hrs)

SECTION 2

HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Mild eye irritation.
May cause reversible skin reaction.

WARNING!

Appearance: Yellow

Physical State: Liquid

Odor: Aromatic

Potential Health Effects

- Skin contact
- Contains aromatic hydrocarbons- aspiration hazard

Eyes: May cause tearing.

Skin: Skin contact may produce skin sensations such as numbing, burning, or tingling. These sensations are reversible within 12 - 24 hours of onset. .

Ingestion: Mild to severe lung injury may occur if material is drawn into the lungs during swallowing, or during vomiting after swallowing.

SECTION 3

COMPOSITION/INFORMATION ON INGREDIENTS

<u>CHEMICAL NAME</u>	<u>CAS#</u>	<u>WT. %</u>	<u>OSHA PEL</u>
Cypermethrin cis/trans +/- 40/60	52315-07-8	30.6	N/A
Mineral Oil	64742-55-8	<30	N/A
Aromatic hydrocarbons		<40	N/A

SECTION 4

FIRST AID MEASURES

IF SWALLOWED:

Call a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING:

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF IN EYES:

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF INHALED:

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 poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN: Contains aromatic hydrocarbons. Do not induce vomiting due to aspiration hazard; consideration should be given to gastric lavage. Ingestion of a large amount might result in central nervous system stimulation.

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SECTION 5 FIRE FIGHTING MEASURES

Flammable Explosive Properties:

Flash Point: 50°C / > 122°F
Method: Pensky Martin Closed Cup
Autoignition Temperature: Not available
Flammability Limits in Air: Not established
Extinguishing Media: Foam, Carbon dioxide (CO2) Dry chemical.
Fire/Explosion Hazard: Combustible material. Heated material can form flammable and explosive vapors with air.
Hazardous Combustion Products: Carbon monoxide, Carbon dioxide (CO2), Hydrogen chloride, chlorine, hydrogen cyanide.

NFPA

Health: 2

Flammability: 2

Instability: 0

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with the skin and the eyes. Use personal protective equipment. Remove all sources of ignition.
Environmental Precautions: Keep material out of lakes, streams, ponds and sewer drains. Dike to confine spill and absorb with an absorbent 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 for Clean-up: Remove all ignition sources. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

SECTION 7 HANDLING AND STORAGE

Handling: Keep out of reach of children. Wear personal protective equipment. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Keep away from flames and hot surfaces. Remove and wash contaminated clothing before re-use.
Storage: Store in cool/well-ventilated place. Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

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. 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.

Personal Protective Equipment

Eye/face Protection: Where there is potential for eye contact have eye flushing equipment available. Use eye protection to avoid eye contact. .
Skin Protection: Wear protective gloves/clothing. Socks and footwear.
Respiratory Protection: Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full face piece 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:

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

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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Yellow	Odor:	Aromatic
Physical State:	Liquid	pH:	4.71
Boiling Point/Range:	Not available	Melting Point/Range:	Not available
Specific Gravity:	0.971	Solubility:	Emulsifies
Evaporation Rate:	Not available	Vapor Pressure:	Not available
Vapor Density:	Not available	VOC Content:	Not available
Viscosity:	Not available	Molecular Weight:	8.095 lb/gal
Bulk Density:	No data available	Percent Solids:	Not available
Percent Volatiles:	Not available		

SECTION 10 STABILITY AND REACTIVITY

Stability:	Stable under recommended storage conditions
Conditions to Avoid:	Heat, flames and sparks
Incompatible Materials:	No materials to be especially mentioned
Hazardous Decomposition Products:	Carbon monoxide. Carbon dioxide (CO ₂). Hydrogen cyanide. Hydrogen chloride. Chlorine.
Possibility of Hazardous Polymerization:	None under normal processing

SECTION 11 TOXICOLOGICAL INFORMATION

Acutotoxicity (Formulation):	
ACUTE ORAL LD₅₀:	355 mg/kg
ACUTE DERMAL LD₅₀:	>2,000 mg/kg (rabbit)
ACUTE INHALATION LC₅₀:	>2.02 mg/L (4 hrs, rat)
EYE IRRITATION:	moderately irritating
DERMAL IRRITATION:	moderately irritating
DERMAL SENSITIZATION:	not a sensitizer

Signs of toxicity in laboratory animals included hypertonicity, ataxia, lethargy, convulsions, gasping, salivation, dyspnea, and alopecia.

Chronic Toxicity & Carcinogenicity

Cypermethrin: In animal studies cypermethrin did not cause reproductive toxicity, teratogenicity, neurotoxicity or carcinogenicity in male and female rats and male mice. Cypermethrin caused an increase in benign lung tumors in female mice at 1600 ppm in the diet. The EPA concluded on a weight of evidence approach that cypermethrin represents a low oncogenic potential to female mice at this dose level (approximately 228 mg/kg/day). Liver enlargement is often noted in laboratory animals that have ingested large doses of cypermethrin in their life span. An overall absence of genotoxicity has been demonstrated in tests of mutagenicity, DNA damage and chromosome aberrations.

MATERIAL SAFETY DATA SHEET

Tenkoz Cypermethrin Insecticide

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SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity:

Cypermethrin:

Is rapidly degraded in soil with a half life of 2-4 weeks. It is readily hydrolyzed under basic conditions; hydrolysis half-life period can be 20-29 days. Cypermethrin has a high affinity for organic matter and a Log Pow of 5.0; yet, because of the ease with which the material undergoes degradation, it has very low potential for bioconcentration (BCF= 17), and it is not mobile in soil.

Cypermethrin is considered extremely toxic to fish and aquatic arthropods, and has LC50 values which range from 0.004 ug/L to 3.6 ug/L. The aquatic arthropods tended to be some of the more sensitive species. Care should be taken to avoid contamination of the aquatic environment. Cypermethrin is slightly toxic to birds and oral LD50 values are greater than 10,248 mg/kg.

SECTION 13 DISPOSAL CONSIDERATIONS

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. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. Do not apply directly to wetlands or water.

Contaminated Packaging:

Non refillable container. Do not reuse this container.

(For containers less than 5 gallons). Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(For containers larger than 5 gallons). Clean container promptly after emptying. Triple rinse as follows. Empty the remaining contents into application equipment or a mix tank. Fill container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. .

SECTION 14 TRANSPORT INFORMATION

DOT

When shipped domestically by highway in non-bulk containers this product can be shipped as not regulated.

When shipped in bulk, by vessel, or internationally use the following shipping description:

Proper Shipping Name

Flammable liquid, n.o.s (aromatic hydrocarbon)

Hazard Class

3

UN-No

UN1993

Packing Group

PG III

Marine pollutant

Y (Cypermethrin)

ICAO

UN-No

UN1993

Proper Shipping Name

Flammable liquid, n.o.s (aromatic hydrocarbon)

Hazard Class

3

Packing Group

III

Description

Marine pollutant (Cypermethrin)

MATERIAL SAFETY DATA SHEET

Tenkoz Cypermethrin Insecticide

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SECTION 14 TRANSPORT INFORMATION (cont.-)

IATA

UN-No UN1993
Proper Shipping Name Flammable liquid, n.o.s (aromatic hydrocarbon)
Hazard Class 3
Packing Group PG III
ERG Code 3L
Description Marine pollutant (Cypermethrin)

IMDG/IMO

Proper Shipping Name Flammable liquid, n.o.s (aromatic hydrocarbon)
Hazard Class 3
UN-No UN1993
Packing Group PG III
EmS No. F-E, S-E

Special Provisions

Marine Pollutant

223, 274, 330, 944, 955
 This product contains a chemical which is listed as a severe marine pollutant according to IMDG/IMO Specified Class 1 Substances PRTR

SECTION 15 REGULATORY INFORMATION

International Inventories:

Chemical Name	TSCA	DSL	NDSL	EINECS/ELINCS	ENCS	CHINA	KECL	AICS
Cypermethrin cis/trans +/- 40/60				X		X	96-36; 97-1-243; KE-05-0375	X
Mineral oil	Present	X		X	(9)-1692	X	KE-12553	X
Aromatic hydrocarbons	Present	X		X	(9)-1698	X	KE-31662	X

USA

Federal Regulations

SARA 313

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 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

Chronic Health Hazard No
Acute Health Hazard Yes
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

Clean Water Act

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any HAPs.

CERCLA

RCRA

Pesticide Information

Component	FIFRA Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Cypermethrin cis/trans +/- 40/60			X	
Aromatic hydrocarbons (<40)			X	

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State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

State Right-to-Know

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Cypermethrin cis/trans +/- 40/60	Listed.				
Mineral oil	Listed.				

International Regulations

Mexico - Grade

Not available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

Not determined

SECTION 16 OTHER INFORMATION

Revision Date 20-Nov-2012

Revision Summary

Update section 13; Update section 8; Update section 2

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Revision 6