Safety Data Sheet

Issue Date: 12-Jan-2018

Revision Date: 22-Jan-2018

Version 1

1. IDENTIFICATION

<u>Product Identifier</u> Product Name	Gharda Permethrin Technical	
Other means of identification SDS #	GCI-004	
Registration Number(s) UN/ID No	EPA Reg. No. 93182-5 UN3349	
Recommended use of the chemic	cal and restrictions on use	
Recommended Use	EPA registered insecticide. Liquid technical concentrate. For manufacture use in agriculture insect control products. Refer to product label for further details.	
Details of the supplier of the safe	ety data sheet	
Manufacturer Address		
GHARDA CHEMICALS INTERNAT	IONAL INC.	
760 Newtown-Yardley Road		
Suite 110		
Newtown, PA USA 18940		
Website: www.ghardausa.com		
For further information contact: 1 (215) 968-9474		
Emergency Telephone Number		

Emergency Telephone (24 hr)

MEDICAL EMERGENCY (24 hr): PROPHARMA (866)-359-5660 TRANSPORTATION OR SPILL (24 hr): CHEMTREC (800) 424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview This chemical is a product registered by the Environmental Protection Agency 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-EPA registered chemicals. Please see Section 15 for additional EPA information.

Appearance Viscous liquid

Physical state Liquid

Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin sensitization	Category 1

<u>Signal Word</u> Warning

Hazard statements

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



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Contaminated work clothing must not be allowed out of the workplace Wear protective gloves

Precautionary Statements - Response

IF ON SKIN: Wash with plenty of water and soap If skin irritation or rash occurs: Get medical advice/attention Wash contaminated clothing before reuse IF INHALED: Remove person to fresh air and keep comfortable for breathing Call a poison center or doctor/physician if you feel unwell IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell Rinse mouth

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Γ	Chemical Name	CAS No.	Weight-%
	Permethrin	52645-53-1	96.2

If Chemical Name/CAS No 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

First Aid Measures	
General Advice	Provide this SDS to medical personnel for treatment.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical attention.
Skin Contact	Remove contaminated clothing and shoes. Wash affected areas thoroughly with soap and water for at least 15 minutes. Seek medical attention.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion	Immediately call a poison center or doctor/physician. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Have person sip a glass of water if able to swallow.
Most important symptoms and effects	
Symptoms	Harmful if swallowed. Harmful if inhaled. May cause an allergic skin reaction. Nervousness,

anxiety, ataxia, convulsion and allergic manifestation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray (fog). Foam.

Unsuitable Extinguishing Media High volume water jet.

Specific Hazards Arising from the Chemical

Not determined.

Hazardous Combustion Products Hydrogen chloride. Nitrogen oxides (NOx). Under certain fire conditions, traces of other toxic gases cannot be excluded.

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. Collect contaminated fire extinguishing water separately. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Avoid contact with spilled product or contaminated areas. Avoid contact with skin, eyes or
	clothing. Use personal protection recommended in Section 8. Keep unprotected persons
	away. Ensure adequate ventilation.

Environmental precautions

Environmental precautions	Do not allow into any sewer, on the ground or into any body of water. See Section 12 for
	additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up	Absorb spilled material on china clayor saw dust and carefully sweep up the spilled
	material and place it in a suitable container for disposal. For waste disposal, see section 13
	of the SDS.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling	Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Wear protective gloves. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughlyafter handling. Do not eat, drink or smoke when using this product. Use onlyoutdoors or in a
	well-ventilated area.

Conditions for safe storage, including any incompatibilities

Storage ConditionsKeep container tightly closed and store in a cool, dry and well-ventilated place. Keep away
from foodstuffs, beverages, and feed. Keep away from heat. Protect from direct sunlight.
Protect from humidity and water. Store between 0°C and 30 °C.

Incompatible Materials Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines	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	Showers. Eyewash stations. Ventilation systems.
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Individual protection measures, such as personal protective equipment

Eye/Face Protection	Tightly sealed goggles.
Skin and Body Protection	Choose chemical resistant gloves. The glove material has to be impermeable and resistant to the product/substance. Recommend are gloves made of: Nitrile rubber (NBR, = 0.38 mm thickness), Polyvinyl chloride (PVC, = 0.7 mm thickness).
Respiratory Protection	Respiratory single serving mask DIN EN 149 with filter FFP2.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance Color	Liquid Viscous liquid Pale yellow to light brown	Odor Odor Threshold	Not determined Not determined
Property	Values	Remarks • Method	
pH	Not determined		
Melting Point/Freezing Point	35.5-36.5 °C / 97.9-97.7 °F		
Boiling Point/Boiling Range	200 °C / 392 °F	0.1 mmHg	
Flash Point	230 °C / 446 °F		
Evaporation Rate	Not determined		
Flammability (Solid, Gas)	Liquid - Not applicable		
Flammability Limits in Air			
Upper Flammability Limits	Not determined		
Lower Flammability Limit	Not determined		
Vapor Pressure	0.002mPa		

Vapor Density	Not determined
Relative Density	1.29 g/cm3
Water Solubility	6 x 10-3 mg/l
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	Not determined
Explosive Properties	Not determined
Oxidizing Properties	Not determined

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.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

Strong acids. Strong bases.

Hazardous Decomposition Products

May emit toxic fumes under fire conditions.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	
Eye Contact	Avoid contact with eyes.
Skin Contact	Avoid contact with skin.
Inhalation	Harmful if inhaled.
Ingestion	Harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Permethrin	= 383 mg/kg (Rat) = 220 mg/kg (> 2 g/kg (Rabbit) = 1750 mg/kg (> 0.69 mg/L (Rat)4 h
52645-53-1	Rat)	Rat) > 5000 mg/kg (Rat)	

Information on physical, chemical and toxicological effects

Symptoms

Please see section 4 of this SDS for symptoms.

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

Sensitization May cause an allergic skin reaction.

Carcinogenicity

Group 3 IARC components are "not classifiable as human carcinogens".

Chemical Name	ACGIH	IARC	NTP	OSHA
Permethrin		Group 3		Х
52645-53-1				

Legend

IARC (International Agency for Research on Cancer) Group 3 - Not Classifiable as to Carcinogenicity in Hurrans

OSHA (Occupational Safety and Health Administration of the US Department of Labor) X - Present

Numerical measures of toxicity

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

ATEmix (oral) 500.00 mg/kg ATEmix (inhalation-dust/mist) 1.50 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects. Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Permethrin		0.008 - 0.03: 96 h Pimephales	
52645-53-1		promelas mg/L LC50 flow -through	
		0.015: 96 h Cyprinus carpio mg/L	
		LC50 flow -through 0.00049 -	
		0.00097:96 h Oncorhynchus mykiss	
		mg/L LC50 flow -through 0.001 -	
		0.009: 96 h Pimephales promelas	
		mg/L LC50 static 0.0108: 96 h	
		Lepomis macrochirus mg/L LC50	
		0.0017 - 0.0048: 96 h	
		Oncorhynchus mykiss mg/L LC50	
		static 0.0052 - 0.0077: 96 h	
		Cyprinus carpio mg/L LC50 0.00188	
		- 0.00336: 96 h Lepomis	
		macrochirus mg/L LC50 static	
		0.00079: 96 h Lepomis macrochirus	
		mg/L LC50 flow -through	

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

<u>Mobility</u>

Chemical Name	Partition Coefficient
Permethrin	6.5
52645-53-1	

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	This pesticide is extremely toxic to aquatic organisms, including fish and invertebrates. DO NOT discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other bodies of waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. DONOT contaminate water when disposing of equipment washwaters. DONOT discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or the Regional Office of the Environmental Protection Agency.
Contaminated Packaging	Do not reuse container. Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Permethrin	Toxic
52645-53-1	

14. TRANSPORT INFORMATION

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

Packing Group

Marine Pollutant

UN/ID No Proper Shipping Name Hazard Class Packing Group Marine Pollutant	UN3349 Pyrethroid, solid, toxic (Permethrin) 6.1 III Yes.
IATA_ UN/ID No Proper Shipping Name Hazard Class Packing Group Marine Pollutant	UN3349 Pyrethroid, solid, toxic (Permethrin) 6.1 III Yes
<u>IMDG</u> UN/ID No Proper Shipping Name Hazard Class	UN3349 Pyrethroid, solid, toxic (Permethrin) 6.1

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Yes

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/E LINCS	ENCS	IECSC	KECL	PICCS	AICS
Permethrin	Х		Х	Present	Х	Present	Х	Х

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

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).

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	CAS No.	Weight-%	SARA 313 - Threshold Values %
Permethrin - 52645-53-1	52645-53-1	96.2	1.0

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)

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
Permethrin	Х	Х	
52645-53-1			

EPA Pesticide Registration Number EPA Reg. No. 93182-5

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. Wash thoroughly with soap and water after handling

Difference between SDS and EPA pesticide label

	EPA	OSHA
Signal Word	Caution	Warning
Acute toxicity - Oral	Harmful if swallowed	Harmful if swallowed
Acute toxicity - Inhalation	NA	Harmful if inhaled
Skin sensitization	NA	May cause an allergic skin reaction

16. OTHER INFORMATION

NFPA

HMIS

Health Hazards Not determined Health Hazards Not determined

12-Jan-2018

22-Jan-2018

New format

Flammability Not determined Flammability Not determined Instability Not determined Physical hazards Not determined Special Hazards Not determined Personal Protection Not determined

Disclaimer

Issue Date:

Revision Date:

Revision Note:

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