

Material Safety Data Sheet

Stingray Wasp & Hornet Jet Spray

SDS #: 6594-A
Revision Date: 2013-01-09
Version 2



This MSDS has been prepared to meet U.S. OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Workplace Hazardous Materials Information System (WHMIS) requirements.

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	Stingray Wasp & Hornet Jet Spray
Recommended use	Insecticide
Manufacturer FMC Corporation Agricultural Products Group 1735 Market Street Philadelphia, PA 19103 General Information: Phone: (215) 299-6000 E-Mail: msdsinfo@fmc.com	Emergency telephone number For leak, fire, spill or accident emergencies, call: +1 800 / 424 9300 (CHEMTREC - U.S.A.) +1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries) Medical Emergencies: (800) 331-3148 (U.S.A. & Canada) +1 (651) 632-6793 (All Other Countries - Collect)

2. Hazards identification

Appearance	Aerosolized liquid
Physical state	aerosol
Odor	No information available.
Physical or Chemical Hazards	.
Flammable properties	Combustible liquid. Contents under pressure.
Potential health effects	
Acute effects	
Eyes	Avoid contact with eyes. Contact with eyes may cause irritation.
Skin	Prolonged or repeated contact may dry skin and cause irritation.
Inhalation	May be harmful if inhaled. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.
Ingestion	May be harmful if swallowed. Potential for aspiration if swallowed.
Chronic effects	Repeated or prolonged exposure may cause central nervous system effects. Chronic exposure to aromatic hydrocarbons may cause liver and kidney damage.

3. Composition/information on ingredients

Hazardous ingredients

Chemical Name	CAS-No	Weight %
Petroleum distillates, hydrotreated light	64742-47-8	>80
Carbon Dioxide	124-38-9	<5
Piperonyl butoxide	51-03-6	0.5
Permethrin	52645-53-1	0.25
Tetramethrin	7696-12-0	0.1

4. First aid measures

Eye contact	Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.
Skin contact	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.
Inhalation	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
Ingestion	Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not induce vomiting or give anything by mouth to an unconscious person.
Notes to physician	This product is a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided. Contains petroleum distillate. Vomiting may cause aspiration pneumonia.

5. Fire-fighting measures

Flammable properties	Combustible liquid. Contents under pressure.
Flash Point	Non-flammable per flame projection test. > 76.7 °C / > 170 °F
Sensitivity to Mechanical Impact	not applicable
Sensitivity to Static Discharge	not applicable
Suitable extinguishing media	Foam. Carbon dioxide (CO ₂). Dry chemical. Water spray.
Specific hazards arising from the chemical	Contents under pressure. Temperatures >54.4°C (>130°F) may cause bursting. Keep containers cool to avoid bursting.
Protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and protective suit.
NFPA	
Health Hazard	2
Flammability	3
Stability	0
Special Hazards	-

6. Accidental release measures

Personal precautions	Isolate and post spill area. Remove all sources of ignition. Ventilate the area. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8. If ventilation is not possible wear full protection suit and chemical protective equipment.
Environmental precautions	Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.

Methods for cleaning up Transfer damaged cartridges or cans to containers for later disposal. Clean and neutralize spill area, tools and equipment by washing with bleach water and soap. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13. Rinsate may be disposed at a waste water treatment plant.

Other For further clean-up instructions call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

7. Handling and storage

Handling Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

Storage Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children and animals. Store in original container only.

8. Exposure controls/personal protection

Exposure guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Carbon Dioxide 124-38-9	STEL 30000 ppm TWA: 5000 ppm	TWA: 5000 ppm TWA: 9000 mg/m ³	IDLH: 40000 ppm TWA: 5000 ppm TWA: 9000 mg/m ³ STEL: 30000 ppm STEL: 54000 mg/m ³	
Chemical Name	British Columbia	Quebec	Ontario TWAEV	Alberta
Petroleum distillates, hydrotreated light 64742-47-8	TWA: 200 mg/m ³ Skin			
Carbon Dioxide 124-38-9	TWA: 5000 ppm STEL: 15000 ppm	TWA: 5000 ppm TWA: 9000 mg/m ³ STEL: 30000 ppm STEL: 54000 mg/m ³	TWA: 5000 ppm STEL: 30000 ppm	TWA: 5000 ppm TWA: 9000 mg/m ³ STEL: 30000 ppm STEL: 54000 mg/m ³

Occupational exposure controls

Engineering measures Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Personal Protective Equipment

General Information If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.

Respiratory protection For dust, splash, mist or spray exposures wear a filtering mask.

Eye/face protection For dust, splash, mist or spray exposure, wear chemical protective goggles or a face-shield

Skin and body protection Wear long-sleeved shirt, long pants, socks, shoes, and gloves.

Hand protection Protective gloves

Hygiene measures Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. Launder work clothing separately from regular household laundry.

9. Physical and chemical properties

Appearance	Aerosolized liquid
Color	No information available.
Physical state	aerosol
Odor	No information available.
pH	No information available.
Melting Point/Range	No information available.
Freezing point	No information available.
Boiling Point/Range	not applicable
Flash Point	Non-flammable per flame projection test. > 76.7 °C / > 170 °F
Evaporation rate	not applicable
Autoignition Temperature	not applicable
Flammable properties	Combustible liquid. Contents under pressure.
Vapor pressure	4913 mm Hg
Vapor density	No information available.
Specific Gravity	0.78
Water solubility	No information available
Percent volatile	No information available.
Partition coefficient:	not applicable
Viscosity	No information available.
Oxidizing properties	not applicable

10. Stability and reactivity

Stability	Stable.
Conditions to avoid	Heat, flames and sparks
Materials to avoid	Strong oxidizing agents. Alkalis.
Hazardous decomposition products	Carbon oxides.
Hazardous polymerization	Hazardous polymerization does not occur.

11. Toxicological information

Ingestion	May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Potential for aspiration if swallowed. Vomiting after ingestion of this product may cause aspiration of aromatic hydrocarbons into the lungs, which may result in fatal pulmonary edema.
Inhalation	May be harmful if inhaled. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.

Chronic Toxicity - Other Ingredient(s)

Chronic Toxicity	Repeated or prolonged exposure may cause central nervous system effects. Chronic exposure to aromatic hydrocarbons may cause liver and kidney damage.
Carcinogenicity	Contains no ingredient listed as a carcinogen Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH).
Mutagenicity	Piperonyl butoxide ether may affect mammalian liver microsomal detoxification enzymes. Permethrin: Did not show mutagenic effects in animal experiments.

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Reproductive toxicity Permethrin: No toxicity to reproduction.

Neurological Effects Permethrin: Clinical signs of neurotoxicity include altered motor activity and FOB effects, with no signs of histopathology.

Developmental Toxicity Permethrin: Not teratogenic in animal studies.

Target Organ Effects Mice fed 0.3 or 0.9% piperonyl butoxide in the diet for 20 days had increased liver weight and other signs of liver toxicity. Male rats given up to 2.4% of piperonyl butoxide in the diet for up to 12 weeks had clinical and histologic signs of liver damage; the highest dose group showed preneoplastic changes, including enlargement of hepatocyte nuclei and multinucleated cells. Kidney damage was also seen, Permethrin: Long-term feeding studies in animals resulted in increased liver and kidney weights, induction of the liver microsomal drug metabolizing enzyme system and histopathological changes in the lungs and liver.

Chronic Toxicity - Other Ingredient(s) Chronic exposure to aromatic hydrocarbons may cause headaches, dizziness, loss of sensations or feelings (such as numbness), and liver and kidney damage.

Chemical Name	ACGIH	IARC	NTP	OSHA	NIOSH - Target Organs
Carbon Dioxide					respiratory system, CVS

12. Ecological information

Ecotoxicity

Piperonyl butoxide (51-03-6)

Active Ingredient(s)	Duration	Species	Value	Units:
Piperonyl Butoxide	LC50	Fish	3.94	ppm
	LD50	Bee	25	µg/bee
	LD50	Bobwhite quail	>2250	mg/kg
	LD50	Mallard duck	>5620	ppm

Permethrin (52645-53-1)

Active Ingredient(s)	Duration	Species	Value	Units:
Permethrin	LC50	aquatic arthropods	0.02 - 7.6	µg/L
	LC50	Fish	0.05 - 315	µg/L
	LD50 Oral	Bobwhite quail	>5200	mg/kg
	LD50 Oral	Mallard duck	>5200	mg/kg
	LD50	Bee	0.026 - 0.17	µg/bee

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Petroleum distillates, hydrotreated light		LC50= 45 mg/L Pimephales promelas 96 h LC50= 2.2 mg/L Lepomis macrochirus 96 h LC50= 2.4 mg/L Oncorhynchus mykiss 96 h		LC50 = 4720 mg/L 96 h

Environmental Fate

Permethrin (52645-53-1)

Active Ingredient(s)	Type of Test	Result
Permethrin	Bioconcentration factor (BCF) Bluefill sunfish (Lepomis macrochirus)	535
	Half-life in soil	~30 days
	log Pow	6.1

	Mobility in soil	Not expected to reach groundwater
	Stability in water	Stable to hydrolysis over a wide range of pH values.

13. Disposal considerations

Waste disposal methods Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance.

Contaminated packaging Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions.

14. Transport information

DOT USDOT is requiring that products formerly classified as "Consumer Commodity, ORM-D" transition to "Limited Quantity" by 1/1/2014. During the transition period the 49CFR carton shipping marks may be Consumer Commodity (old) or Limited Quantity Diamond (new). Please prepare shipping documents to match the carton mark.

Proper shipping name Consumer Commodity
Hazard class ORM-D

TDG
UN/ID No UN1950
Proper shipping name Aerosols
Hazard Class 2.1

ICAO/IATA
UN/ID No ID8000
Proper shipping name Consumer Commodity
Hazard Class 9

IMDG/IMO
UN/ID No UN1950
Proper shipping name Aerosols
Hazard Class 2.1

15. Regulatory information

U.S. 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 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Piperonyl butoxide	51-03-6	0.5	1.0
Permethrin	52645-53-1	0.25	1.0
Tetramethrin	7696-12-0	0.1	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	yes
Chronic Health Hazard	yes
Fire Hazard	yes
Sudden Release of Pressure Hazard	yes
Reactive Hazard	no

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.

International Regulations

Mexico - Grade

Moderate risk, Grade 2

Chemical Name	Mexico - Pollutant Release and Transfer Register - Reporting Emissions for Fabrication, Process or Use -Threshold Quantities	Pollutant Release and Transfer Register - Reporting Emissions - Threshold Quantities
Carbon Dioxide	100000	100000 kg/yr

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

B3 Combustible liquid



16. Other information

Revision Date: 2013-01-09
Reason for revision: (M)SDS sections updated.

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