

Material Safety Data Sheet

Stingray Wasp & Hornet Jet Spray

MSDS #: 6594-A
Revision Date: 2014-04-29
Version 2.01



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

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	Stingray Wasp & Hornet Jet Spray
Recommended use:	Insecticide
<u>Manufacturer</u>	<u>Emergency telephone number</u>
FMC Corporation Agricultural Solutions 1735 Market Street Philadelphia, PA 19103 General Information: Phone: (215) 299-6000 E-Mail: msdsinfo@fmc.com	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: 1 800 / 331-3148 (PROSAR - U.S.A. & Canada) 1 651 / 632-6793 (PROSAR - All Other Countries - Collect)

2. HAZARDS IDENTIFICATION

<u>Appearance</u>	Aerosolized liquid
<u>Physical state</u>	aerosol
<u>Odor</u>	No information available.
<u>Physical or Chemical Hazards</u>	
Flammable properties	Combustible liquid. Contents under pressure.
<u>Potential health effects</u>	
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 %
Carbon Dioxide	124-38-9	<5
Piperonyl butoxide	51-03-6	0.5
Permethrin	52645-53-1	0.25
Petroleum distillates, hydrotreated light	64742-47-8	>80
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 (within the U.S. and Canada) 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 (CO₂). Dry chemical. Water spray.

Specific hazards arising from the chemical Contents under pressure. Temperatures (>54.4°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	2
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. BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 130 °F. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects.
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 CONTROL / PERSONAL PROTECTIONExposure 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	Mexico: TWA 5000 ppm Mexico: TWA 9000 mg/m ³ Mexico: STEL 15000 ppm Mexico: STEL 27000 mg/m ³
Chemical Name	British Columbia	Quebec	Ontario TWAEV	Alberta
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
Petroleum distillates, hydrotreated light 64742-47-8	TWA: 200 mg/m ³ Skin			

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.
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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

Information on basic physical and chemical properties

Appearance	Aerosolized liquid
Color	No information available.
Physical state	aerosol
Odor	No information available.
pH	
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
Flammable properties	Combustible liquid. Contents under pressure.
Vapor pressure	4913 mm Hg
Vapor density	No information available
Specific Gravity	0.78
Water solubility	Insoluble in water
Percent volatile	No information available
Partition coefficient	Not applicable
Viscosity	No information available

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

Acute effects

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 effects

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.

Reproductive toxicity Permethrin: No toxicity to reproduction in animal studies.

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	48 h EC50	Crustacea	0.001	mg/L
	72 h EC50	Algae	0.0125	mg/L
	96 h LC50	Fish	0.79	µg/L
	21 d NOEC	Crustacea	0.039	µg/L
	96 hr NOEC	Algae	0.9	µg/L
	21 d NOEC	Fish	0.3	µg/L

Environmental Fate

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 12/31/2020. 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
Hazard class

Consumer Commodity
ORM-D

TDG

UN/ID No
Proper shipping name
Hazard Class

UN1950
Aerosols
2.1

ICAO/IATA

UN/ID No
Proper shipping name
Hazard Class

ID8000
Consumer Commodity
9

IMDG/IMO

UN/ID No
Proper shipping name
Hazard Class

UN1950
Aerosols
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	Carcinogen Status	Mexico
Carbon Dioxide		Mexico: TWA 5000 ppm Mexico: TWA 9000 mg/m ³ Mexico: STEL 15000 ppm Mexico: STEL 27000 mg/m ³
Component	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 124-38-9 (<5)	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: 2014-04-29
Reason for revision: (M)SDS sections updated.

Disclaimer

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End of Material Safety Data Sheet