

SAFETY DATA SHEET

Gazette 5G

SDS # : 7539-A

Revision date: 2016-06-01

Version 1.02



1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Gazette 5G
Active Ingredient(s) Carbosulfan
Synonyms CARBOSULFAN (FMC 35001): 2,3-dihydro-2,2-dimethylbenzofuran-7-yl (dibutylaminothio)methylcarbamate (CAS name); 2,3-dihydro-2,2-dimethyl-7-benzofuranyl [(dibutylamino)thio]methylcarbamate (IUPAC name)
Formula 7539
Recommended Use: Insecticide.

Manufacturer/Supplier

FMC (Suzhou) Crop Care Co. Ltd
99 Jiepu Road, Shengpu, Suzhou Industrial
Park, Jiang Su, PRC 215126
Emergency Telephone Numbers:
(86)-(0512)-(62863988)
Fax: (86)-(0512)-(62863900)

Emergency telephone number

For leak, fire, spill, or accident emergencies, call:
1 800 / 424-9300 (CHEMTREC - U.S.A. & Canada)
1 703 / 527 3887 (CHEMTREC - All Other Countries - Collect)

Medical Emergencies:
1 800 / 331-3148 (PROSAR - U.S.A. & Canada)
1 651 / 632-6793 (PROSAR - All Other Countries - Collect)
Responsible/issuing person

Official National Emergency Telephone
Number or Poison Control Center Number

2. HAZARDS IDENTIFICATION

Classification of the chemical

Acute oral toxicity	Category 4
Acute dermal toxicity	Category 5
Acute inhalation toxicity - dust/mist	Category 2
Specific target organ systemic toxicity (single exposure)	Category 1
Specific target organ systemic toxicity (repeated exposure)	Category 1
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

Labeling

Symbol(s)



Signal word:

DANGER

Hazard Statements

H302 - Harmful if swallowed
H313 - May be harmful in contact with skin
H330 - Fatal if inhaled
H370 - Causes damage to organs
H372 - Causes damage to organs through prolonged or repeated exposure
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements

P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P333 + P313 - If skin irritation or rash occurs: Get medical advice/ attention
P363 - Wash contaminated clothing before reuse
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell
P330 - Rinse mouth
P271 - Use only outdoors or in a well-ventilated area
P284 - Wear respiratory protection
P310 - Immediately call a POISON CENTER or doctor/ physician
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P320 - Specific treatment is urgent (see .? on this label)
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P273 - Avoid release to the environment
P391 - Collect spillage
P309 - IF exposed or if you feel unwell:
P321 - Specific treatment (see supplemental first aid instructions on this label)
P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P314 - Get medical advice/ attention if you feel unwell
P501 - Dispose of contents/ container to an approved incineration plant

**Hazards not otherwise classified
(HNOC)**

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	Weight %	ENCS (Japan)	ISHL No	CAS-No
Vinyl acetate	0.0012	X		108-05-4
Iron Oxide	0.08783	X		1309-37-1
Aluminum Oxide	<1	X		1344-28-1
Calcium Silicate	<5	X		1344-95-2
Titanium dioxide	0.08783	X		13463-67-7
Crystalline silica, quartz	80-90	X		14808-60-7
Carbofuran	<1	X		1563-66-2
Carbosulfan	5.5			55285-14-8
Sucrose	0.53			57-50-1
Water	0.27			7732-18-5
Rhodamine B Dye (Violet #10)	0.037			81-89-9
Vinyl Polymer	0			PROPRIETARY

4. FIRST AID MEASURES

Eye Contact

Hold eyes 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. 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 further treatment advice.
Inhalation	Move to fresh air. If person is not breathing, contact emergency medical services, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Ingestion	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. 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.
Indication of immediate medical attention and special treatment needed, if necessary	This product contains a reversible cholinesterase inhibitor. Atropine sulfate is antidotal. Support respiration as needed with removal of secretions, maintenance of a patent airway and, if necessary, artificial ventilation. If cyanosis is absent: Adults - start treatment by giving 2 mg atropine intravenously or intramuscularly, if necessary, and repeat with 0.4 - 2.0 mg atropine at 15 minute intervals until atropinization occurs (tachycardia, flushed skin, dry mouth, mydriasis); Children under 12 - initial dose = 0.05 mg/kg body weight and repeat dose = 0.02 - 0.05 mg/kg body weight. Use of oximes such as 2-PAM is controversial. Observe patient to ensure that these symptoms do not recur as atropinization wears off. If in eyes, instill one drop of homatropine. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care.

5. FIRE-FIGHTING MEASURES

Flammable properties	Moderately combustible. The product may form flammable mixtures with air when heated above the flash point.
Suitable Extinguishing Media	Foam Carbon dioxide (CO ₂) Dry chemical Soft stream or water fog only if necessary
Protective equipment and precautions for firefighters	Isolate fire area. Evaluate downwind. Do not breathe smoke, vapors or gases generated. Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Isolate and post spill area. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.
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	Sweep up and shovel into suitable containers for disposal. Clean and neutralize spill area, tools and equipment for a minimum contact of one hour with vinegar-alcohol solution, then by bleach soap and water. Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13.
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. Keep/store only in original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	Japan	ACGIH TLV	China	Korea
Vinyl acetate 108-05-4	C2B	STEL 15 ppm TWA: 10 ppm	TWA: 10 mg/m ³ STEL: 15 mg/m ³ C1 C3	STEL: 15 ppm TWA: 10 ppm
Iron Oxide 1309-37-1		TWA: 5 mg/m ³		TWA: 10 mg/m ³ TWA: 5 mg/m ³
Aluminum Oxide	OEL: 2 mg/m ³	TWA: 1 mg/m ³	TWA: 4 mg/m ³	TWA: 10 mg/m ³

1344-28-1	OEL: 0.5 mg/m ³		STEL: 8 mg/m ³	
Calcium Silicate 1344-95-2				TWA: 10 mg/m ³
Titanium dioxide 13463-67-7	OEL: 0.3 mg/m ³ C2B	TWA: 10 mg/m ³	TWA: 8 mg/m ³ STEL: 16 mg/m ³	TWA: 10 mg/m ³
Crystalline silica, quartz 14808-60-7		TWA: 0.025 mg/m ³	TWA: 0.7 mg/m ³ TWA: 0.3 mg/m ³ TWA: 1 mg/m ³ TWA: 0.5 mg/m ³ TWA: 0.2 mg/m ³ STEL: 2 mg/m ³ STEL: 1.4 mg/m ³ STEL: 1 mg/m ³ STEL: 0.6 mg/m ³ STEL: 0.4 mg/m ³ C1	TWA: 0.05 mg/m ³
Carbofuran 1563-66-2		TWA: 0.1 mg/m ³		TWA: 0.1 mg/m ³
Sucrose 57-50-1		TWA: 10 mg/m ³		TWA: 10 mg/m ³
Chemical name	Taiwan	Indonesia	Australia	India
Vinyl acetate 108-05-4	STEL 15 ppm STEL 52.5 mg/m ³	TWA 10 ppm TWA 35 mg/m ³ C(A3) STEL 15 ppm STEL 53 mg/m ³	STEL 20 ppm STEL 70 mg/m ³ TWA 10 ppm TWA 35 mg/m ³	
Iron Oxide 1309-37-1	STEL 15 mg/m ³	TWA 5 mg/m ³ TWA 10 mg/m ³ C(A4)	TWA 5 mg/m ³ TWA 10 mg/m ³	TWA 5 mg/m ³
Aluminum Oxide 1344-28-1		TWA 10 mg/m ³ C(A4)	TWA 10 mg/m ³	
Calcium Silicate 1344-95-2		TWA 10 mg/m ³ C(A4)	TWA 10 mg/m ³	
Titanium dioxide 13463-67-7	STEL 15 mg/m ³	TWA 10 mg/m ³ C(A4)	TWA 10 mg/m ³	
Crystalline silica, quartz 14808-60-7		TWA 0.1 mg/m ³	TWA 0.1 mg/m ³	
Carbofuran 1563-66-2	STEL 0.3 mg/m ³	TWA 0.1 mg/m ³ C(A4)	TWA 0.1 mg/m ³	TWA 0.1 mg/m ³
Sucrose 57-50-1		TWA 10 mg/m ³ C(A4)	TWA 10 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 facepiece respirator (N95, R95, or P95) which is approved for pesticides (U.S. NIOSH/MSHA, EU CEN or comparable certification organization).

Eye/Face Protection

For dust, splash, mist or spray exposure, wear chemical protective goggles. **and Body Protection**

Wear long-sleeved shirt, long pants, neoprene or other eye or skin suitable contamination. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash the contaminated clothing before

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Granules
Odor	No information available
Physical State	Solid
pH	No data available
Flash point	Not determined
Autoignition temperature	No data available
Boiling Point/Range	No data available
Melting Point/Range	No data available
Flammability Limits in Air	
Upper flammability limit:	No data available
Lower flammability limit:	No data available
Explosion limits	
Upper	No data available
Lower	No data available
Explosive properties	No information available
Oxidizing properties	No information available
Evaporation Rate	No data available
Vapor density	No data available
solubility	insoluble
Partition coefficient	No data available
Viscosity, dynamic	No information available

10. STABILITY AND REACTIVITY

Stability	Stable.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to Avoid	Heat, flames and sparks.
Hazardous Decomposition Products	Carbon monoxide (CO). Carbon dioxide (CO ₂).

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product Information.

Skin Contact	Mild Irritant
Eye Contact	Minimally irritating
LD50 Dermal	> 2001 mg/kg
LD50 Oral	639 mg/kg
LC50 Inhalation	> 0.15 mg/L 4 hr
Sensitization	Non-sensitizing

Chronic toxicity

Chronic toxicity	Effects are expected to be similar to those that are seen with acute toxicity. Chronic exposure to aromatic hydrocarbons may cause headaches, dizziness, loss of sensations or feelings (such as numbness), and liver and kidney damage.
Neurological effects	Carbosulfan: Chronic exposure to animals has caused decreased cholinesterase activity (erythrocyte, plasma, and/or brain).
Target organ effects	Nervous System, Acetylcholinesterase Inhibition. Gastrointestinal tract (GI). Red blood cells.
Carcinogenicity	Carbosulfan: Did not show carcinogenic effects in animal experiments. Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH). This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product.
Mutagenicity	Carbosulfan: Not genotoxic in animal studies
Reproductive toxicity	No toxicity to reproduction in animal studies
Developmental toxicity	Carbosulfan: Caused fetal incomplete ossification and major vessel variations in animal studies.

Chemical name	IARC
Crystalline silica, quartz	Group 1
Carbosulfan	Group 2A

12. ECOLOGICAL INFORMATION

Ecotoxicity

Carbofuran (1563-66-2)				
Active Ingredient(s)	Duration	Species	Value	Units
Carbofuran	48 h EC50	Crustacea	0.75	mg/L
	72 h EC50	Algae	19	mg/L
	96 h LC50	Fish	0.18	mg/L
	21 d NOEC	Crustacea	0.23	µg/L
	96 h NOEC	Algae	3.2	mg/L
	21 d NOEC	Fish	5.22	µg/L

Carbosulfan (55285-14-8)				
Active Ingredient(s)	Duration	Species	Value	Units
Carbosulfan	48 h EC50	Crustacea	1.5	µg/L
	72 h EC50	Algae	47	mg/L
	96 h LC50	Fish	0.015	mg/L
	21 d NOEC	Crustacea	3.2	µg/L
	21 d NOEC	Fish	3.0	µg/L

Persistence and degradability No information available.

Bioaccumulation No information available.

Chemical name	Partition coefficient
Vinyl acetate 108-05-4	0.73

Other Adverse Effects No information available
Ozone Not applicable

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

This material is not a hazardous material as defined by U.S. Department of Transportation at 49 CFR Parts 100 through 185.

TDG

Classification below is only applicable when shipped by vessel and is not applicable when shipped by road or rail only.

UN/ID no UN3077
 Proper Shipping Name Environmentally hazardous substance, solid, n.o.s.
 Hazard class 9
 Packing Group III
 Marine Pollutant Carbosulfan, Carbofuran.
 Description UN3077, Environmentally hazardous substance, solid, n.o.s. (Carbosulfan, Carbofuran), 9, PG III, Marine Pollutant

IMDG/IMO

UN/ID no UN3077
 Proper Shipping Name Environmentally hazardous substance, solid, n.o.s.
 Hazard class 9
 Packing Group III
 Marine Pollutant P
 Marine Pollutant Carbosulfan, Carbofuran
 EmS No. F-A, S-F
 Description UN3077, Environmentally hazardous substance, solid, n.o.s. (Carbosulfan, Carbofuran), 9, PG III, Marine Pollutant

ICAO/IATA

UN/ID no UN3077
 Proper Shipping Name Environmentally hazardous substance, solid, n.o.s.
 Hazard class 9
 Packing Group III
 Marine Pollutant Carbosulfan, Carbofuran
 Description UN3077, Environmentally hazardous substance, solid, n.o.s. (Carbosulfan, Carbofuran), 9, PG III, Marine Pollutant

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELI NCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)	NZIoC (New Zealand)
Vinyl acetate 108-05-4	X	X	X	X	X	X	X	X	X
Iron Oxide 1309-37-1	X	X	X	X	X	X	X	X	X
Aluminum Oxide 1344-28-1	X	X	X	X	X	X	X	X	X
Calcium Silicate 1344-95-2	X	X	X	X	X	X	X	X	X
Titanium dioxide 13463-67-7	X	X	X	X	X	X	X	X	X
Crystalline silica, quartz 14808-60-7	X	X	X	X	X	X	X	X	X
Carbofuran 1563-66-2	X	-	X	X	X	X	X	X	X
Carbosulfan 55285-14-8	-	-	X	-	-	X	-	-	X
Sucrose 57-50-1	X	X	X	-	X	X	X	X	X
Water	X	X	X	-	X	X	X	X	X

7732-18-5									
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ENCS - Japan Existing and New Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

Japan

Chemical name	Dangerous Substances	organic solvents	Harmful Substances Whose Names Are to be Indicated on the Label	Pollution Release and Transfer Registry (Class II):	Pollution Release and Transfer Registry (Class I):	Poisonous and Deleterious Substances Control Law
Vinyl acetate	Flammable substance ≥0.1 %	Not applicable	X		134	
Iron Oxide	≥1 %	Not applicable	X			
Aluminum Oxide	≥1 %	Not applicable	X			
Titanium dioxide	≥0.1 %	Not applicable	X			
Crystalline silica, quartz	≥0.1 %	Not applicable	X			
Carbofuran	≥1 %	Not applicable	X		426	
Carbosulfan	Not applicable	Not applicable	Not applicable		206	Deleterious -X
Chemical name	ISHA - Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying	ISHA - Harmful Substances Requiring Permission	ISHA - Toxic Chemicals Control Law	Toxic Release Inventory Chemicals - Group 1	Toxic Release Inventory Chemicals - Group 2	
Vinyl acetate	Not applicable	Not applicable	Not applicable	Not applicable	≥0.1 %	
Aluminum Oxide	Not applicable	Not applicable	Not applicable	Not applicable	≥1.0 %	
Carbofuran	Not applicable	Not applicable	97-1-255 *	Not applicable	≥1.0 %	
Carbosulfan	Not applicable	Not applicable	97-1-253 *	Not applicable	≥1.0 %	

16. OTHER INFORMATION

Revision date: 2016-06-01

Reason for revision: No information available.

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Prepared By:

FMC Corporation

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End of Safety Data Sheet