

MSDS #GGC-12, #GGC-6 SWOOSH CO2 Cartridge**SECTION 1: IDENTIFICATION****Product Name: Swoosh CO₂ Cartridges****MANUFACTURED FOR:** Diversitech, Inc**ADDRESS:** 2530 Lantrac Court, Decatur, GA 30035**PHONE NUMBER: 800-255-3924** Chem-Tel (Chemical Emergencies Only)**PHONE NUMBER (For Information): 800-995-2222****DATE REVISED:** 5/5/2004**PREPARED BY:** Anthony Jernigan**SECTION 2: HAZARDOUS INGREDIENTS INFORMATION**

INGREDIENT	CAS NO	OSHA PEL	ACIGH TLV	OTHER STEL	%
Carbon dioxide	124-38-9	5000 ppm	3000 ppm		~100

SECTION 3: HAZARD IDENTIFICATION

Emergency Overview: Colorless odorless gas. Contact with desublimed solid may cause frostbite. This product is nonflammable. Breathing high concentrations of vapors may produce drowsiness and a headache.

Potential Health Effects:**Eyes:** Contact with desublimed solid may cause frostbite.**Skin:** Contact with desublimed solid may cause frostbite**Ingestion:** Unlikely. Contact with desublimed solid may cause frostbite.**Inhalation:** High concentrations of vapors in immediate area can displace oxygen and can cause dizziness and unconsciousness. Use with adequate ventilation.**Pre-Existing Medical Conditions Aggravated by Exposure:** Heart, lung, skin, eye.**SECTION 4: FIRST AID MEASURES****Eyes:** Treat for frostbite immediately. Have eyes examined and tested by medical personnel if irritation develops or persists.**Skin:** Treat for frostbite immediately. Get medical attention if irritation develops or persists.**Ingestion:** Not a possible route of entry.**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.**SECTION 5: FIRE FIGHTING MEASURES****Flash Point:** None to boiling (TCC)**LEL/UEL:** Nonflammable**Extinguishing Media:** Use extinguishing media as suitable for the combustible materials involved in the fire.**Fire Fighting Instructions:** As in any fire, wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear.**Unusual Fire and Explosion Hazards:** Contents under pressure. Do not store near heat sources.**SECTION 6: ACCIDENTAL RELEASE MEASURES****Large Spills:** Shut off leak if possible and safe to do so. Wear self-contained breathing apparatus and appropriate personal protective equipment. Allow condensed solid to sublime.**Small Spills:** Allow condensed solid to sublime.

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SECTION 7: HANDLING AND STORAGE

Avoid prolonged or repeated contact with eyes, skin, and clothing. Wash hands before eating. Protect cartridges from abuse, and extreme temperatures. Keep this product out of the reach of children. Do not puncture cartridge unless it is contained in an approved appliance. Do not attempt to refill spent cartridges. Maintain a well-ventilated work area; use with adequate ventilation. Avoid breathing product vapor or mist. Store in a cool dry place, away from heat, sparks, flame and direct sunlight.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

CHEMICAL NAME	ACGIH TWA	OSHA PEL	ACGIH STEL
Carbon Dioxide	5,000 ppm	5,000 ppm	30,000 ppm

Work/Hygienic Practices: Good general ventilation should be sufficient to control airborne levels. Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product. Wear safety glasses with side shields (or goggles) and rubber, neoprene or other chemically resistant gloves if there is documented evidence of compatibility when handling this material.

NFPA and HMIS Codes:

	NFPA	HMIS
Health	1	1
Flammability	0	0
Reactivity	0	0

Personal Protection - B

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Colorless gas	Solubility in Water: Very Soluble
Odor: Slight ethereal	Specific Gravity: (Water =1) 1.53
pH: NA	Evaporation Rate: >1 (Butyl acetate=1)
Vapor Pressure: 856 psia @ 70 F	Vapor Density: 1.65 @ 70°F (Air = 1)
Viscosity: NA	Percent Volatile: 100%

SECTION 10: STABILITY AND REACTIVITY

Stability: This product is stable. Conditions to Avoid: None known

Incompatibility: None known **Products of Decomposition:** None known

Hazardous Polymerization: Will not occur **Conditions to Avoid:** NA

SECTION 11: TOXICOLOGICAL INFORMATION

Inhalation:

Carbon Dioxide: LCLo/human 9ppm/5 min

Cancer Information: No ingredients listed as human carcinogens by NTP or IARC

Reproductive effects: none

Teratogenic effects: none

Mutagenic effects: none

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SECTION 12: ECOLOGICAL INFORMATION

Environmental Impact Information: No sufficient effect known from discharge of gas or desublimed solid.

Environmental Impact Data

REPORTING (percent by weight):

CFC 0.0% VOC 0.0%; HFC 0.0% HFC 0.0%; Cl. Solv. 0.0% ODP 0.00

US regulations require reporting spills of this material that could reach any surface waters. The toll free number for the US Coast Guard National Response Center is: **800-424-8802**.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with all federal, state and local regulations.

SECTION 14: TRANSPORTATION INFORMATION

<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Class</u>	<u>Sub. Risk</u>	<u>Pkg. Group</u>	<u>Hazard Label</u>	<u>Pkg. Instr.</u>	<u>Max. Quantity</u>
Air: Carbon Dioxide	UN 1013	2.2	NA	NA	Non-flammable Gas	200	75kg;150kg.
Ground: Consumer Commodity, ORM-D	NA	ORM-D	NA	NA	ORM-D	Pkg. Auth.	173.306

SECTION 15: REGULATORY INFORMATION

SECTION 313 SUPPLIER NOTIFICATION

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372): None

TOXIC SUBSTANCES CONTROL ACT (TSCA): All ingredients of this product are listed on the TSCA Inventory.

WHMIS: Class A

This product is classified according to the hazard criteria of the CPR, and the MSDS contains all of the information required by the CPR.

EEC:

Supply Classification: Not Listed

Hazard Pictogram: None

Risk Phrases: R-20 Harmful by Inhalation

Safety Phrases: S-2 Keep out of reach of children

S-47 Keep at temperatures not exceeding 49 degrees C

S-57 Refer to supplier for information on recycling

SECTION 16: OTHER INFORMATION

Do not puncture or incinerate containers. Normal ventilation for standard manufacturing practices is usually adequate. Local exhaust should be used when large amounts are released.

REFERENCES: 29 CFR 1910.1200 40 CFR 300-700 ANSI Z400.1-1998; EEC Dangerous Substances Classification, Packaging and Labeling List (Annexes 1, 2, 3 & 4)

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