

ITEM# 98-025-1 GRAPHITE PLUS AEROSOL

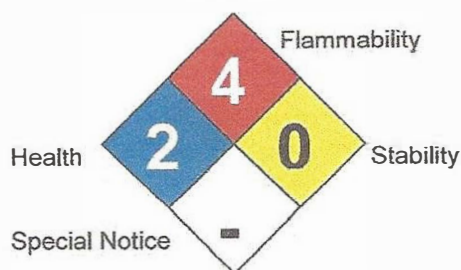
SDS / Safety Data Sheet

(According regulation 1907/2006/EC and directives 67/548/EC and 1999/45/EC)

HMIS

HEALTH	2
FLAMMABILITY	4
Physical Hazard	1
PERSONAL PROTECTION	B

NFPA



Section 1 – Identification of the Substance / Preparation, and of the Company

Product Name/ Trade Name	Graphite Plus
Product Description	Graphite aerosol spray coating
CHEMTEL, ACCOUNT #MIS4594445 COLLECT CALLS ACCEPTED 24 HR EMERGENCY TELEPHONE: USA, CANADA, PUERTO RICO & US VIRGIN ISLANDS 1-800-255-3924 AUSTRALIA: 1-300-954-583 BRAZIL: 0-800-591-6042 CHINA: 400-120-0751 INDIA: 000-800-100-4086 MEXICO: 01-800-099-0731 ALL OTHER COUNTRIES: 1-813-248-0585	

Section 2 – Hazards Information

DANGER!

Emergency Overview

Extremely flammable aerosol
 Contents under pressure
 Irritating to respiratory system
 Irritating to skin
 Irritating to eyes

Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal

Appearance opaque

Physical state Aerosol

Odor Solvent

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Potential Health Effects

Principle Routes of Exposure

Eye contact. Skin contact. Inhalation.

Acute toxicity

Eyes

Irritating to eyes.

Skin

Irritating to skin. Prolonged skin contact may defat the skin and produce dermatitis. May cause frostbite.

Inhalation	Irritating to respiratory system. Avoid breathing vapors or mists. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Not an expected route of exposure. Potential for aspiration if swallowed. May cause blindness if swallowed.
Chronic Effects	No information available
Aggravated Medical Conditions	Central nervous system. Gastrointestinal tract. Preexisting eye disorders. Skin disorders. Respiratory disorders. Central Vascular System (CVS).

Section 3 – Composition / Information On Ingredients

Hazardous Ingredients And Non Hazardous Ingredients

This product is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Components	CAS Number	Weight %
PROPANE/ISOBUTANE/N-BUTANE	68476-86-8	65-70
ISOPROPYL ALCOHOL	67-63-0	20-30
METHANOL	67-56-1	5-10
GRAPHITE	7782-42-5	1-5
1-METHOXY-2-PROPANOL	107-98-2	1-5

Section 4 – First Aid Measures

Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.
Skin Contact	Wash off immediately with soap and plenty of water. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
Ingestion	Do NOT induce vomiting. Call physician immediately.
Notes to Physician	Treat symptomatically.

Section 5 – Fire Fighting Measures

Flammable Properties	Extremely flammable aerosol.
Flash Point	-132 °F / -91 °C (based on propellant)
Extinguishing Media	Foam. Dry chemical. Alcohol-resistant foam. Carbon dioxide (CO2).
Hazardous Combustion Products	Carbon oxides.
Sensitivity to Static Discharge	No
Specific hazards arising from the chemical	Containers can build up pressure if exposed to heat (fire). Keep containers and surrounding areas cool with water spray.
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.
NFPA	Health 2 Flammability 4 Stability 0 Physical and chemical hazards -
HMIS	Health 2 Flammability 4 Physical Hazard 1 Personal protection B

Section 6 – Accidental Release Measures

Personal Precautions	Ensure adequate ventilation. For personal protection see section 8.
Environmental Precautions	Do not flush into surface water or sanitary sewer system.
Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up:	Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Section 7 – Handling and Storage

Advice on safe handling	Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Do not breathe vapors or spray mist. Do not ingest. Keep away from heat, sparks and open flame. No smoking. Wash thoroughly after handling.
Storage conditions	Keep out of the reach of children. Incompatible with oxidizing agents.
Aerosol Level	3

Section 8 – Exposure Controls/ Personal Protection

Exposure guidelines			
Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
ISOPROPYL ALCOHOL CAS 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³
METHANOL 67-56-1	STEL: 250 ppm TWA: 200 ppm S*	TWA: 200 ppm TWA: 260 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m ³ (vacated) S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³
1-METHOXY-2-PROPANOL 107-98-2	STEL: 100 ppm TWA: 50 ppm	(vacated) TWA: 100 ppm (vacated) TWA: 360 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 540 mg/m ³	TWA: 100 ppm TWA: 360 mg/m ³ STEL: 150 ppm STEL: 540 mg/m ³
GRAPHITE 7782-42-5	TWA: 2 mg/m ³ respirable fraction	TWA: 15 mg/m ³ , total dust TWA: 5 mg/m ³ , respirable fraction (vacated) TWA: 10 mg/m ³ , total dust (vacated) TWA: 5 mg/m ³ , respirable fraction	IDLH: 1250 mg/m ³ TWA: 2.5 mg/m ³ , respirable dust
N-BUTYL ALCOHOL 71-36-3	TWA: 20 ppm	TWA: 100 ppm TWA: 300 mg/m ³ (vacated) S* (vacated) Ceiling: 50 ppm (vacated) Ceiling: 150 mg/m ³	IDLH: 1400 ppm Ceiling: 50 ppm Ceiling: 150 mg/m ³
Other Exposure Guidelines	Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).		
Engineering Measures	Maintain mechanical ventilation sufficient to keep airborne concentrations below exposure limits.		
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.		
Eye Protection	Safety glasses with side-shields.		
Skin Protection	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.		
Hygiene measures	Do not eat, drink or smoke when using this product. General industrial hygiene practice. Avoid contact with skin, eyes and clothing. Wash hands and face before breaks and immediately after handling the product. Avoid breathing vapors, mist or gas.		

Section 9 – Physical and Chemical Properties

Colour:	Black	Material State	Aerosol
Odour	Solvent		
Boiling Point:	No information available	Melting Point	No data available
Specific Gravity	0.730	Vapour Density	Heavier than air
Vapor Pressure (mm Hg)	Not determined	VOC content (%)	98.4
Solubility in Water	No information available	Evaporation Rate:	Not applicable
pH	Not applicable	Auto Ignition	No data available
Decomposition Temp	n/a	Flash Point	-91 °C / -132 °F

Section 10 – Stability and Reactivity

Stability	Stable under recommended storage conditions.
Conditions to Avoid	Keep away from heat, sparks and open flame.
Materials to Avoid	Strong oxidizing agents. Strong bases.
Hazardous Decomposition Products	Carbon oxides. Fumes.
Hazardous polymerization	Does not occur.

Section 11 – Toxicological Information

Acute Toxicity

Product Information Causes skin, eye and respiratory tract irritation. May be harmful if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
ISOPROPYL ALCOHOL	4396 mg/kg (rat)	12800 mg/kg (rabbit)	16000 ppm (rat) 8 h
METHANOL	5628 mg/kg (rat)		83.2 mg/L (rat) 4 h
1-METHOXY-2-PROPANOL	5200 mg/kg (rat)	13 g/kg (rabbit)	54.6 mg/L (rat) 4 h 24 mg/L (rat) 1 h

Chronic Toxicity

Carcinogenicity The table below indicates whether each agency has evaluated a listed ingredient as a carcinogen:

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl Alcohol		Group 1 Group 3		X

IARC: (International Agency for Research on Cancer)
Group 3 - Not Classifiable as to Carcinogenicity in Humans
OSHA: (Occupational Safety & Health Administration)
X – Present

Target Organ Effects Central nervous system. Central Vascular System (CVS). Eyes. Gastrointestinal tract (GI).
Respiratory system. Skin.

Section 12 – Ecological Information

Ecotoxicity	The environmental impact of this product has not been fully investigated.
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Section 13 – Disposal Considerations

Waste Disposal Methods	This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).
Contaminated packaging	Do not re-use empty containers.

Section 14 – Transport Information

DOT Ground	CONSUMER COMMODITY ORM-D or LIMITED QUANTITY
IMDG	UN1950, AEROSOLS, 2.1, LTD. QTY.
IATA	UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD. QTY.

Section 15 – Regulatory Information

International Inventories:

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies

ENCS	---
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Chemical Name	TSCA	DSL/ NDSL	EINECS/ ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Isopropyl Alcohol	X	X	X	X	X	Present	X	X
Propane/Isobutane/ N-Butane	X	X	X	Not listed	X	Present	X	X
Methanol	X	X	X	X	X	Present	X	X
Graphite	X	X	X	Not listed	X	Present	X	X
1-Methoxy-2-Propanol	X	X	X	X	X	Present	X	X

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 Commercial Chemical Substances/EU List of Notified Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 CHINA - 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

U.S. Federal Regulations:

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	SARA 313 - Threshold Values %
Isopropyl Alcohol	1.0
Methanol	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

U.S. State Regulations:

California Proposition 65

This product contains the following Proposition 65 chemicals: Methanol (carcinogen)

U.S. State Right-to-Know Regulations:

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Isopropanol	X	X	X		
Methanol	X	X	X	X	
1-Methoxy-2-propanol	X	X	X		
Graphite	X	X	X		
N-butyl alcohol	X	X	X		

International Regulations:

Chemical Name	Carcinogen Status	Exposure Limits
Isopropyl alcohol		Mexico: TWA 400 ppm

		Mexico: TWA 980 mg/m ³ Mexico: STEL 500 ppm Mexico: STEL 1225 mg/m ³
Methanol		Mexico: TWA 200 ppm Mexico: TWA 260 mg/m ³ Mexico: STEL 250 ppm Mexico: STEL 310 mg/m ³
Graphite		Mexico: TWA 2 mg/m ³

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.

Section 16 – Other Information

Disclaimer

The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet