Material Safety Data Sheet

HMIS

HEALTH	2
FLAMMABILITY	4
REACTIVITY	0
PERSONAL PROTECTION	J

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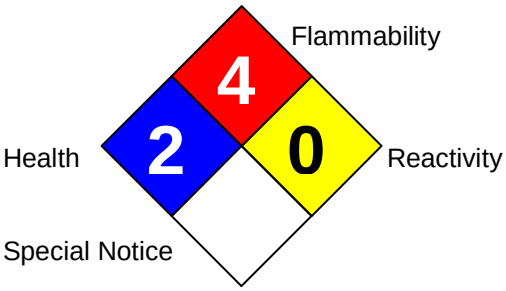

Section I – Product and Company Identification

Product Name/ Trade Name	**Graphite Plus Aerosol**		
Manufacturer	Cummings-Moore Graphite Co. 1646 N. Green Ave. Detroit, MI 48209	**Emergency Phone**	1-800-255-3924
		Information Phone	1-908-537-2155
		Date Prepared	9/13/10
		Preparer *(optional)*	LRM

Section II – Hazard Ingredients/Identity Information

Hazardous Components	CAS Number	OSHA PEL	ACGIH TLV	Other Limits	% (optional)
Isopropyl alcohol	67-63-0	400 ppm	400 ppm (TWA), 500 ppm (STEL)	n/a	< 60
Propane / isobutane / n-butane	68476-86-8	800 ppm	1000 ppm (TWA)	n/a	< 35
Methyl alcohol	67-56-1	200 ppm skin	200 ppm skin (TWA), 250 ppm skin (STEL)	n/a	< 5
1-methoxy-2-propanol	107-98-2	100 ppm	100 ppm (TWA), 150 ppm (STEL)	n/a	< 5
Graphite	7782-42-5	15 mppcf	2.0 mg/m^3	n/a	< 2

Section III – Physical / Chemical Characteristics

Boiling Point	-43 to 248°F	**Specific Gravity (H_2O = 1)**	0.71
Vapor Pressure (mm Hg)	55-65 PSIG	**Melting Point**	n/a
Vapor Density (Air = 1)	> 1	**Evaporation Rate (Butyl Acetate = 1)**	> 1
Solubility in Water	Negligible	**Appearance and Odor**	Black liquid in aerosol package, alcohol odor
pH	n/a		

Section IV – Fire and Explosion Hazard Data

Flash Point (Method Used)	-156°F	**Flammable Limits: LEL** = 1.8%	**UEL**= 36%
Extinguishing Media	Alcohol foam, CO_2, dry chemical, water fog		
Special Fire Fighting Procedures	Containers can build up pressure if exposed to heat (fire). 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	Vapors can travel to a source of ignition and flash back. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.		

Section V – Reactivity Data

Stability	Stable under normal storage conditions.
Conditions to Avoid	All sources of ignition, welding arcs, and open flames.
Incompatibility *(Materials to Avoid)*	Strong acids, alkalis, oxidizers, and amines.
Hazardous Decomposition or Byproducts	Oxides of carbon, oxides of nitrogen, and may produce forms of chloride, chlorine, and phosgene.
Hazardous Polymerization	Will not occur under normal conditions.

Section VI – Health Hazard Data

Route(s) of Entry: Inhalation? Yes	**Skin?** Yes **Ingestion?** Yes
Carcinogenicity:	**NTP?** No **IARC Monographs?** No **OSHA Regulated?** No
Health Hazards *(Acute and Chronic)*	***** Emergency Overview ***** Vapors irritating to eyes and respiratory tract. Vapors may cause flash fire or explosion. **Eye Contact:** Liquid, aerosols, and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or feeling like that of fine dust in the eyes. **Skin Contact:** Prolonged or repeated contact can result in defatting and drying of skin which may result in skin irritation and dermatitis (rash). **Inhalation:** Headaches, dizziness, nausea, decreased blood pressure, changes in heart rate and cyanosis may result from over exposure to vapor or skin exposure. Prolonged inhalation may be harmful. **Ingestion:** This material may be harmful or fatal if swallowed. **Chronic Effects:** Overexposure may cause nervous system damage, lung damage, kidney damage, and liver disorder (edema, proteinuria) and damage.
Signs and Symptoms of Exposure	Irritation as noted above. Eye watering, headaches, nausea, dizziness and loss of coordination are signs that exposure levels are too high.
Medical Conditions Generally Aggravated by Exposure	Preexisting eye, skin, and respiratory disorders may be aggravated by exposure to this product.
Emergency and First Aid Procedures	**Eye Contact:** Immediately flush eyes with plenty of water for 15 minutes while holding eyelids open. Get medical attention. **Skin Contact:** Remove contaminated clothing/shoes. Wash with soap and water. Get medical attention if irritation develops or persists. Do not reuse clothing until cleaned. **Inhalation:** Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get immediate medical attention. **Ingestion:** Get medical attention immediately. Do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Section VII – Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled	Warning – flammable. Eliminate all ignition sources. Handling equipment must be grounded to prevent sparking. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.
Waste Disposal Method	Dispose in accordance with all federal, state, and local regulations.
Precautions to Be Taken in Handling and Storing	Keep away from heat, sparks, and flame. Do not store above 120^{o}F (48^{o}C). Avoid breathing vapors. Avoid prolonged contact with skin. Wash thoroughly after handling. See Section IV.
Other Precautions	Vapors are heavier than air and will collect in low areas.

Section VIII – Control Measures

Respiratory Protection (Specify Type)	If exposure may or does exceed occupational exposure limits (see section II), a NIOSH/MSHA approved air-purifying respirator with an organic vapor cartridge or canister may be permissible. Protection provided by air-purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Ventilation:	Use ventilation as required to maintain vapor concentrations below TLV.
Eye Protection	Wear safety glasses with side shields (or goggles) and a face shield.
Gloves and Other Protective Clothing	Where contact is likely, wear chemical-resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.
Work/Hygienic Practices	Wash thoroughly before eating, drinking, using restroom, smoking, or applying cosmetics. Remove and air-dry contaminated clothing in a well-ventilated area, then wash before reusing. Use only in a well ventilated area. Follow all MSDS/label precautions even after container is emptied because they may contain residues. Avoid repeated or prolonged contact with skin. Avoid breathing vapors from heated material. Avoid contact with eyes, skin, and clothing. Clean spills or overspray promptly – they may present a slippage hazard.