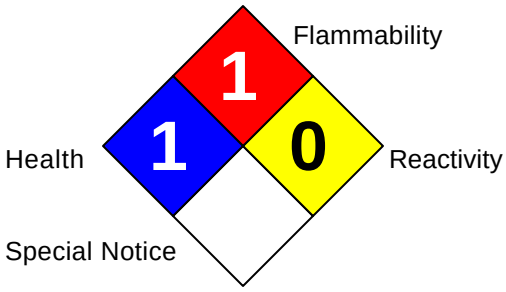
Material Safety Data Sheet

HMIS

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PERSONAL PROTECTION	B

NFPA



Section I – Product and Company Identification

Product Name/ Trade Name	**339-S Graphite Grease**		
Manufacturer	Cummings & Moore Detroit, Michigan	**Emergency Phone**	1-800-255-3924
		Information Phone	1-908-537-2155
		Date Prepared	9/28/00
		Preparer *(optional)*	LRM

Section II – Hazard Ingredients/Identity Information

Hazardous Components	CAS Number	OSHA PEL	ACGIH TLV	Other Limits	% (optional)
Petroleum distillates	64742-52-5, 64742-53-6	5 mg/m^3	5 mg/m^3	N/A	
Natural Graphite	7782-42-5	15 mppcf	2.5 mg/m^3	N/A	
Silica	14808-60-7	N/A	0.05 mg/m^3	N/A	0.0 – 1.2

Section III – Physical / Chemical Characteristics

Boiling Point	Not determined	**Specific Gravity (H_2O = 1)**	0.89 @ 60^o F
Vapor Pressure (mm Hg)	Less than 0.01 @ 20^o C	**Melting Point**	Not determined
Vapor Density (Air = 1)	Greater than 5	**Evaporation Rate (Butyl Acetate = 1)**	Less than 0.01
Solubility in Water	Negligible (Less than 0.1%)	**Appearance and Odor**	Black / mild petroleum odor

Section IV – Fire and Explosion Hazard Data

Flash Point (Method Used)	435^{o}F (COC)	**Flammable Limits: LEL** = Not determined	**UEL**= Not determined
Extinguishing Media	Use water spray, dry chemical, foam or carbon dioxide. Water or foam may cause frothing. Use water to keep fire-exposed containers cool. Water spray may be used to flush spills away from exposures.		
Special Fire Fighting Procedures	Self-contained breathing equipment and chemical resistant clothing recommended.		
Unusual Fire and Explosion Hazards	Pressure will increase in overheated, closed containers		

Section V – Reactivity Data

Stability	This product is stable and will not react violently with water
Conditions to Avoid	Sources of ignition (open flame, heat, sparks, welding)
Incompatibility *(Materials to Avoid)*	Strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite.
Hazardous Decomposition or Byproducts	Oxides of carbon
Hazardous Polymerization	Will not occur

Section VI – Health Hazard Data

Route(s) of Entry: Inhalation?	Not likely under normal usage	**Skin?**	Yes	**Ingestion?**	Not likely under normal usage
Carcinogenicity: NTP?	Yes	**IARC Monographs?**	Yes	**OSHA Regulated?**	No
Health Hazards ***(Acute and Chronic)***	**Acute Effects:** None recognized. **Chronic Effects:** Prolonged or repeated skin contact can cause irritation. IARC Monograph Vol. 68, 1997, concludes that there is sufficient evidence that inhaled crystalline silica causes cancer in humans. IARC Classification Group1.				
Signs and Symptoms of Exposure	Irritated eyes and skin.				
Medical Conditions Generally Aggravated by Exposure	May aggravate existing eye or skin conditions.				
Emergency and First Aid Procedures	**Eye Contact**: If splashed into the eyes, flush with clear water for 15 minutes. If the irritation persists, call a physician. **Skin Contact:** In case of contact, remove any contaminated clothing and wash the skin thoroughly with soap and water. Wash contaminated clothing before reuse. **Inhalation:** The vapor pressure is very low. Vapor inhalation under ambient conditions is normally not a problem. If overcome by vapor from hot product, immediately remove from exposure and call a physician. If breathing is irregular or has stopped, start resuscitation; administer oxygen, if available. If overcome by oil mist, remove from further exposure until excessive oil mist condition subsides. **Ingestion:** If ingested, DO NOT induce vomiting; call a physician immediately.				

Section VII – Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled	Recover free product. Add sand, earth or other suitable absorbent to spill area. Minimize skin contact. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas. Assure conformity with applicable government regulations.
Waste Disposal Method	Spilled material, unused contents and empty containers must be disposed of in accordance with local, state and federal regulations.
Precautions to Be Taken in Handling and Storing	Keep container sealed when not in use. Do not store or mix with strong oxidizers. Keep out of eyes. Do not store sealed container near extreme heat. Do not reuse container.
Other Precautions	None.

Section VIII – Control Measures

Respiratory Protection (Specify Type)	If vapor concentration exceeds TLV, use a respirator approved by NIOSH in a positive pressure mode.		
Ventilation: Local Exhaust	Not required	**Special**	Not required
Mechanical	Not required	**Other**	Not required
Protective Gloves	Use chemical resistant gloves, if needed, to avoid prolonged or repeated skin contact.	**Eye Protection**	Safety glasses recommended. Use goggles or face shield when splashing may occur.
Other Protective Clothing or Equipment	Use chemical resistant apron or other impervious clothing, if needed, to avoid contaminating regular clothing or repeated skin contact.		
Work/Hygienic Practices	Keep work area clean. Avoid sources of ignition and strong oxidizers.		