

Material Safety Data Sheet

CARBON BLACK OIL

MSDS No. EJ-471

Date of Preparation: June 15, 2004

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: CARBON BLACK OIL

Chemical Formula: Mixture

CAS Number: 64741-62-4

Other Designations: Decant oil, slurry oil, clarified oil, heavy aromatic fuel oil, catalytically cracked clarified oil, carbon black feedstock, carbon black feedstock oil, and pyrolysis tar

General Use:

Manufacturer: Enjet, Inc
 5373 W. Alabama, Suite 502
 Houston, Texas 77056

Emergency: Chemtrec (800) 424-9300
 Enjet, Inc. (713) 552-1559

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	100 % vol.
CARBON BLACK OIL	64741-62-4	100

Trace Impurities:

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
First Ingredient	none estab.	none estab.	5 mg/m ³	10 mg/m ³	none estab.	none estab.	none estab.
Hydrogen Sulfide	1989 OSHA Ceiling: 20 ppm		1989 ACGIH TLV Hydrogen Sulfide				
Peak ppm	50		TLV: 10ppm				
			STEL: 15ppm				

Section 3 - Hazards Identification

☆☆☆☆ Emergency Overview ☆☆☆☆

HMIS
H 0
F 2
R 0
PPE*
*Sec. 8

Potential Health Effects

Primary Entry Routes: Inhalation, ingestion

Target Organs: Central Nervous System, skin, and mucous membranes

Acute Effects

Inhalation: May result in increased rate of respiration, tachycardia (excessively rapid heart beat), cyanosis (dark purplish coloration of skin and mucous membranes caused by deficient blood oxygenation), hemoptysis (spitting up blood from some part of respiratory tract), pulmonary edema, and liver and renal injury.

Eye: Repeated contact will cause irritation severe burning

Skin: Repeated contact with skin can cause dermatitis and possible systemic toxicity.

Ingestion: Gastrointestinal (GI) irritation, vomiting, diarrhea, and, in severe cases, CNS depression, progressing to coma and death

Carcinogenicity: The IARC lists fuel oils, residual (heavy), as possible human carcinogen (Group 2B), animal evidence limited.

Medical Conditions Aggravated by Long-Term Exposure: None known

Chronic Effects: Repeated skin contact causes dermatitis and possible systematic toxicity.

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Section 4 - First Aid Measures

Inhalation: Remove exposed person to fresh air and support breathing as needed.
Eye Contact: Gently lift the eyelids and flush immediately and continuously with flooding amounts of water until transported to an emergency medical facility. Consult a physician immediately.
Skin Contact: Quickly remove contaminated clothing. Rinse with flooding amounts of water for at least 15 min. For reddened or blistered skin, consult a physician. Wash affected area with soap and water.
Ingestion: Never give anything by mouth to an unconscious or convulsing person. If ingested, do not induce vomiting unless large amounts are ingested. Large quantities may produce renal, liver and CNS toxicity. Consult a physician immediately.
After first aid, get appropriate in-plant, paramedic, or community medical support.
Note to Physicians: Unless large quantities are ingested, emesis or gastric lavage is contraindicated due to aspiration hazard. Preferred antidotes are charcoal and milk. If gastric emptying is necessary in an alert patient, syrup of Ipecac is preferred to lavage.
Special Precautions/Procedures: After first aid, get appropriate in-plant, paramedic or community medical support

Section 5 - Fire-Fighting Measures

Flash Point: >150°F (65.56°C)
Flash Point Method: CC
Burning Rate: NA
Autoignition Temperature: none reported
LEL: 0.6% v/v
UEL: 7.0% v/v
Flammability Classification: Combustible
Extinguishing Media: Use dry chemical, carbon dioxide, foam water fog or spray. Do not use a forced water spray directly on burning oil since this will scatter the fire. Use a smothering technique to extinguish fire. Cool fire-exposed containers with water spray.
Unusual Fire or Explosion Hazards: None
Hazardous Combustion Products: None
Fire-Fighting Instructions: Isolate hazard area and deny entry. Be aware of runoff from fire control methods. Do not release into sewers or waterways due to health and fire or explosion hazard.
Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.



Section 6 - Accidental Release Measures

Spill/Leak Procedures: Notify safety personnel, evacuate area for large spills, remove all heat and ignition sources, and provide maximum explosion-proof ventilation.
Containment: For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.
Cleanup: Cleanup personnel should protect against vapor inhalation and liquid contact. Cleanup spills promptly to reduce fire or vapor hazards. Use a noncombustible absorbent container. Pick up small spills or residues. Do not release to sewers or waterways due to health and fire.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120)

Section 7 - Handling and Storage

Handling Precautions: Avoid prolonged repeated skin contact and breathing vapors or mist. Avoid all personal contact. Harmful in contact with or if absorbed through the skin.
Storage Requirements: Use and storage conditions should be suitable for an OSHA Class IIIA combustible liquid. Store in closed containers in a well-ventilated area away from heat and ignition sources and strong oxidizing agents. Protect containers from physical damage. To prevent static sparks electrically ground and bond all containers and equipment used in shipping, receiving, or transferring operations. Use non-sparking tools and explosion-proof electric equipment. No smoking in areas of storage or use.
Regulatory Requirements:

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:

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Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls:

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance and Odor: Homogeneous, black oily liquid with a mild oil-like odor.
Odor Threshold: NA
Vapor Pressure: <0.1 mm Hg at 20 °C (68 °F)
Vapor Density (Air=1): >2
Formula Weight: NA
Density: NA
Specific Gravity (H₂O=1, at 4 °C): 1.06 to 1.20 at 60°F (15.6°C)
pH: NA

Water Solubility: Negligible
Other Solubility's:
Boiling Point: >204°C (400°F)
Freezing/Melting Point: NA
Viscosity: @ 100° C CST 11.6
Refractive Index: NA
Surface Tension: NA
% Volatile: NA
Evaporation Rate: NA

Section 10 - Stability and Reactivity

Stability: CARBON BLACK OIL is stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization cannot occur.

Chemical Incompatibilities: Strong oxidizing agents.

Conditions to Avoid: Heat, sparks, flame and static electricity.

Hazardous Decomposition Products: Thermal oxidative decomposition of CARBON BLACK OIL can produce carbon monoxide.

Section 11 - Toxicological Information

Toxicity Data:*

Eye Effects: This product has a primary eye irritation score of 2.0/110.0 (rabbit).

Acute Inhalation Effects:
Human, inhalation, no data available.

Skin Effects: This product has a primary skin irritation score of 0.2/8.0 (rabbit).

Acute Oral Effects:
Rat, oral, LD₅₀: 2672 mg/kg

* See NIOSH, RTECS for additional toxicity data.

Section 12 - Ecological Information

Ecotoxicity: Enjet has not conducted ecological testing.

Environmental Fate

Environmental Transport: NA

Environmental Degradation: NA

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Soil Absorption/Mobility: NA

Section 13 - Disposal Considerations

Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations

Disposal Regulatory Requirements: NE

Container Cleaning and Disposal: NE

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Fuel Oil

Shipping Symbols: None

Hazard Class: Flammable

Liquid

ID No.: NA 1993

Packing Group: PG III

Label: NA

Section 15 - Regulatory Information

EPA Regulations:

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)

RCRA Hazardous Waste Classification (40 CFR 261.77): Not classified

CERCLA Hazardous Substance (40 CFR 302.4) listed/unlisted specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a); CAA, Sec. 112

SARA 311/312 Codes: This product is defined as hazardous by OSHA under 29 CFR Part 1910.1200(d)

SARA Toxic Chemical (40 CFR 372.65): Not listed

SARA BHS (Extremely Hazardous Substance) (40 CFR 355): Not listed. Threshold Planning Quantity (TPQ)

OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

State Regulations:

Section 16 - Other Information

Prepared By: R. N. Kauth

Revision Notes: June 15, 2004

Additional Hazard Rating Systems:

Disclaimer: The information presented herein is based on data considered to be accurate as of the date of preparation of the Material Safety Data Sheet. However, no warranty or representation, expressed or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, no responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.