

REC'D FEB 15 1999

MSDS #N113

6100

**Material Safety Data Sheet**  
 May be used to comply with  
 OSHA's Hazard Communication Standard,  
 29 CFR 1910.1200. Standard must be  
 consulted for specific requirements.

**U.S. Department of Labor**  
 Occupational Safety and Health Administration  
 (Non-Mandatory Form) *CHM00143*  
 Form Approved  
 OMB No. 1218-0072 *X45100271-010*



IDENTITY (As Used on Label and List) *H.B. REFRIGERATION OIL #4* Note: Blank spaces are not permitted. If any item is not applicable, or, no information is available, the space must be marked to indicate that.

Section I #H-2401, H-2406

Manufacturer's Name <i>Calcumet Refining Company</i>	Emergency Telephone Number During Transit - INFOTRAC <i>(972) 492-1800 800-535-5053</i>
Address (Number, Street, City, State, and ZIP Code) <i>14000 Mackinaw Avenue</i>	Telephone Number for Information <i>(972) 492-1800</i>
<i>Chicago, IL 60633</i>	Date Prepared <i>9/02/97</i>
<i>(Packaged by North American Research Corp.)</i>	Signature of Preparer (optional) <i>George H. Bell</i>

**Section II - Hazardous Ingredients/Identity Information**

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
<i>Mineral Oil (CAS #64742-44-5)</i>	<i>N/A</i>	<i>5mg/m<sup>3</sup> as mist</i>	<i>N/A</i>	<i>100</i>

NFPA HAZARD RATING	SHIPPING DESCRIPTION:
<i>"1" Health</i>	<i>Lubricating Oils NMFC #155250</i>
<i>"1" Flammable</i>	
<i>"0" Reactivity</i>	

"Please consider recycling this product after use"

**Section III - Physical/Chemical Characteristics**

Boiling Point	<i>500°F</i>	Specific Gravity (H <sub>2</sub> O = 1)	<i>0.9</i>
Vapor Pressure (mm Hg)	<i>Negligible</i>	Melting Point	<i>N/A</i>
Vapor Density (AIR = 1)	<i>Above 5</i>	Evaporation Rate (Butyl Acetate = 1).	<i>Negligible</i>
Solubility in Water	<i>Insoluble</i>		
Appearance and Odor	<i>Pale yellow liquid; Mineral oil odor</i>		

**Section IV - Fire and Explosion Hazard Data**

Flash Point (Method Used) <i>302°F Min PMCC</i>	Flammable Limits	LEL <i>N/A</i>	UEL <i>N/A</i>
Extinguishing Media <i>Dry chemical, carbon dioxide, water fog and foam.</i>			
Special Fire Fighting Procedures <i>Use water spray to cool containers exposed to flames. Fire fighting personnel should wear respiratory protection (positive pressure if available).</i>			
Unusual Fire and Explosion Hazards <i>Product of combustion include fumes, smoke and carbon monoxide.</i>			

NOTE: water fog and foam may cause frothing and spattering.

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**Section V — Reactivity Data**

Stability	Unstable		Conditions to Avoid None
	Stable	X	

**Incompatibility (Materials to Avoid)**

Strong oxidizers. Never permit oil to get in an oxygen regulator.

**Hazardous Decomposition or Byproducts**

Carbon monoxide and other combustion products of hydrocarbons

Hazardous Polymerization	May Occur		Conditions to Avoid None
	Will Not Occur	X	

**Section VI — Health Hazard Data**

Route(s) of Entry:	Inhalation? X	Skin? X	Ingestion? X
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Health Hazards (Acute and Chronic) Tests on similar materials show a low order of acute toxicity. May cause reversible eye and skin irritation. Prolonged skin exposure may cause dermatitis or oil acne. Breathing mist may cause dizziness or pulmonary irritation. Ingestion may cause cramps and diarrhea. Chronic overexposure - no reaction expected.

Carcinogenicity:	NTP? No	IARC Monographs? No	OSHA Regulated? No
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Not a carcinogen

Signs and Symptoms of Exposure See "Health Hazards" above

Medical Conditions  
Generally Aggravated by Exposure Existing dermatitis

Emergency and First Aid Procedures In all cases remove source of exposure. INHALATION: not likely to occur except as mist. Remove patient to fresh air & consult physician. EYES: flush eyes immediately with water at least 15min. If irritation persists, consult a physician. SKIN: wash with soap & water. If rash develops see a physician. INGESTION: DO NOT induce vomiting. Consult a physician immediately.

**Section VII — Precautions for Safe Handling and Use**

Steps to Be Taken in Case Material Is Released or Spilled  
Shut off ignition sources. Contain spill and keep from entering waterways or sewers. Large quantities can be pumped. Small quantities may be soaked up on oil absorbants.

Waste Disposal Method  
Dispose of according to current local, state & federal regulations. Materials may become hazardous waste through use. Consider recycling. Consult your SPCC plan.

Precautions to Be Taken in Handling and Storing  
Keep away from flames, sparks or hot surfaces. Never use a torch to cut or weld on or near containers. Empty oil containers can contain explosive vapors.

Other Precautions  
Never wear oil soaked clothing. Launder or dry clean before wearing. Discard oil soaked shoes.

**Section VIII — Control Measures**

Respiratory Protection (Specify Type)  
NIOSH/MSHA approved apparatus is required if exposure limit is exceeded.

Ventilation	Local Exhaust Use in well ventilated areas	Special N/A
	Mechanical (General) N/A	Other N/A

Protective Gloves  
Oil resistant (neoprene or plastic)

Eye Protection  
Safety glasses or splash goggles

Other Protective Clothing or Equipment  
Oil resistant apron where splashing is likely to prevent clothing contamination.

Work/Hygienic Practices  
Wash hands thoroughly after use & before eating, drinking or using restrooms.