



# MATERIAL SAFETY DATA SHEET

**Supplier:** Moose Jaw Refinery  
 641 Manitoba Street East  
 Moose Jaw, SK S6H 6E3


**24 Hour Emergency Telephone Number:**  
**1-306-691-7800**

## 1. PRODUCT IDENTIFICATION

### HEAVY VACUUM GAS OIL (HVGO)

#### Synonyms:

- 1. Petroleum Hydrocarbon

WHMIS
<p>Class D, Div 2: Poisonous Material</p> 
TDG
<p>Not Regulated</p>

CANUTEC Emergency Transport (613) 996-6666

#### Description:

Heavy Vacuum Gas Oil is a petroleum process oil produced in the vacuum distillation tower and is a byproduct in the production of asphalt.

## 2. HAZARDOUS INGREDIENTS

The following components are defined in accordance with sub-paragraph 13(a)(i) to (iv) or paragraph 14(a) of the Hazardous Product Act.

NAME	LD <sub>50</sub>	LC <sub>50</sub>	CAS#
Complex mixture of aliphatic/ aromatic hydrocarbons* (C <sub>7</sub> -C <sub>50</sub> )	>5000 mg/kg (oral, rat)	Not available	67741-57-7

## 3. TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Waxy liquid
Specific Gravity:	0.90
Density:	0.90 kg/L (approx.) @ 15°C
Appearance/Odor:	Dark green viscous liquid with hydrocarbon odor.
Odor Threshold:	Not applicable
Vapor Pressure:	<1 kPa (approx.) @ 25°C
Vapor Density:	Not applicable
Evaporation Rate:	
Boiling Point/Range:	315-560°C @ 1 atm
Viscosity:	40 cSt @ 40°C (approx.)
pH:	
Solubility In Water:	Negligible
Coeff. Of Water/Oil Dist:	

## 4. HEALTH HAZARD INFORMATION

#### ACUTE EFFECTS:

##### Inhalation:

Due to low volatility, inhalation is unlikely.

##### Eye Contact:

Cold HVGO or heated vapors may cause irritation to eyes. Hot HVGO liquid may burn eyes on contact.

##### Skin Contact:

Contact with skin may cause irritation/dermatitis. AVOID SKIN CONTACT.

##### Ingestion:

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

#### CHRONIC EFFECTS:

##### Toxicity Data:

Vacuum gas oils may contain polycyclic aromatic hydrocarbons, several of which have been identified as carcinogenic to experimental animals.

##### Skin Contact:

Prolonged or repeated contact with skin may cause dermatitis or warty skin growths (keratosis) and potential skin cancer. AVOID SKIN CONTACT.

#### Occupational Exposure Limits (OELs) Recommended:

	HVGO	
ACGIH:	5 mg.m3 oil mist twa	



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## 5. FIRST AID MEASURES

### Eye Contact:

Copious warm water flush – 15 minutes. Physician assessment necessary if eyes inflamed. Cleanse soiling with olive oil.

### Inhalation:

Evacuate to fresh air. Apply cardio-pulmonary resuscitation if required. Administer oxygen if available. If resuscitation is required, physician assessment mandatory.

### Skin Contact:

For hot HVGO splashes, cool affected area with water immersion or shower. Remove contaminated clothing – launder before reuse. Soap and water wash. Discard saturated leather articles. Physician assessment necessary if redness or irritation occurs. For skin soiling without underlying burns, cleanse with mineral oil followed by soap and water. Use olive oil in vicinity of eyes.

### Ingestion:

DO NOT INDUCE VOMITING. Force fluids. Activated charcoal tablets. Physician assessment mandatory.

### Emergency Procedures:

The ingestion of process oils is an unlikely event. No specific therapy is indicated. Treat with supportive measures as appropriate to the patient's condition. Only medically approved solvents may be used to remove HVGO from burns, as other solvents could cause further skin damage.

## 6. PREVENTATIVE AND CORRECTIVE MEASURES

### Special Protection Information:

General ventilation. Respiratory protections normally not necessary. If mist generated by excessive heating, wear approved organic vapor respirator suitable for oil mist in areas with sufficient oxygen. Protective gloves should be of nitrile, viton. Chemical splash goggles must be worn. Oil resistant clothing should be worn if direct contact with liquid is likely.

### Spill Control And Disposal:

Contain spill. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Scoop up used absorbent and rags into drums.

### Waste Disposal Method:

Dispose in approved landfill site or licensed waste reclaimer facility.

## 7. FIRE AND EXPLOSION HAZARD

<b>Flash-Point (Test Method = P-MC):</b>	175°C
<b>Auto-Ignition:</b>	Unknown
<b>Flammable Limits (%Volume):</b>	Not applicable

### General Hazards:

Treat as a combustible liquid. Addition of water or foam may cause frothing. Do not cut, drill or weld empty containers.

### Fire Fighting:

Contain spill. Cover with extinguishing agent. Use water spray to cool fire-exposed containers and as a protective screen. To avoid spreading, do not point solid water stream directly into burning oil.

## 8. REACTIVITY DATA

### Stability:

Stable.

### Incompatible Materials and Conditions to Avoid:

Avoid excessive heat. Avoid strong oxidizing agents (strong acids, peroxides, chlorine, etc.).

## 9. PREPARATION

<b>Prepared by:</b>	Moose Jaw Refinery (306) 691-7800
<b>Date:</b>	May 2011
<b>Expires:</b>	May 2014

## CAUTION

Moose Jaw Refinery assumes no responsibility for injury to anyone caused by the product if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, Moose Jaw Refinery assumes no responsibility for injury to anyone caused by abnormal use of the product even if reasonable safety procedures are followed. Furthermore, vendee and third persons assume the risk in their use of the product.