



# 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

**ASPHALT CUTBACK**  
**SC70, 250, 800, 3000**

### Synonyms:

- 1. Petroleum Hydrocarbon

WHMIS	
<b>Class B: Combustible Material</b> 	<b>Class D, Division 2: Poisonous Material</b> 
TDG	
	<b>Shipping Name:</b> Elevated Temperature Liquid, Flammable, n.o.s.  UN 3256 Class 3 PGIII

**CANUTEC Emergency Transport (613) 996-6666**

### Description:

Asphalt SC Cutbacks are used in a wide variety of paving, roofing and industrial applications. These cutbacks are almost always heated before use.

## 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#
Asphalt	not established	not established	55-90	8052-42-4
Gas Oil	>5000 mg/kg (oral, rat)	1700 mg/m <sup>3</sup> (inhaled, rat 4 hr)	10-45	64741-44-2
Sulphur	not established	1660 mg/m <sup>3</sup> inhalation, mammal (unspecified)	<2	7704-34-9

\* SC3000 is not a combustible liquid by WHMIS definition (flash >93.3°C.  
 \*\* Benzene, toluene, xylene = nil.  
 CAUTION: When heated, toxic hydrogen sulfide or solvent vapors may be generated.

## 3. TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Black, highly viscous liquid with tarry hydrocarbon odor.
Specific Gravity:	
Density:	0.94 kg/L (approx.) @ 15°C
Appearance/Odor:	Black, highly viscous liquid with tarry hydrocarbon odor.
Odor Threshold:	
Vapor Pressure:	<1 kPa (estimated) @ 37.8°C
Vapor Density:	>1 (approx.) @ 20°C
Evaporation Rate:	
Boiling Point/Range:	>184°C (approx.) @ 1 atm
Viscosity:	70, 250, 800, 3000 cSt @ 60°C (approx. respectively)
pH:	
Solubility In Water:	Insoluble
Coeff. Of Water/Oil Dist:	

## 4. TOXICOLOGICAL PROPERTIES

### ACUTE EFFECTS:

#### Inhalation:

Irritation of vapors, mist or asphalt fumes will cause headaches, nausea, dizziness and intoxication.

#### Eye Contact:

Vapors or mist may irritate eyes.

#### Skin Contact:

Hot asphalt burns skin and eyes. Solvent may cause drying, cracking or inflammation of skin.

#### Ingestion:

Ingestion is unlikely.

### CHRONIC EFFECTS:

#### Skin Effects:

Prolonged dermal exposure to kerosene may produce dermatitis.

#### Inhalation:

Asphalt fumes contain substances that are known to cause cancer in humans.

#### Toxicity Data:

American Conference of Governmental Industrial Hygienists (ACGIH) has designated diesel fuel (similar to gas oil) as an animal carcinogen (A3).

### Occupational Exposure Limits (OELs) Recommended:

	Asphalt (mist)	Gas Oil
ACGIH: (TLV)	0.5 mg/m <sup>3</sup> (twa)	100 mg/m <sup>3</sup> (twa)



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## 5. FIRST AID MEASURES

### Eye Contact:

Copious warm water flush – 15 minutes. Physician assessment 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 asphalt splash, cool part by water immersion or shower. Do not attempt removal of asphalt but split longitudinally if splash is circumferential to avoid tourniquet effect. For skin soiling without underlying burn, cleanse with mineral oil followed by soap and water. Use olive oil in vicinity of eyes.

### Ingestion:

DO NOT INDUCE VOMITING. If vomiting – take care to prevent aspiration. Give 250 ml (1.2 pint) of milk to drink. Liquid paraffin may slow gastric absorption. Give activated charcoal tablets only if prescribed by physician. Physician assessment is mandatory.

### Emergency Procedures:

No attempt should be made to remove firmly adhering bitumen from the skin. Once the bitumen is cooled, it will do no further harm and in fact provides a sterile covering over a burnt area. As healing takes place, the bitumen plaque will detach itself, usually after a few days. If solvent treatment is used, it should be followed by washing with soap and water, then the application of a proprietary refatting agent or skin cleansing cream. Only medically approved solvents may be used to remove bitumen from burns, as other solvents could cause further skin damage.

## 6. PREVENTATIVE AND CORRECTIVE MEASURES

### Special Protection Information:

General ventilation. Use explosion-proof mechanical ventilation suitable for group D atmospheres. Local exhaust, if necessary, to maintain allowable limits of asphalt fumes ( $0.5 \text{ mg/m}^3$ ), hydrogen sulphide (10 ppm) and solvent vapors (300 ppm). Respiratory protection normally not needed unless hydrogen sulphide concentration exceeds 10 ppm, asphalt fumes exceed  $0.5 \text{ mg/m}^3$ , or solvent vapors exceed 300 ppm. For solvent vapors up to 3000 ppm, with sufficient oxygen use an approved full-face organic vapor cartridge respirator suitable for oil mist. Otherwise use self-contained or air-supplied breathing apparatus. Protective gloves should be of nitrile, viton. Chemical splash goggles must be worn. Tyvek protective clothing should be worn to prevent all contact. DO NOT USE NATURAL RUBBER or PVC (polyvinyl chloride).

### Spill Control and Disposal:

Avoid contact. Use full protective equipment and breathing apparatus. Allow to cool and solidify (solvent evaporates). Break up and recover. Scoop up into drums. DO NOT FLUSH TO SEWER.

### Waste Disposal Method:

Dispose in approved landfill site or licensed waste reclaimer facility.

## 7. FIRE AND EXPLOSION HAZARD

<b>Flash-Point (Method=COC):</b>	112, 118, 126, 148°C (respectively)
<b>Auto-Ignition:</b>	250°C (approx)
<b>Flammable Limits in air (%Volume):</b>	Unknown

### General Hazards:

Addition of water or foam may cause frothing. Do not cut, drill or weld empty containers.

### Fire Fighting:

Use full protective equipment and self-contained breathing apparatus to protect against possible release of hydrogen sulphide and sulphur dioxide. 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 approaching flash point. Avoid strong acids, alkalis, oxidizing agents (chlorine, oxygen).

### Hazardous Decomposition Products:

CO<sub>x</sub>, NO<sub>x</sub>, SO<sub>x</sub>, hydrogen sulfide and dense smoke upon combustion.

## 9. PREPARATION

<b>Prepared by:</b>	Moose Jaw Refinery (306) 691-7800
<b>Date:</b>	May 2008
<b>Expires:</b>	June 2011

## 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.

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