



# MATERIAL SAFETY DATA SHEET

MSDS # 51-AS1

## *SINCLAIR ASPHALT CEMENT*

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**TRADE NAME:** Asphalt, Asphalt Cement

**APPLICATIONS:** Surfacing

**SYNONYMS:** AC-2.5,5,10,20,30,40 (PBA)(F), AR-2000, 4000, 6000, 8000, AC-R (P,PBA) F, Roll Saturate, PG 58-22, PG 58-28, PG 58-34, PG 64-22, PG 64-28,

**CAS REGISTRY #:** 8052-42-4

**CHEMICAL FAMILY:** Asphalt Mixture

**EMERGENCY PHONE:** CHEMTREC – (800) 424-9300 or (703) 527-3887 (collect)

**SUPPLIER:** Sinclair Oil Corporation  
P.O. Box 30825  
Salt Lake City, Utah 84130

**TELEPHONE / FAX:** (888) 340-3466 / (801) 524-2740

### 2. COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENTS:	CAS#	Typical wt.%
Asphalt	8052-42-4	100

### 3. HAZARDS IDENTIFICATION

**APPEARANCE:** Black

**PHYSICAL STATE:** Liquid or solid

**ODOR:** Strong tar odor

**EMERGENCY OVERVIEW:** Can cause Eye and Skin Irritation. Avoid prolonged contact with eyes, skin, and clothing. Hot product can cause burns. If burned by hot product, cool affected area immediately with cool water. Seek medical attention if redness or irritation persists. Fumes from hot product can cause irritation to the eyes, skin, and respiratory system.

#### POTENTIAL HEALTH EFFECTS

**INHALATION:** Inhalation of hot asphalt vapors can produce eye and respiratory tract irritation, headache, nausea, and nervousness. Exposure to high concentrations of hydrocarbon vapors from this product can occur if stored or used in confined spaces or unventilated areas at elevated temperatures.

**EYE CONTACT:** Hot vapors may cause eye irritation.

**SKIN CONTACT:** Handling of hot asphalt can cause severe burns because it is sticky and not readily removed from the skin.

**INGESTION:** If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhea may occur. Give two glasses of water. Get medical attention.

## 4. FIRST AID MEASURES

**INHALATION:** If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or respiratory irritation persists. If breathing stops, use resuscitation measures

**EYE CONTACT:** Flush immediately with water for at least 15 minutes. Seek medical attention if irritation develops or persists.

**SKIN CONTACT:** If hot asphalt contacts exposed skin, cool immediately with cold water and seek medical assistance promptly. "Petroleum jelly, baby oil, or mineral oil will facilitate removal of asphalt from skin." Launder contaminated clothing before reuse. Discard contaminated leather articles. Wash with soap and water, if skin has not been burned.

**INGESTION:** Not likely to occur.

## 5. FIRE FIGHTING MEASURES

**FLASH POINT (°F):** 425 °

**FLAMMABLE LIMITS:** LEL – not determined UEL – not determined

**AUTOIGNITION TEMPERATURE:** greater than 905 °F

**FLAMMABILITY CLASSIFICATION:** Combustible Liquid/Solid

**GENERAL HAZARD:** Incomplete burning can produce carbon monoxide. Water or foam may cause frothing, which can be violent and endanger fire fighters, especially if sprayed into containers of hot liquids.

**FIRE FIGHTING INSTRUCTIONS:** Keep personnel removed from and up-wind of fire. Use CO<sub>2</sub>, foam, dry chemical, Halon, or water fog. Cool adjacent structures and storage drums with water spray. Evacuate area. Prevent runoff from fire control dilution from entering streams or drinking water supply.

**FIRE FIGHTING EQUIPMENT: HAZARDOUS COMBUSTION PRODUCTS:** Use of SCBA in enclosed or confined spaces, or as other wise needed (Bunker gear).

**Hazardous Decomposition Products:** May produce carbon monoxide with incomplete burning.

## 6. ACCIDENTAL RELEASE MEASURES

**LAND SPILL:** Treat spill as an oil spill. Eliminate all sources of ignition. Remove leaking containers to a safe area. Contain and remove by mechanical means. Guard against contamination of water supplies. Solidified asphalt can be scraped up from the ground using mechanical dredges or lifts. Runoff may create fire or explosion hazard in sewers. Report spills to appropriate authorities. Dispose of in accordance with Federal, State, and Local regulations.

**WATER SPILL:** Solidified asphalt may be removed from water with mechanical dredges or lifts. Runoff may create fire or explosion hazard in sewers. Report spills to appropriate authorities. Dispose of in accordance with Federal, State, and Local regulations. Avoid breathing the vapors.

## 7. HANDLING AND STORAGE

**HANDLING / STORAGE:** Store away from ignition sources in a cool area. When material is heated to application temperatures, precautions should be taken to prevent thermal burns.

## 8. EXPOSURE CONTROLS, RESPIRATORY & PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Provide ventilation sufficient to prevent exceeding recommended exposure limits

**PERSONAL PROTECTION:**

**PROTECTIVE CLOTHING:** Use whole body protection, including impervious gloves, boots. Eye and face protection is recommended when contact with material may occur.

**RESPIRATOR:** Approved respiratory protection must be used when vapor or mist concentrations are unknown or exceed the TLV. Avoid prolonged or repeated breathing of vapor or mists.

## OCUPATIONAL EXPOSURE LIMITS

COMPONENT	LIMIT	TWA	STEL	CEILING	NOTATION	OTHER
Asphalt Vapors	OSHA PEL	0.5mg/M <sup>3</sup>			A4	

A1= Confirmed Human Carcinogen

A3= Confirmed Animal Carcinogen with Unknown Relevance to Humans

A4= Not Classified as a Human Carcinogen

CNS= Central Nervous System

Skin= Absorption through the skin may contribute to overall exposure

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE/PHYSICAL STATE:** Liquid or solid

**COLOR:** Black

**DENSITY/SPECIFIC GRAVITY (g/ml):** 0.9 – 1.1

**VAPOR DENSITY (air=1):** Greater than 1

**VAPOR PRESSURE:** NA

**BOILING POINT/RANGE:** 800 – 1400 °F

**SOLUBILITY IN WATER:** No

**VISCOSITY:** N/A/F

**pH :** N/A

**FREEZING POINT:** 90 °F

Solid at 90 °F

## 10. STABILITY AND REACTIVITY

**GENERAL:** This product is stable

**INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:** Avoid Strong oxidizers, acids, alkalis and water

**HAZARDOUS DECOMPOSITION:** Incomplete burning can produce carbon monoxide. Hazardous polymerization will not occur.

## 11. TOXICOLOGICAL INFORMATION

**SYSTEMIC:** Petroleum derived fuel oils are complex and variable mixtures of hydrocarbons. In general, the more viscous the mixture, the less toxic it will be.

### ACUTE:

**Inhalation:** : Studies in guinea pigs and rats inhaling vapors from heated asphalt showed effects on the lungs, such as pneumonitis and non-malignant lesions.

**Ingestion:** Ingestion may cause nausea and diarrhea.

**Eye:** Exposure to vapors from hot asphalt may cause eye irritation and tearing.

**Skin:** Acute exposure may cause irritation and thermal burns.

**CHRONIC:** The International Agency for Research on Cancer has concluded that: There is sufficient evidence for the carcinogenicity of extracts of steam-refined bitumens, air-refined bitumens, and pooled mixtures of steam- and air-refined bitumens in carcinogenicity of undiluted air-refined bitumens in experimental animals. There is inadequate evidence for the carcinogenicity of undiluted air-refined bitumens in experimental animals. There is inadequate evidence that bitumens alone are carcinogenic in humans. An extract of road-surfacing bitumen (asphalt) was found to be mutagenic in the Ames Assay.

## 12. DISPOSAL INFORMATION

**RCRA:** Disposal of this product or material contaminated with product may be regulated by RCRA due to the characteristic of ignitability.

**EPA Hazard Class:** Acute Hazard/Chronic Hazard/Fire Hazard.

Dispose of in accordance with Federal, State, and Local regulations.

## 13. TRANSPORT INFORMATION

**DOT (Department of Transportation):**

**PROPER SHIPPING NAME:** Elevated Temperature Liquid N.O.S.

**HAZARD CLASS:** 9

**IDENTIFICATION NUMBER:** UN 3257 PG III

**NAERG96 NUMBER:** 128

## 14. REGULATORY INFORMATION

**CERCLA** (Comprehensive Environmental Response Compensation and Liability Act):

**SARA TITLE III** (Superfund Amendments and Reauthorization Act): Asphalt is subject to SARA Title III Sections 311 and 312, which require MSDS reporting and Hazardous Chemical Inventory Reporting.

## 15. OTHER INFORMATION

**NFPA 704/HMIS:**

Health – 0 Flammability – 1 Reactivity – 0  
(0 = insignificant, 1 = slight, 2 = moderate, 3 = high, 4 = extreme)

**REVISION SUMMARY:**

Complete review of MSDS, January 2007.

**THIS PRODUCT MATERIAL SAFETY DATA SHEET PROVIDES HEALTH AND SAFETY INFORMATION. THE PRODUCT SHOULD BE USED IN APPLICATIONS CONSISTENT WITH THIS PRODUCT LITERATURE. FOR ANY OTHER USES, EXPOSURES SHOULD BE EVALUATED SO THAT APPROPRIATE HANDLING PRACTICES AND TRAINING PROGRAMS CAN BE ESTABLISHED TO ENSURE SAFE WORKPLACE OPERATIONS.**

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**DATE:** January 2007