

# Material Safety Data Sheet



Residium / Asphalt

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MSDS #: Asphalt

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## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** Residium / Asphalt

**General Uses:** Roofing material. road paving, sound proofing, water proofing.

**Product Description:** Black, semi-solid to solid at ambient temperature. Hydrocarbon Odor.

### MANUFACTURER:

Cross Oil Refining & Marketing, Inc.  
484 East Sixth Street  
Smackover, Arkansas 71762  
MSDS prepared by: Clark B. Smith

### EMERGENCY TELEPHONE NUMBERS

**(870) 881-8700, Ext. 1163 [USA]**

(870) 881-8700, Ext. 1128

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## 2. COMPOSITION INFORMATION

**CHEMICAL FAMILY:** Petroleum Hydrocarbon

**HAZARDOUS INGREDIENTS:** None Known

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

**Common Name:** Residium 100%

**Exposure Limits (Oil Mist):** TWA

ACGIH, TLV(ppm) 5

OSHA, PELS (ppm) NA

NIOSH, STEL/CEIL(ppm) 5

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## 3. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW:

Black, semi-solid / solid at ambient temperature. Hydrocarbon odor. Can burn in a fire. Transported at *extremely high* temperature.

### POTENTIAL HEALTH EFFECTS:

**INHALATION:** Will not produce vapors unless heated to temperatures of ~300 °F.

**EYE CONTACT:** *Extreme temperatures* cause severe eye burns.

**SKIN CONTACT:** *Extreme temperature* cause severe skin burns.

**INGESTION:** Not a likely occurrence.

**CHRONIC (CANCER) INFORMATION:** Vol. 35, paragraph 4.4 of the IARC Monographs states, "There is inadequate evidence for the carcinogenicity of undiluted air refined bitumens in experimental animals. There is inadequate evidence that bitumens alone are carcinogenic to humans."

## 4. FIRST AID MEASURES

**EYE CONTACT:** High associated temperatures cause severe eye burns. Get medical attention immediately.

**SKIN:** High associated temperatures cause severe skin burns. Get medical attention immediately.

**INGESTION:** Not a likely occurrence.

**INHALATION: Fumes -** Must not exceed 5 ppm TWA in an 8-hour period.

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## 5. FIRE FIGHTING MEASURES

Flash Point, °F (Method)	See Section 9
Ignition Temp. °F	Not Determined
Flammability Limits (%)	Not Determined

### RECOMMENDED FIRE EXTINGUISHING AGENTS AND SPECIAL PROCEDURES

According to NFPA Guide, use water spray, dry chemical, foam, or carbon dioxide. Water or foam may cause frothing. Use water to cool fire exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for persons attempting to stop the leak.

**UNUSUAL OR EXPLOSIVE HAZARDS:** None

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## 6. ACCIDENTAL RELEASE MEASURES

Notify the appropriate authorities immediately. Contain spill, if possible. Avoid breathing vapor. Use self-contained breathing apparatus or supplied air for large spills or in confined areas. Ventilate confined spaces. Prevent entry into sewers or waterways. Avoid contact with skin, eyes or clothing.

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## 7. HANDLING AND STORAGE

**PRECAUTIONS:** Minimum feasible handling temperatures should be maintained. Periods of exposure to high temperature should be minimized. Water contamination should be avoided.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### PROTECTIVE EQUIPMENT

**EYE/FACE PROTECTION:** Chemical-type goggles or face shield recommended to prevent eye exposure.

**SKIN PROTECTION:** Workers should wear full clothing, including chemically impervious gloves. Soiled clothing should be laundered or dry cleaned at least weekly.

**RESPIRATORY PROTECTION:** Airborne concentrations should be kept to lowest possible levels. Use respirator approved by OSHA or NIOSH as appropriate. Supplied air respiratory protection should be used for cleaning large spills or upon entry into tanks, vessels, or other confined spaces. See Exposure Limit below.

**VENTILATION:** Must be adequate to meet exposure limits below.

### EXPOSURE LIMIT (TOTAL PRODUCT)

5 mg/m<sup>3</sup> for asphalt fumes over an 8 hour daily exposure (ACGIH).

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** Black, semi-solid / solid, strong hydrocarbon odor

**% VOC:** 100 (Can be totally burned)

**FREEZING POINT:** Not applicable

**VAPOR PRESSURE** 63 torr @ 204 °C

**SOLUBILITY IN WATER:** Insoluble

**pH:** Not available

**VAPOR DENSITY (Air=1):** 1+

<u>GRADE</u>	<u>FLASH, °F (COC)</u>	<u>SOFTENING POINT, °F</u>	<u>VISCOSITY, cP</u>	<u>BOILING POINT, °F</u>
Flux 110 -125	620	118	NA	950
Flux 160-190 Pen	580	105	2400 @ 210 °F	900
SBA - 160	600	104	NA	900 +
AC-20	630	120	NA	1000+
AC-30	640	122	NA	1000+
AC-40	650	124	NA	1000+
Coating 200-210 Softening Point	615	200	N/A	1000+
Saturant	600	133	100 @ 375 °F	1000+

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### 10. STABILITY AND REACTIVITY

- This material reacts violently with strong oxidizers.
- Evolves toxic levels of carbon monoxide, carbon dioxide, irritating aldehydes and keytones when heated to combustion.
- Hazardous polymerization does not occur.

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### 11. TOXICOLOGICAL INFORMATION

No information is available.

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## 12. ECOLOGICAL INFORMATION

If applied to leaves, this product may kill grasses and small plants by interfering with transpiration and respiration. This product is not toxic to fish but may coat gill structures resulting in suffocation if spilled in shallow, running water. Product may be moderately toxic to amphibians by preventing dermal respiration. This product may cause gastrointestinal distress in birds and mammals through ingestion.

This product is rapidly biodegradable. Biodegradation is possible with 100 to 120 days in aerobic environments at temperatures above 70F (21C).

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## 13. DISPOSAL CONSIDERATIONS

This product has been evaluated for RCRA characteristics and *does not* meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This product is subject in service to chemical alteration, which may render the resulting material hazardous.

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## 14. TRANSPORT INFORMATION

<u>PRODUCT</u>	<u>DOT</u>		<u>PACKAGING</u>
	<u>CLASS</u>	<u>PLACARD NO.</u>	
Elevated Temperature Material, Liquid	9	UN 3257	PG III

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## 15. REGULATORY INFORMATION

<b>TSCA:</b>	All components of this material are listed in the U.S. TSCA Inventory.	
<b>OSHA:</b>	IARC Monographs state that when laboratory animals are exposed to severely hydrotreated oils, such as these product(s), there is <b>insufficient evidence</b> for cancer. Thus, these oils are <b>Unlabeled</b> in accordance with 29 CFR 1910.1200.	
<b>SARA TITLE III</b>	Section 302/304 Extremely Hazardous Substance	None
	Section 313 Toxic Chemicals	None
<b>CERCLA</b>		

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## 16. OTHER INFORMATION

### Hazard Ratings Recommended for Containers

<u>NFPA</u>	<u>HMIS</u>
Fire 1	Health 1
Health 1	Flammability 1
Reactivity 0	Reactivity 0

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Specific Hazard none Personal Protection Index B

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## 16. OTHER INFORMATION (CON'T)

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Cross Oil Refining & Marketing Company, Inc. The data on this sheet is related only to the specific material designated herein. Cross Oil Refining & Marketing Co., Inc. assumes no legal responsibility for use or reliance upon these data.

NA = Not Available

Not App. = Not Applicable

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## 17. WARNING LABEL

RESIDIUM / ASPHALT

Date: 2-27-09

Tank Car Number: NA

Cross Truck Loading Manifest No: NA

### WARNING

**Avoid Prolonged Breathing of Fumes.** Average exposure to airborne mist for an 8 hour workday should not exceed 5.0 milligrams of mist per cubic meter of air.

**Avoid Eye and Skin Contact:** Wear oil-impervious protective clothing. If clothes become contaminated, change to clean clothing after thoroughly washing exposed skin with soap and warm water.

### FIRST AID

**Inhalation:** If overcome by fumes, remove from exposure immediately and call a physician.

**Skin:** Avoid skin contact, as *severe* burns are likely. Contact a physician immediately.

**Eyes:** Severe burns are likely. Contact a physician immediately.

**Ingestion:** Not a likely occurrence

### FIRE CONTROL

Use water spray or fog, chemical foam, dry powder or carbon dioxide.

### SPILL / LEAK

Contain spill. Advise State Environmental Protection Agency, if required. Put recovered material in an appropriate container and dispose of according to federal, state, and local regulations. For guidance call Cross Oil Refining & Marketing Co., Inc. at (870) 881-8700, Ext. 1163

### STORAGE

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Store in original or equivalent container. Store at the lowest practical temperature. Keep container closed when not in use. Do not apply heat or flame to the container

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