

# MSDS - Material Safety Data Sheet

## Product Name: BLACK WAX CRUDE OIL

MSDS No.: SER05

### I. Basic Information:

**Manufacturer:** Silver Eagle Refining, Woods Cross Inc.

**Address:** P.O. Box 870298, 2355 South 1100 West

**City, ST Zip:** Woods Cross, UT 84087

**Emergency Contact:** Kerry Carroll

**Emergency Telephone Number:** 801-556-6494

**Contact:** Kerry B. Carroll/Blaine Zwahlen

**Information Telephone Number:** 801-298-3211

**Last Update:** 04/07/2004

**Expiration Date:**

**Chemical State:**  Liquid  Gas  Solid

**Chemical Type:**  Pure  Mixture



1	Health
2	Flammability
0	Reactivity
X	Pers. Protection

### II. Ingredients:

Trade Secret

CAS No.	Chemical Name	% Range	EHS		IARC		SARA		OSHA PEL	ACGIH TLV	Other Limits
			NTP		SUB Z	313					
71432	Benzene	0 to .05	X				X	5 ppm	0.5 ppm	IDLH = 1	
7783064	Hydrogen sulfide	0 to 10ppm	X				X	10 ppm	10 ppm		
64741-56-6	Petroleum Hydrocarbon	100									

### III. Hazardous Identification:

**Hazard Category:**

Acute  Chronic  Fire  Pressure  Reactive

**Hazardous Identification Information:**

API DEFINITION: PETROLEUM - CRUDE OIL: A complex combination of hydrocarbons. It consists predominantly of paraffins, cyclic paraffins, cyclic aromatic hydrocarbons having carbon numbers predominantly greater than C1. May also contain small amounts of benzene hydrocarbons, sulfur, and oxygenated compounds.

SYNONYMS: Petroleum, Waxy Crude, Black Wax

CHEMICAL FAMILY: PETROLEUM HYDROCARBON

CHEMICAL FORMULA: C-5 TO C-42 HYDROCARBONS

CAS NUMBER: 64741-46-4

### IV. First Aid Measures:

**Route(s) of Entry:**

Eyes, Skin, Ingestion and Inhalation

**Health Hazards (Acute and Chronic):**

## ***MSDS - Material Safety Data Sheet***

***Product Name: BLACK WAX CRUDE OIL***

***MSDS No.: SER05***

MAY CAUSE SEVERE EYE IRRITATION, CONJUNCTIVITIS, MAY CAUSE MODERATE SKIN IRRITATION, DEFATTING, DERMATITIS, NASAL AND RESPIRATORY TRACT IRRITATION, CENTRAL NERVOUS SYSTEM EFFECTS, POSSIBLE SECONDARY INFECTION, ANEMIA, IRREGULAR HEART RHYTHM, BEHAVIORAL CHANGES, HARMFUL OR FATAL IF SWALLOWED, GASTROINTESTINAL DISTURBANE

**Signs and Symptoms:**

EYE IRRITATION, REDNESS, TEARING, BLURRED VISION, SKIN IRRITATION, CRACKING, REDNESS, ITCHING, INFLAMMATION, EXCITATION, EUPHORIA, CONTRACTED EYE PUPILS, DIZZINESS, DROWSINESS, FATIGUE, NAUSEA, HEADACHE, LOSS OF REFLEXES, TREMORS, CONVULSIONS, SEIZURES, LOSS OF CONSCIOUSNESS, COMA, DEPRESSION, DIARRHEA, VOMITING.

**Medical Conditions Generally Aggravated by Exposure:**

PREEXISTING SKIN AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT. PREEXISTING SKIN OR LUNG ALLERGIES MAY INCREASE THE CHANCE OF DEVELOPING INCREASED ALLERGY SYMPTOMS FROM EXPOSURE TO THIS PRODUCT.

**Emergency and First Aid Procedures:**

Skin: irritating; remove contaminated clothing, flush with water; Eyes: flush with water; Ingestion: if swallowed, do not induce vomiting, drink water and milk, contact physician. Aspiration: enforced bed rest; administer oxygen; call doctor. Ingestion: do not induce vomiting; call doctor. Eyes and Skin: wash with water; use soap and water on skin.

**Other Health Warnings:**

***V. Fire Fighting Measures:***

**Flash Point:** <59 - 199+F (<15 - 93+      **Lower Explosive Limit:**      **Upper Explosive Limit:**

**F.P. Method:**

**Fire Extinguishing Media:** EXTINGUISHING MEDIA: CO2, Dry Chemical, Foam, Water Fog. Do not use water spray or a direct stream of water.

**Special Fire Fighting Procedures:**

**FIRE FIGHTING INSTRUCTIONS:**  
For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

**Unusual Fire and Explosion:**

***VI. Accidental Release Measures:***

**Steps to be Taken in Case Material is Released or Spilled:**

STAY UPWIND AND AWAY FROM SPILL. DO NOT ENTER OR STAY IN AREA UNLESS MONITORING INDICATES OK. ISOLATE HAZARD AREA; RESTRICT ENTRY. RECOVER AS MUCH AS POSSIBLE. THEN ABSORB AND HANDLE IAW ENVIRONMENTAL REGULATIONS. KEEP OUT OF SEWERS/WATERWAYS.

## ***MSDS - Material Safety Data Sheet***

***Product Name: BLACK WAX CRUDE OIL***

***MSDS No.: SER05***

### ***VII. Handling and Storage:***

**Precautions to be Taken:**

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT SHIPPING NAME: PETROLEUM CRUDE OIL  
DOT HAZARD CLASS: 3 (FLAMMABLE LIQUID)  
DOT IDENTIFICATION NUMBER: UN1267  
DOT PACKING GROUP: N/A

This material presents a fire hazard. Liquid quickly evaporates and forms vapor (fumes) which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches. Fire hazard is greater as liquid temperature rises above 15F.

Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Do not breathe vapor or fumes. Wash thoroughly after handling.

Toxic quantities of hydrogen sulfide (H<sub>2</sub>S) may be present in storage tanks and bulk transport vessels which contain or have contained this material. Persons opening or entering these compartments should first determine if H<sub>2</sub>S is present. See Exposure Controls/Personal Protection -Section 8. Do not attempt rescue of a person overexposed to H<sub>2</sub>S without wearing approved supplied-air or self-contained breathing equipment.

Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, review all operations which have the potential of generating an accumulation of electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising Out of Static, Lighting, and Stray Currents" and/or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity.

FOR MATERIAL PACKED IN STEEL DRUMS: Do not use pressure to empty drum or drum may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner, or properly disposed of.

**Other Precautions:**

### ***VIII. Exposure Controls/Personal Protection:***

**Ventilation Requirements:**

USE IN WELL VENTILATED AREA. IN CONFINED SPACE, MECHANICAL VENTILATION MAY BE NECESSARY TO KEEP BELOW PEL/TLVS

## MSDS - Material Safety Data Sheet

**Product Name: BLACK WAX CRUDE OIL**

**MSDS No.: SER05**

**Personal Protective Equipment:**

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION:

Wear eye protection such as safety glasses, chemical goggles, or face shields if engineering controls or work practices are not adequate to prevent eye contact.

SKIN PROTECTION:

Wear protective clothing if engineering controls or work practices are not adequate to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted. Suggested materials for protective gloves include:

<Polyvinyl Alcohol (or PVA - Note: Avoid contact with water. PVA deteriorates in water)>

RESPIRATORY PROTECTION:

No respiratory protection is normally required. Determine if airborne concentrations are below recommended exposure limits for H2S. If not, wear a NIOSH approved air-supplying respirator. Refer to the OSHA Benzene Standard to determine what type of respirator is required based on exposure levels.

### IX. Physical and Chemical Properties:

**Boiling Point:** 180 - 700F and higher.

**Melting Point:**

**Evaporation Rate (Butyl Acetate = 1):** NDA

**Vapor Pressure (mm Hg.):** 05. - 1.26PSIA

**Specific Gravity (H2O = 1):** 0.86000

**Vapor Density (AIR = 1):** <1

**Solubility In Water:** Soluble in hydrocarbon solvents; insoluble in water.

**Appearance and Odor:** Amber to black viscous liquid with a mild to pungent sulfurous odor.

**Other Information:**

### X. Stability and Reactivity:

**Stability:**

stable

**Incompatibility (Materials to Avoid):**

Materials to Avoid: AVOID STRONG OXIDIZING AGENTS (PEROXIDE, DICHROMATE, PERMANGANATE, CHLORINE, ETC), STRONG ACIDS, CAUSTICS AND HALOGENS.

Stability Condition to Avoid: HEAT, SPARKS, OPEN FLAME, STATIC ELECTRICITY OR OTHER POTENTIAL IGNITION SOURCES SHOULD BE AVOIDED. DO NOT SWITCH LOAD.

**Decomposition/By Products:**

CARBON MONOXIDE, CARBON DIOXIDE AND REACTIVE HYDROCARBONS (ALDEHYDES, AROMATICS, ETC) COMPOUNDS

**Hazardous Polymerization:**

Polymerization will not occur.

### XI. Toxicological Information:

## ***MSDS - Material Safety Data Sheet***

***Product Name: BLACK WAX CRUDE OIL***

***MSDS No.: SER05***

**EYE EFFECTS:**

The eye irritation hazard is based on an evaluation of the data for the components.

**SKIN EFFECTS:**

The skin irritation hazard is based on an evaluation of the data for the components. The acute dermal toxicity is based on an evaluation of the data for the components.

**ACUTE ORAL EFFECTS:**

The acute oral toxicity is based on an evaluation of the data for the components.

**ACUTE INHALATION EFFECTS:**

The acute respiratory toxicity is based on an evaluation of the data for the components.

**CHRONIC EFFECTS/CARCINOGENICITY:**

The International Agency for Research on Cancer (IARC) reviewed the carcinogenic potential of crude oil in 1989 and concluded that there was limited evidence for the carcinogenicity of crude oil in animals and inadequate evidence for the carcinogenicity of crude oil in humans. The basis for the findings for animals are results from studies in which crudes applied to the skin of lab animals showed benign and malignant skin tumors in some studies, but not in others.

This product may contain significant amounts of polynuclear aromatic hydrocarbons (PAH's) which have been shown to cause skin cancer after prolonged and frequent contact with the skin of test animals. Brief or intermittent skin contact with this product is not expected to have serious effects if it is washed from the skin. While skin cancer is unlikely to occur in human beings following use of this product, skin contact and breathing of mists or vapors should be reduced to a minimum.

This product contains benzene.

**GENETIC TOXICITY/CANCER:** Repeated or prolonged breathing of benzene vapor has been associated with the development of chromosomal damage in experimental animals and various blood diseases in humans ranging from aplastic anemia to leukemia (a form of cancer). All of these diseases can be fatal.

**REPRODUCTIVE/DEVELOPMENTAL TOXICITY:** No birth defects have been shown to occur in pregnant laboratory animals exposed to doses not toxic to the mother. However, some evidence of fetal toxicity such as delayed physical development has been seen at such levels. The available information on the effects of benzene on human pregnancies is inadequate but it has been established that benzene can cross the human placenta. **OCCUPATIONAL:** The OSHA Benzene Standard (29 CFR 1910.1028) contains detailed requirements for training, exposure monitoring, respiratory protection and medical surveillance triggered by the exposure level. Refer to the OSHA Standard before using this product

***XII. Ecological Information:***

## ***MSDS - Material Safety Data Sheet***

***Product Name: BLACK WAX CRUDE OIL***

***MSDS No.: SER05***

ENVIRONMENTAL DATA SHEET

EQUILON EDS: 55270E

CRUDE OIL - FLAMMABLE; SOUR (FLASHPOINT 0.5% WT.)

TELEPHONE NUMBER:

24 HOUR EMERGENCY ASSISTANCE

GENERAL MSDS ASSISTANCE

EQUIVA SERVICES: 877-276-7283

877-276-7285

CHEMTREC: 800-424-9300

NAME AND ADDRESS

EQUILON ENTERPRISES

PRODUCT STEWARDSHIP

P.O. BOX 674414

HOUSTON, TX 77267-4414

PRODUCT CODE: 82743

UNDER EPA-CWA, THIS PRODUCT IS CLASSIFIED AS AN OIL UNDER SECTION 311.

SPILLS INTO OR LEADING TO SURFACE WATERS THAT CAUSE A SHEEN MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER, 800-424-8802.

THIS MATERIAL IS COVERED BY CERCLA'S PETROLEUM EXCLUSION, THEREFORE, RELEASES TO AIR, LAND OR WATER ARE NOT REPORTABLE UNDER EPA-CERCLA ("SUPERFUND").

### ***XIII. Disposal Considerations:***

DISPOSE OF ACCORDING TO ALL FEDERAL, STATE AND LOCAL REGULATIONS

### ***XIV. Transport Information:***

DEPARTMENT OF TRANSPORTATION CLASSIFICATION:

CLASS 3 (FLAMMABLE LIQUID), PACKING GROUP MUST BE DETERMINED ON A CASE-BY-CASE BASIS.

DOT PROPER SHIPPING NAME:PETROLEUM CRUDE OIL

OTHER REQUIREMENTS:UN1267, GUIDE 128

### ***XV. Regulatory Information:***

# MSDS - Material Safety Data Sheet

**Product Name: BLACK WAX CRUDE OIL**

**MSDS No.: SER05**

THIS PRODUCT IS LISTED ON THE EPA/TSCA INVENTORY OF CHEMICAL SUBSTANCES. PROTECTION OF STRATOSPHERIC OZONE (PURSUANT TO SECTION 611 OF THE CLEAN AIR ACT AMENDMENTS OF 1990): PER 40 CFR PART 82, THIS PRODUCT DOES NOT CONTAIN NOR WAS IT DIRECTLY MANUFACTURED WITH ANY CLASS I OR CLASS II OZONE DEPLETING SUBSTANCES.

IN ACCORDANCE WITH SARA TITLE III, SECTION 313, THE ATTACHED ENVIRONMENTAL DATA SHEET (EDS) SHOULD ALWAYS BE COPIED AND SENT WITH THE MSDS.

THE FOLLOWING CHEMICALS ARE SPECIFICALLY LISTED BY INDIVIDUAL STATES; OTHER PRODUCT SPECIFIC HEALTH AND SAFETY DATA IN OTHER SECTIONS OF THE MSDS MAY ALSO BE APPLICABLE FOR STATE REQUIREMENTS. FOR DETAILS ON YOUR REGULATORY REQUIREMENTS YOU SHOULD CONTACT THE APPROPRIATE AGENCY IN YOUR STATE.

STATE LISTED COMPONENT	CAS NO	PERCENT	STATE CODE
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CRUDE OIL	8002-05-9	100	CA, CT, FL, IL, LA, MA, ME, MN, NJ, PA, RI
NATURAL GAS	8006-14-2	VARIABLE	MA, PA
HYDROGEN SULFIDE	7783-06-4	VARIABLE	CA, CT, FL, IL, LA, MA, ME, MN, NJ, PA, RI
BENZENE	71-43-2	VARIABLE	CA, CT, FL, IL, LA, MA, ME, MN, NJ, PA, RI, CA65C/R
N-HEXANE	110-54-3	VARIABLE	CA, CT, FL, IL, LA, MA, ME, MN, NJ, PA, RI

CA = CALIFORNIA HAZ. SUBST. LIST; CA65C, CA65R, CA65C/R = CALIFORNIA SAFE DRINKING WATER AND TOXICS ENFORCEMENT ACT OF 1986 OR PROPOSITION 65 LIST; CT = CONNECTICUT TOXIC. SUBST. LIST; FL = FLORIDA SUBST. LIST; IL = ILLINOIS TOX. SUBST. LIST; LA = LOUISIANA HAZ. SUBST. LIST; MA = MASSACHUSETTS SUBST. LIST; ME = MAINE HAZ. SUBST. LIST; MN = MINNESOTA HAZ. SUBST. LIST; NJ = NEW JERSEY HAZ. SUBST. LIST; PA = PENNSYLVANIA HAZ. SUBST. LIST; RI = RHODE ISLAND HAZ. SUBST. LIST.

CALIFORNIA PROPOSITION 65 FOOTNOTE: CA65C = THE CHEMICAL IDENTIFIED WITH THIS CODE IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER. CA65R = THE CHEMICAL IDENTIFIED WITH THIS CODE IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. CA65C/R = THE CHEMICAL IDENTIFIED WITH THIS CODE IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BOTH CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

MSDS REVISED IN SECTION XV - STATE REGULATORY INFORMATION.

THE INFORMATION CONTAINED IN THIS DATA SHEET IS BASED ON THE DATA AVAILABLE TO US AT THIS TIME, AND IS BELIEVED TO BE ACCURATE BASED UPON THAT DATA. IT IS PROVIDED INDEPENDENTLY OF ANY SALE OF THE PRODUCT, FOR PURPOSE OF HAZARD COMMUNICATION. IT IS NOT INTENDED TO CONSTITUTE PRODUCT PERFORMANCE INFORMATION, AND NO EXPRESS OR IMPLIED WARRANTY OF ANY KIND IS MADE WITH RESPECT TO THE PRODUCT, UNDERLYING DATA OR THE INFORMATION CONTAINED HEREIN. YOU ARE URGED TO OBTAIN DATA SHEETS FOR ALL PRODUCTS YOU BUY, PROCESS USE OR DISTRIBUTE, AND ARE ENCOURAGED TO ADVISE THOSE WHO MAY COME IN CONTACT WITH SUCH PRODUCTS OF THE INFORMATION CONTAINED HEREIN.

TO DETERMINE THE APPLICABILITY OR EFFECT OF ANY LAW OR REGULATION WITH RESPECT TO THE PRODUCT, YOU SHOULD CONSULT WITH YOUR LEGAL ADVISOR OR THE APPROPRIATE GOVERNMENT AGENCY. WE WILL NOT PROVIDE ADVICE ON SUCH MATTERS, OR BE RESPONSIBLE FOR ANY INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN. THE UNDERLYING DATA, AND THE INFORMATION PROVIDED HEREIN AS A RESULT OF THAT DATA, IS THE PROPERTY OF EQUIVA SERVICES, LLC AND IS NOT TO BE THE SUBJECT OF SALE OR EXCHANGE WITHOUT THE EXPRESS WRITTEN CONSENT OF EQUIVA SERVICES, LLC.

## ***MSDS - Material Safety Data Sheet***

***Product Name: BLACK WAX CRUDE OIL***

***MSDS No.: SER05***

### ***XVI. Other Information:***

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WARNING! THIS MATERIAL CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, OR BIRTH DEFECTS, OR OTHER REPRODUCTIVE HARM.