

# MATERIAL SAFETY DATA SHEET

Product Name: ANCO LIG

Anchor Drilling Fluids USA, Inc.  
2431 E 61<sup>ST</sup> Street, Suite 710 Tulsa, OK 74136

Run Date: 12/22/94

Rev. Date: 5/1/06

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## I. GENERAL INFORMATION

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Chemical Name: LEONARDITE CAS#: 1415-93-6  
Chemical Family: NORTH DAKOTA CRUDE HUMIC ACID  
Chemical Formula:  
Synonyms: LIGNITE  
NFPA Properties: Health: 1 Flammability: 4 Reactivity: 0  
Emergency Telephone: CHEMTREC (800) 424-9300 Information Telephone: (918) 583-7701

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## II. HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

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| Hazardous Components  | TWAPPM | TWA MG/M <sup>3</sup> | STEL PPM | STEL MG/M <sup>3</sup> | CAS#       | OTHER LIMITS | %   |
|-----------------------|--------|-----------------------|----------|------------------------|------------|--------------|-----|
| 1. COAL DUST          | 1.5    | 1.5                   |          |                        | NONE       |              |     |
| 2. CRYSTALLINE QUARTZ |        |                       |          |                        | 14808-60-7 |              | 2-6 |

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## III. PHYSICAL / CHEMICAL CHARACTERISTICS

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|                      |            |             |                     |
|----------------------|------------|-------------|---------------------|
| Boiling Point °F:    | N/A        | Color:      | DEEP BROWN TO BLACK |
| Specific Gravity:    | 1.5        | Odor:       | ALMOST ODORLESS     |
| Vapor Pressure:      | N/A        | Appearance: | POWDER              |
| Percent Volatility:  | N/A        | pH:         |                     |
| Vapor Density:       | N/A        | Viscosity:  | N/A                 |
| Evaporation Rate:    | N/A        | Activity:   | N/A                 |
| Solubility in Water: | NEGLIGIBLE | LC50:       | NDA                 |
| Melting Point °F:    | N/A        | LD50:       | NDA                 |

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## IV. FIRE & EXPLOSION HAZARD DATA

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Extinguishing Agents: DRYCHEMICAL OR WATERSPRAY OR WATERFOG OR CO2 OR FOAM OR SAND & EARTH  
Flash Point °F: >400  
Flammable Limits: N/A LEL: N/A UEL: N/A  
Special Firefighting Procedures: FIREFIGHTERS SHOULD WEAR NORMAL PROTECTIVE EQUIPMENT INCLUDING A SELF-CONTAINED BREATHING APPARATUS.

Unusual Fire & Explosion Hazards:

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## V. HEALTH HAZARD DATA

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Routes of Entry:    Inhalation – YES                      Skin – YES                      Ingestion – YES  
Effects of Overexposure:    NONE  
Toxicological Properties:    NDA  
Chronic & Acute Effects of Overexposure:  
Carcinogenicity:    NTP – NO                      IARC Monographs – NO                      OSHA Regulated:

Emergency First Aid Procedures:

- Eyes:            FLUSH WITH PLENTY OF WATER. IF IRRITATION DEVELOPS, CALL A PHYSICIAN.
  - Skin Contact: ORDINARY MEASURES OF PERSONAL HYGIENE SHOULD BE ADEQUATE
  - Inhalation:    SYMPTOMATIC TREATMENT.
- Ingestion:            ESSENTIALLY NON-TOXIC.

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## VI. REACTIVITY DATA

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Stability:                      STABLE                                      Hazardous Polymerization:    WILL NOT OCCUR  
Hazardous Decomposition Products: SMOKE, FUMES, CARBON MONOXIDE, CARBON DIOXIDE  
Conditions To Avoid:  
Incompatibility and Materials to Avoid:

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## VII. PRECAUTIONS FOR SAFE HANDLING AND USE

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|   |  |
|---|--|
| <u>Steps To Be Taken In Case Material Is Released Or Spilled – Procedures For Clean-Up:</u> | SWEEP SPILL MATERIAL AND REPACKAGE.                              |
| <u>Waste Disposal Method:</u>   | INCINERATE IN ACCORDANCE TO LOCAL, STATE AND FEDERAL REGULATIONS |
| <u>Precautions To Be Taken In Handling &amp; Storage:</u>                                   | NONE.  |

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## VIII. CONTROL MEASURES

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Ventilation Type Required:                      LOCAL EXHAUST  
Protective Gloves:                                      RECOMMENDED  
Eye Protection:                                      SAFETY GOGGLES  
Respiratory Protection:                              WEAR A NIOSH APPROVED MASK IF CONCENTRATION IS TO EXCEED TLV  
Other Protective Equipment:  
Comments:

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## IX. REGULATORY & TRANSPORTATION INFORMATION

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US DOT Proper Shipping Name: "OIL-WELL TREATING COMPOUND"  
US DOT Hazard Class: DOT ID Number: NOT REGULATED  
ID Number: Freight Classification:  
Unregulated by DOT: Regulated by DOT:  
Special Transportation Note:  
Labels Required:

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