

# MATERIAL SAFETY DATA SHEET

Product Name: GRAPHITE

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

Run Date: 12/22/99

Rev. Date: 05/01/06

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## I. GENERAL INFORMATION

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Chemical Name: N/A CAS#: N/A  
Chemical Family: NATURAL GRAPHITE  
Chemical Formula: N/A  
Synonyms: NUT PLUG  
NFPA Properties: Health: NDA Flammability: NDA Reactivity: NDA  
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	OSHA PEL	ACGIH	CAS#	%
1. GRAPHITE	2.0 mg/m3		7782-42-5	
2. SILICA	0.05 mg/m3		14808-60-7	

TSCA STATUS: GRAPHITE IS LISTED ON THE US EPA TSCA INVENTORY.

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## III. PHYSICAL / CHEMICAL CHARACTERISTICS

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Boiling Point °F:	N/A	Appearance:	GRAY TO BLACK
Specific Gravity:	2.20-2.35	Odor:	NONE
Vapor Pressure:	N/A	Form:	SOLID – GRANULAR
Percent Volatility:	N/A	pH:	
Vapor Density:	N/A	Viscosity:	
Evaporation Rate:	N/A	Activity:	
Solubility in Water:	INSOLUBLE	LC50:	NDA
Melting Point °F:	N/A	LD50:	NDA

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## IV. FIRE & EXPLOSION HAZARD DATA

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Extinguishing Agents: WATER  
Flash Point °F: N/A  
Flammable Limits: N/A LEL: N/A UEL: N/A  
Special Firefighting Procedures: SPRAY WITH WATER. FIREFIGHTERS SHOULD WEAR NORMAL PROTECTIVE EQUIPMENT, INCLUDING A SELF CONTAINED BREATHING APPARATUS.  
Unusual Fire & Explosion Hazards: NONE.

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## V. HEALTH HAZARD DATA

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Routes of Entry: Inhalation: YES      Skin: YES      Ingestion: NO  
Effects of Overexposure: CASES OF PULMONARY FIBROSIS, EMPHYSEMA AND CORPULMONALE MAY RESULT FROM PROLONGED INHALATION OF DUST (CHRONIC). MINOR SKIN AND/OR EYE IRRITATION MAY OCCUR.  
Toxicological Properties: NDA  
Carcinogenicity (Silica): NTP – YES      IARC Monographs – YES      OSHA Regulated – NO  
IARC MONOGRAPH VOL. 68, 1997, CONCLUDES THAT THERE IS SUFFICIENT EVIDENCE THAT INHALED CRYSTALLINE SILICA CAUSES CANCER IN HUMANS. IARC CLASSIFICATION GROUP 1.  
Signs & Symptoms of Exposure: INHALATION – NOSE AND/OR THROAT IRRITATION, SHORTNESS OF BREATH.  
SKIN/EYES – REDNESS OF SKIN, IRRITATION OF EYES.  
Medical Conditions Generally Aggravated by Exposure: EMPHYSEMA, ASTHMA OR OTHER RESPIRATORY PROBLEMS.

### Emergency First Aid Procedures:

Eyes: RINSE EYES WITH STERILE EYE WASH. SEEK MEDICAL ATTENTION IF IRRITATION PERSISTS.  
Skin Contact: WASH WITH MILD SOAP AND WATER.  
Inhalation: REMOVE FROM DUST AREA. SEEK MEDICAL ATTENTION IF SYMPTOMS PERSIST.  
Ingestion: ESSENTIALLY NON-TOXIC.

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## VI. REACTIVITY DATA

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Stability: STABLE (under normal conditions)  
Hazardous Polymerization: WILL NOT OCCUR  
Hazardous Decomposition Products: CARBON MONOXIDE, CARBON DIOXIDE  
Conditions To Avoid: NONE.  
Incompatibility and Materials to Avoid: OXIDIZING AGENTS.

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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 UP SPILL MATERIAL AND REPACKAGE.
<u>Waste Disposal Method:</u>	DISPOSE OF IN ACCORDANCE TO LOCAL, STATE AND FEDERAL REGULATIONS.
<u>Precautions To Be Taken In Handling &amp; Storage:</u>	HANDLE AND TRANSFER IN A MANNER THAT AVOIDS EXCESSIVE DUSTING. STORE AWAY FROM OXIDIZING AGENTS.
<u>Other Precautions</u>	GRAPHITE IS A CONDUCTOR OF ELECTRICITY. EXERCISE CAUTION WHEN HANDLING GRAPHITE IN AREAS WHERE CONTACT WITH ELECTRICAL CIRCUITRY IS POSSIBLE.

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## VIII. CONTROL MEASURES

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Ventilation Type Required:	LOCAL AND MECHANICAL EXHAUST.
Protective Gloves:	CONVENTIONAL WORK GLOVES.
Eye Protection:	SAFETY GOGGLES OR GLASSES.
Respiratory Protection:	USE OSHA APPROVED RESPIRATOR FOR NUISANCE DUST.
Other Protective Equipment:	NOT REQUIRED.
Work Hygienic Practices:	KEEP WORK AREA CLEAN. USE ADEQUATE DUST COLLECTION/VENTILATION TO MAINTAIN LEVELS OF DUST BELOW ACGIH-TLV

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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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