

Ener-Gs

SECTION 1. IDENTIFICATION

Product Identifier Ener-Gs
Other Means of Identification Blended Graphite
Recommended Use Drilling Fluid Additive.
Manufacturer / Supplier AES Drilling Fluids, LLC, 11767 Katy Freeway, Suite 230, Houston, TX, 77079, Sales & Information, 281-556-5628
Emergency Phone No. CHEMTREC, 1-800-424-9300, 24-hour Emergency
Date of Preparation May 11, 2015

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

OSHA Defined Hazards: Combustible dust

GHS Label Elements

Signal Word:

Warning

Hazard Statement(s):

Dust in eye may result in mechanical irritation.

H335 May cause respiratory irritation.

May form combustible dust concentrations in air

Precautionary Statement(s):

Prevention:

P262 Do not get in eyes, on skin, or on clothing.

P264 Wash hands and skin thoroughly after handling.

P261 Avoid breathing dust.

P280 Wear eye protection/face protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance:

Chemical Name	CAS No.	%	Other Identifiers
Graphite, Synthetic	7782-42-5	Confidential	

Notes

The specific chemical identity and/or exact percentage of composition (concentration) has been withheld as a trade secret.

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor. Get medical advice/attention if you feel unwell or are concerned.

Skin Contact

Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. If skin irritation occurs get medical advice/attention.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice/attention.

Ingestion

Rinse mouth with water. Do not induce vomiting without medical advice. If vomiting occurs, have victim lean forward to reduce the risk of aspiration. Seek medical attention.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water, Carbon Dioxide, Foam, Dry chemical.

Specific Hazards Arising from the Chemical

At very high dust concentrations, product may form combustible dust concentrations or explosive dust-air mixtures. Oxides of carbon.

Special Protective Equipment and Precautions for Fire-fighters

When fighting chemical fires, emergency responders should wear NIOSH approved self contained breathing apparatus and appropriate protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet.

Environmental Precautions

Prevent product from entering drains, soil, ditches, sewers, waterways and/or groundwater.

Methods and Materials for Containment and Cleaning Up

Vacuum or sweep product up, try to minimize dust build-up. Spill material may cause floors and contact surfaces to become slippery, flush slowly with water, collect and store in suitable containers. Store recovered product in suitable containers for disposal according to local regulations.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid breathing in dust. Do not get in eyes, on skin or on clothing. Avoid creating excessive dust while handling the product. Do not eat, drink or smoke in areas where product is handled. Employees should wash hands after working with product and before going on breaks outside of the work area. If spilled, take caution, as material can cause surfaces to become very slippery. See Section 8 for appropriate Personal Protective Equipment (PPE).

Conditions for Safe Storage

Store in an area that is: cool, dry, ventilated. Away from open flames, excessive heat or sources of ignition. Keep containers tightly closed when not in use. Use good housekeeping to prevent accumulation of dust.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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Control Parameters

Chemical Name	ACGIH® TLV®		OSHA PEL		AIHA® WEEL™	
	TWA	STEL [C]	TWA	Ceiling	8-hr TWA	Short-term TWA [C]
Graphite, Synthetic	2 mg/m3 (R)		3 mg/m3 (R)		Not established	

ACGIH® = American Conference of Governmental Industrial Hygienists. TWA = Time-Weighted Average. R = Respirable fraction. STEL = Short-term Exposure Limit. C = Ceiling limit. OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. AIHA® = AIHA® Guideline Foundation.

Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. While working with the product an eyewash and safety shower should be within acceptable distance to the work area.

Individual Protection Measures

Eye/Face Protection

Safety glasses or goggles. Wear chemical safety goggles and face shield when contact is possible.

Skin Protection

Wear appropriate gloves while handling product. Wear long sleeves, long pants and appropriate footwear while working with product.

Respiratory Protection

If conditions of use promote large amounts of dust to gather in the work area, wear NIOSH approved dust mask or respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Grey.
Odour	Odourless
pH	Not available
Melting Point/Freezing Point	> 5000 °F (2760 °C) (melting); Not available (freezing)
Initial Boiling Point/Range	Not available
Flash Point	Not available
Evaporation Rate	Not available
Flammability (solid, gas)	Not available
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	2.25
Solubility	Insoluble in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Other Information	
Physical State	Solid

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use.

Chemical Stability

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Normally stable.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

Conditions to Avoid

Open flames, sparks, static discharge, heat and other ignition sources.

Incompatible Materials

Strong Oxidizing Agents. Strong alkalis, strong acids.

Hazardous Decomposition Products

Oxides of carbon.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Graphite, Synthetic	Not available	Not available	Not available

Skin Corrosion/Irritation

Not a skin irritant.

Serious Eye Damage/Irritation

May cause mechanical irritation to eyes.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May cause irritation of the respiratory tract.

Skin Absorption

No information was located.

Ingestion

May cause irritation of the mouth, throat and stomach.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Chronic inhalation exposure to natural graphite is associated with the development of pneumoconiosis, a disease of the lungs.

Respiratory and/or Skin Sensitization

Not a respiratory sensitizer. Not a skin sensitizer.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Graphite, Synthetic	Not Listed	Not Listed	Not Listed	Not Listed

Not known to cause cancer.

Key to Abbreviations

IARC = International Agency for Research on Cancer. ACGIH® = American Conference of Governmental Industrial Hygienists. NTP = National Toxicology Program. OSHA = US Occupational Safety and Health Administration.

Reproductive Toxicity

Development of Offspring

No information was located.

Sexual Function and Fertility

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

Do not allow product to contaminate domestic or irrigation water supplies, lakes, streams, ponds or rivers.

Toxicity

No information was located.

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Graphite, Synthetic	Not available	Not available	Not available	Not available

Persistence and Degradability

No information was located.

Bioaccumulative Potential

No information was located.

Mobility in Soil

No information was located.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of in accordance with all local, state and federal regulations. Not classified as RCRA Hazardous. RCRA WASTE NUMBER: Not Applicable.

SECTION 14. TRANSPORT INFORMATION

Not regulated under US DOT Regulations.

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are on the TSCA Inventory or exempt from the TSCA.

Additional USA Regulatory Lists

CERCLA: Product does not contain any chemicals subject to the reporting requirement of CERCLA.

SARA Title III - Section 302: No listed components.

SARA Title III - Section 311/312: None

SARA Title III - Section 313: No chemicals are reportable under Section 313.

SECTION 16. OTHER INFORMATION

NFPA Rating **Health - 1** **Flammability - 1** **Instability - 0**

SDS Prepared By AES Drilling Fluids

Phone No. 281-556-5628

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Disclaimer Do not handle or use until precautions on MSDS are read and understood. The information on this form is furnished solely for the purpose of enabling those who transport, handle or use our products to ensure the safety and health of their employees and to comply with various laws and regulations (federal, state and local). We believe the statements, technical information and recommendations contained herein are reliable but, they are given without warranty or guarantee of any kind, express or implied and we assume no responsibility for any loss, damage, direct or consequential, arising out of their use.

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