

EnerSperse

SECTION 1. IDENTIFICATION

Product Identifier	EnerSperse
Other Means of Identification	Dispersant
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	March 31, 2015

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) - Category 5; Acute toxicity (Dermal) - Category 4; Skin corrosion/irritation - Category 2; Specific target organ toxicity (single exposure) - Category 3; Aspiration hazard - Category 2

GHS Label Elements



Signal Word:

Warning

Hazard Statement(s):

H305 May be harmful if swallowed and enters airways.

H333 May be harmful if inhaled.

H312 Harmful in contact with skin.

H336 May cause drowsiness or dizziness.

Precautionary Statement(s):

Prevention:

P260 Do not breathe vapours, mist, spray.

P264 Wash hands and skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE/doctor.

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

P302 + P352 IF ON SKIN: Wash with plenty of water.

P362 + P364 Take off contaminated clothing and wash it before reuse.

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product Identifier: EnerSperse

Date of Preparation: March 31, 2015

Page 01 of 06

Mixture:

Chemical Name	CAS No.	%	Other Identifiers
Polyolefin amide alkeneamine	Confidential	Confidential	
Trade Secret	CBI*	Confidential	

Notes

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

CBI = Confidential Business Information.

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of contaminant 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. Immediately call a Poison Centre or doctor.

Skin Contact

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. Seek 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. Seek medical advice/attention.

Ingestion

Immediately call a Poison Centre or doctor. Do not induce vomiting. Rinse mouth with water.

First-aid Comments

Get medical advice/attention if you feel unwell or are concerned.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water, Carbon Dioxide, Foam, Dry chemical.

Specific Hazards Arising from the Chemical

Can ignite if strongly heated.

Oxides of carbon.

Special Protective Equipment and Precautions for Fire-fighters

Use water spray to cool containers/tanks.

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

It is good practice to prevent releases into the environment. Prevent product from entering drains, soil, ditches, sewers, waterways and/or groundwater.

Methods and Materials for Containment and Cleaning Up

Dike and recover contaminated water for appropriate disposal. Contain and soak up spill using noncombustible material such as vermiculite, earth or sand. Store recovered product or absorbent material in suitable containers for disposal according to local regulations.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Product Identifier: EnerSperse

Date of Preparation: March 31, 2015

Page 02 of 06

It is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling. See Section 8 for appropriate Personal Protective Equipment (PPE).

Conditions for Safe Storage

Keep containers tightly closed when not in use. Store in an area that is: cool, dry, well-ventilated. Away from open flames, excessive heat or sources of ignition.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH® TLV®		OSHA PEL		AIHA® WEEL™	
	TWA	STEL [C]	TWA	Ceiling	8-hr TWA	Short-term TWA [C]
Polyolefin amide alkeneamine	Not established		Not established		Not established	
Trade Secret	5 mg/m3		Not established		Not established	

ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. TWA = Time-Weighted Average. OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. AIHA® = AIHA® Guideline Foundation. WEEL™ = Workplace Environmental Exposure Limit. OEL values are for Oil Mist. There is no established TLV or OEL's for petroleum distillates.

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

Wear chemical safety goggles.

Skin Protection

Wear gloves with appropriate chemical resistance, see manufacturers specifications for suitability. Wear long sleeves, long pants and appropriate footwear while working with product. If a splashing hazard exists wear chemical protective clothing e.g. gloves that extend up arms, aprons, boots. Suitable materials are: neoprene rubber, nitrile rubber.

Respiratory Protection

Not normally required if product is used as directed. Wear a NIOSH approved respirator with an appropriate cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Amber liquid.
Odour	Ammonia-like
Odour Threshold	Not available
pH	Not available
Melting Point/Freezing Point	Not available (melting)
Initial Boiling Point/Range	> 250 °F (121 °C)
Flash Point	> 240 °F (116 °C)
Evaporation Rate	Not available
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Relative Density (water = 1)	0.87
Solubility	Insoluble in water
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available

Product Identifier: EnerSperse

Date of Preparation: March 31, 2015

Page 03 of 06

Other Information

Physical State

Liquid

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use.

Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

Conditions to Avoid

High temperatures.

Incompatible Materials

Strong oxidizing agents (e.g. perchloric acid).

Hazardous Decomposition Products

Oxides of carbon.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Polyolefin amide alkeneamine	Not available	> 5000 mg/kg (rat)	Not available
Trade Secret	Not available	> 5000 mg/kg (rat)	> 2000 mg/kg (rabbit)

Skin Corrosion/Irritation

May cause skin irritation.

Serious Eye Damage/Irritation

May cause eye irritation. Symptoms include pain, redness and tearing.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May cause irritation of the mucous membranes and upper respiratory tract. May cause depression of the central nervous system.

Skin Absorption

No information was located.

Ingestion

May cause irritation of the mouth, throat and stomach. May cause depression of the central nervous system.

Aspiration Hazard

Liquid may be aspirated into the lungs during ingestion or vomiting resulting in lung injury.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information was located.

Respiratory and/or Skin Sensitization

Not a respiratory sensitizer. Not known to be a skin sensitizer.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
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Product Identifier: EnerSperse

Date of Preparation: March 31, 2015

Page 04 of 06

Polyolefin amide alkeneamine	Not Listed	Not Listed	Not Listed	Not Listed
Trade Secret	Not Listed	Not Listed	Not Listed	Not Listed

No information was located.

Mouse skin painting studies have shown that highly refined petroleum base oils similar to the ingredients in this products have not caused skin tumors.

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.

Germ Cell Mutagenicity

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
Polyolefin amide alkeneamine	Not available	Not available	Not available	Not available
Trade Secret	2.9 mg/L (Oncorhynchus mykiss (rainbow trout); 96-hour)	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

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

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 are exempt from TSCA Inventory requirements under 40 CFR 720.

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: Immediate Health Hazard

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

SECTION 16. OTHER INFORMATION

NFPA Rating **Health - 2** **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.