

Blue Max

SECTION 1. IDENTIFICATION

Product Identifier Blue Max
Other Means of Surfactant

Identification

Recommended Use Drilling Fluid Additive.

Manufacturer / AES Drilling Fluids, LLC, 11767 Katy Freeway, Suite 230, Houston, TX, 77079, Sales &

Supplier Information, 281-556-5628

Emergency Phone No. CHEMTREC, 1-800-424-9300, 24-hour Emergency

Date of Preparation March 27, 2015

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) - Category 5; Skin corrosion/irritation - Category 2; Serious eye damage/eye irritation - Category 1; Carcinogenicity - Category 2; Specific target organ toxicity (repeated exposure) - Category 2

GHS Label Elements





Signal Word:

Danger

Hazard Statement(s):

H303 May be harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage. H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement(s):

Prevention:

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe vapours, mist, spray.

P264 Wash hands and skin thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

Response:

P330 Rinse mouth.

P301 + P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.

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

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P315 Get immediate medical advice/attention.

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

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Other Hazards

Hazardous to the environment.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers
Proprietary Surfactant	CBI*	5-10	
Surfactant Blend	68603-42-9	18	

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 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. Call a Poison Centre or doctor.

Skin Contact

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. Remove contaminated clothing and launder before reuse. Seek medical advice/attention.

Eye Contact

Flush eyes thoroughly with lukewarm water for 15 minutes. Seek immediate medical attention.

Ingestion

Rinse mouth with water. Never give anything by mouth to an unconscious person. Seek medical attention.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Water, Carbon Dioxide, Dry chemical, Foam.

Unsuitable Extinguishing Media

Do not use direct streams of large volumes of water as this may spread the fire.

Specific Hazards Arising from the Chemical

In the event of a fire this product can release hazardous combustion products such as carbon oxides. Sealed systems of product may over pressurize when heated and rupture or explode.

Oxides of carbon oxides of nitrogen.

Special Protective Equipment and Precautions for Fire-fighters

Use water spray to cool containers/tanks. Do not use a solid stream of foam into hot, burning pools: this may causing frothing and increase fire intensity.

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

Isolate the hazard area. Keep out unnecessary and unprotected personnel. See Section 8 for appropriate personal protective equipment.

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Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas. Prevent product from entering drains, soil, ditches, sewers, waterways and/or groundwater.

Methods and Materials for Containment and Cleaning Up

Dike spilled product to prevent runoff. Contain and soak up spill with absorbent that does not react with spilled product. Do not use absorbents. Contain 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. Prevent contamination of waterways or sewers. Clean up residual contamination with water and place in appropriate containers for disposal.

Other Information

Contact EH&S regarding spill as spills of certain products and certain quantities may require reporting to various authorities.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not breathe in this product. Do not get in eyes, on skin or on clothing. Wear personal protective equipment to avoid direct contact with this chemical. Wash hands thoroughly after handling this product and before eating, using the washroom or leaving work area.

Conditions for Safe Storage

Keep containers tightly closed when not in use. Store in an area that is: well-ventilated, cool, dry. Away from open flames, excessive heat or sources of ignition. Separate from incompatible materials store in the original, labelled, shipping container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

	ACGIH® TLV®		OSHA PEL		AIHA® WEEL™	
Chemical Name	TWA	STEL [C]	TWA	Ceiling	8-hr TWA	Short-term TWA [C]
Surfactant Blend	1 mg/m3 Skin A3		Not established		Not established	
Proprietary Surfactant	Not established		Not established		Not established	

ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. TWA = Time-Weighted Average. STEL = Short-term Exposure Limit. C = Ceiling limit. OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. AIHA® = AIHA® Guideline Foundation. $WEEL^{TM}$ = Workplace Environmental Exposure Limit.

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 with side shields. Wear chemical safety goggles and a face shield when handling product.

Skin Protection

Wear gloves with appropriate chemical resistance, see manufacturers specifications for suitability. Wear chemical protective clothing e.g. gloves, aprons, boots.

Respiratory Protection

If conditions exist above the OEL wear a NIOSH approved respirator with an appropriate cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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Basic Physical and Chemical Properties

AppearanceBlue liquid.OdourAromatic

pH 7

Melting Point/Freezing Point Not available (melting); Not available (freezing)

Initial Boiling Point/RangeNot availableFlash Point> 400 °FEvaporation RateNot availableFlammability (solid, gas)Will not burn.

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) 1.02

Solubility Soluble in water
Auto-ignition Temperature Not available

Decomposition Temperature Not available

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

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

Incompatible Materials

Inorganic acids (e.g. hydrofluoric acid), bases. Hypochlorites nitric acid, sulfuric acid, oxidizing agents (e.g. peroxides), oxygen. Permanganates perchlorates, peroxides. Chromates.

Hazardous Decomposition Products

Oxides of carbon. Oxides of nitrogen.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact; skin absorption; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Surfactant Blend	Not available	Not available	> 2000 mg/kg (rabbit)
Proprietary Surfactant	Not available	Not available	Not available

Skin Corrosion/Irritation

May cause mild skin irritation.

Serious Eye Damage/Irritation

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May cause eye irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Spray mists may cause respiratory tract irritation. Symptoms may include headache, nausea, dizziness, drowsiness and confusion.

Skin Absorption

No information was located.

Ingestion

May cause. irritation of the gastrointestinal tract, nausea, vomiting, diarrhea.

Aspiration Hazard

No information was located.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Prolonged skin contact may cause defatting of the skin resulting in irritation and conditions such as dermatitis.

Respiratory and/or Skin Sensitization

No information was located.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Surfactant Blend	Group 2B	A3	Not Listed	Not Listed
Proprietary Surfactant	Not Listed	Not Listed	Not Listed	Not Listed

May cause cancer.

Key to Abbreviations

IARC = International Agency for Research on Cancer. Group 2B = Possibly carcinogenic to humans. ACGIH® = American Conference of Governmental Industrial Hygienists. A4 = Not classifiable as a human carcinogen. 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.

Effects on or via Lactation

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
Surfactant Blend	Not available	3.3 mg/L (Daphnia magna (water flea); static)	Not available	Not available
Proprietary Surfactant	Not available	Not available	Not available	Not available

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Persistence and Degradability

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No information was located.

Bioaccumulative Potential

No information was located.

Mobility in Soil

Studies are not available.

Other Adverse Effects

There is no information available.

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.

Other Information

The shipping descriptions included are for non-bulk shipments only and may not apply to shipments in bulk packages (see appropriate regulatory definition).

This product contains one or more ingredients as a hazardous substance in Appendix A of 49 CFR 172.101. The product quantity, in one package, which triggers the RQ requirements under 49 CFR for each hazardous substance is shown.

Reportable quantities:

RQ substance: Diethanolamine RQ limit for substance: 100lb RQ limit for product: 8300lb

Shipping information for product over in containers larger than 8300lb would be UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIETHANOLAMINE),

CLASS 9, PG III

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations USA

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

All ingredients are listed on the TSCA Inventory.

Additional USA Regulatory Lists

CERCLA: May contain <1.1% Diethanolamine.

SARA Title III - Section 302: No listed components.

SARA Title III - Section 311/312: Acute Hazards Chronic Health Hazard.

SARA Title III - Section 313: May contain 0.75% to 0.25% concentration of Glycol Ethers

May contain <1.1% Diethanolamine.

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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Date of Preparation Disclaimer

March 27, 2015

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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