

MATERIAL SAFETY DATA SHEET

Product Trade Name: D-AIR 3000W

Revision Date: 05-Nov-2014

Revision Number: 12

SECTION 1. Product and Company Identification

Product Identifier

Product Trade Name: D-AIR 3000W
Synonyms: None
Chemical Family: Blend
Internal ID Code: HM004655

Product Use

Application: Defoamer

Manufacturer's Name and Contact Details

Name and Address: Halliburton Energy Services
645 - 7th Ave SW Suite 2200
Calgary, AB
T2P 4G8
Canada

Emergency Telephone Number: (281) 575-5000

Prepared By

Chemical Compliance
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SECTION 2. Hazard(s) Identification

WHMIS Classification

WHMIS Hazard Class: B3 Combustible Liquids
D2B Toxic Materials

WHMIS Symbol(s)



Summary of hazards of the product

Hazard Overview

May cause eye and skin irritation. May cause headache, dizziness, and other central nervous system effects. May be harmful if swallowed. May be absorbed through the skin. May cause allergic skin reaction. Combustible

SECTION 3: Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	HMIRA Registry Number	Decision Granted Date
Alkenes	Proprietary	30 - 60%	8981	October 3, 2014
D-Limonene	5989-27-5	10 - 30%	Not applicable	Not applicable

Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	10 - 30%	Not applicable	Not applicable
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SECTION 4. First aid measures

Description of first aid measures

Inhalation

If inhaled, remove to fresh air. If not breathing give artificial respiration (AR), preferably mouth-to-mouth. If breathing is difficult, oxygen should be given by trained personnel. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation (CPR) immediately. Get medical attention immediately.

Eyes

In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

Skin

In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated shoes and discard.

Ingestion

Get medical attention! If vomiting occurs, keep head lower than hips to prevent aspiration.

Most important symptoms and effects, both acute and delayed

May cause eye and skin irritation. May cause allergic skin reaction.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically

SECTION 5. Fire Fighting Measures

Extinguishing media

Suitable Extinguishing Media

Carbon dioxide, dry chemical, foam.

Extinguishing media which must not be used for safety reasons

None known.

Special hazards arising from the substance or mixture

Special Exposure Hazards

Use water spray to cool fire exposed surfaces. Closed containers may explode in fire. Decomposition in fire may produce toxic gases. Vapors are heavier than air and may accumulate in low areas. Vapors may travel along the ground to be ignited at distant locations.

Advice for firefighters

Special Protective Equipment for Fire-Fighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

Hazardous combustion products

Acrid fumes. Oxides of nitrogen. Carbon monoxide and carbon dioxide.

SECTION 6. Accidental release measures

Personal precautions and emergency procedures

Protective Equipment

Use appropriate protective equipment.

Environmental Precautionary Measures

None known.

Procedure for Cleaning / Absorption

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

SECTION 7. Handling and Storage

Precautions for safe handling

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors.

Conditions for safe storage and Incompatible materials for storage

Store away from oxidizers. Store away from acids. Keep container closed when not in use. Product has a shelf life of 24 months.

SECTION 8: Exposure Controls/Personal Protection

Occupational Exposure Limits**Exposure Limits**

Substances	CAS Number	ACGIH TLV-TWA	OSHA PEL-TWA
Alkenes	Proprietary	Not available	Not available
D-Limonene	5989-27-5	Not available	Not available
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	Not available	Not available

Appropriate engineering controls**Engineering Controls**

Use in a well ventilated area.

Personal Protective Equipment (PPE)**Respiratory Protection**

Not normally needed. But if significant exposures are possible then the following respirator is recommended:
Organic vapor respirator.

Hand Protection

Impervious rubber gloves.

Skin Protection

Rubber apron.

Eye Protection

Chemical goggles; also wear a face shield if splashing hazard exists.

Other Precautions

Eyewash fountains and safety showers must be easily accessible.

SECTION 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical State: Liquid

Color: Opaque

Odor: Citrus

Odor Threshold: No information available

PropertyValues

Remarks/ - Method

pH:

No information available.

pH Concentration of Solution:

No information available.

Freezing Point/Range

No information available.

Melting Point/Range

No information available.

Boiling Point/Range (C):

No information available.

Flash Point/Range (C):

63.3 °C

Flash Point Method:

PMCC

Autoignition Temperature (C):

No information available.

Flammability Limits in Air - Lower (%):

No information available.

Flammability Limits in Air - Upper (%):

No information available.

Evaporation Rate (Butyl Acetate=1):

No information available.

Vapor Pressure @ 20 C (mmHg):

No information available.

Vapor Density (Air=1):

No information available.

Specific Gravity @ 20 C (Water=1):

0.87

Solubility in Water (g/100ml):

Insoluble

Solubility in other solvents

No information available.

Partition Coefficient/n-Octanol/Water:

No information available.

Decomposition Temperature (C):

No information available.

Viscosity

No information available

Explosive Properties

No information available

Oxidizing Properties

No information available

Other Information

Molecular Weight (g/mole):
VOC Content (%)

No information available.
 No information available

SECTION 10. Stability and Reactivity

Conditions of Reactivity**Conditions to Avoid**

Keep away from heat, sparks and flame. Avoid contact with acids. Avoid contact with aluminum chloride.

Hazardous Polymerization:

Will Not Occur

Chemical Stability

Stable

Sensitivity to Static Discharge

Not available

Sensitivity to Mechanical Impact

Not available

Incompatible materials

Strong oxidizers. Strong acids. Pentafluoroethylene.

Hazardous Decomposition Products

Acrid fumes. Oxides of nitrogen. Carbon monoxide and carbon dioxide.

SECTION 11. Toxicological Information
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Routes of entry

Eye or skin contact, inhalation.

Information on Toxicological Effects**Acute effects from exposure****Product Information****Inhalation**

Under certain conditions of use, some of the product ingredients may cause the following:
 May cause respiratory irritation. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

Eye Contact

May cause eye irritation

Skin Contact

May cause skin irritation. May be absorbed through the skin and produce effects similar to those caused by inhalation and/or ingestion. May cause an allergic skin reaction.

Ingestion

May be fatal if swallowed. May cause abdominal pain, vomiting, nausea, and diarrhea. May cause central nervous system depression including headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time, fatigue blurred vision, slurred speech, giddiness, tremors and convulsions. Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.

Chronic effects from exposure**Chronic Effects/Carcinogenicity**

Prolonged or repeated exposure may cause central nervous system and brain effects. FDA and WHMIS list D-limonene as Generally Recognized As Safe (GRAS).

Irritancy of product**Irritation**

Irritating to eyes and skin

Sensitization of product**Sensitization**

May cause sensitization by skin contact

Mutagenicity

Mutagenic Effects Not regarded as mutagenic.

Carcinogenicity

Carcinogenic Effects No data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.

Reproductive toxicity

Reproductive Toxicity This product does not contain any known or suspected reproductive hazards

Teratogenicity/embryotoxicity

Teratogenic Not a confirmed teratogen or embryotoxin.

Toxicologically synergistic material Not available

Acute Toxicity

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Alkenes	Proprietary	> 5000 mg/kg (Rat) (similar substance)	> 2000 mg/kg (Rat) (similar substance)	> 2.1 mg/L (Rat)
D-Limonene	5989-27-5	4400 mg/kg (Rat) > 3900 mg/kg < 7000 mg/kg (Rat)	> 2000 mg/kg (Rabbit) > 5000 mg/kg (Rabbit)	No data available
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	No data available	No data available	1.26 - 2.83 mg/L (Rat, dust, 1h) (0.315 - 0.71 mg/L, 4h)

SECTION 12. Ecological Information

Toxicity**Ecotoxicity Effects**

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Alkenes	Proprietary	EC50(72h): > 1000 mg/L (Selenastrum capicomutum) (similar substance)	LL50(96h): > 1000 mg/L (Oncorhynchus mykiss) (similar substance) LL50(96h): > 10000 mg/L (Scophthalmus maximus) (similar substance)	No information available	EC50(48h): > 1000 mg/L (Daphnia magna) (similar substance)
D-Limonene	5989-27-5	EC50(72h): 8 mg/L (Desmodesmus subspicatus) (similar substance)	LC50(96h): 720 µg/L (Pimephales promelas)	EC50(3h): 209 mg/L (activated sludge, growth inhibition)	EC50(24h): 0.85 mg/L (Daphnia magna) EC50(48h): 924 µg/L (Daphnia magna)
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	No information available	No information available	No information available	No information available

Persistence and Degradability

No information available

Bioaccumulation potential

No information available

Substances	Log Pow
Alkenes	> 7
D-Limonene	4.38

Mobility in soil

No information available

Results of PBT and vPvB assessment

No information available.

Substances	PBT and vPvB assessment
D-Limonene	Not PBT/vPvB

Other adverse effects**Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors

SECTION 13. Disposal Considerations
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Disposal Method Disposal should be made in accordance with federal, state, and local regulations.

Contaminated Packaging Follow all applicable national or local regulations.

SECTION 14. Transport Information
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Canadian TDG u10

UN Number: Not restricted
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable

IATA/ICAO

UN Number: Not restricted
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable

IMDG/IMO

UN Number: Not restricted
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable

Special Precautions for User: None

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

SECTION 15: Regulatory Information

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canadian Regulations

Canadian DSL Inventory All components listed on inventory or are exempt.

WHMIS Hazard Class B3 Combustible Liquids
D2B Toxic Materials

WHMIS Symbol(s)

US Regulations
US TSCA Inventory

All components listed on inventory or are exempt.

SECTION 16. Other Information**Preparation Information**
Prepared ByChemical Compliance
Telephone: 1-580-251-4335
e-mail: fdunexchem@halliburton.com**Revision Date:**

05-Nov-2014

Not applicable

Additional information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

Key or legend to abbreviations and acronyms

WHMIS: Workplace Hazardous Materials Information System

Key literature references and sources for datawww.ChemADVISOR.com/**Disclaimer Statement**

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*****END OF MSDS*****