

## SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

### D-AIR 4000L

Revision Date: 25-Sep-2013

Revision Number: 7

#### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

##### 1.1 Product Identifier

Product Name D-AIR 4000L

##### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Recommended Use** Defoamer  
**Sector of use** SU2 - Mining, (including offshore industries)  
**Product category** PC20 - Products such as pH-regulators, flocculants, precipitants, neutralization agents, other unspecific  
**Process categories** PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises

##### 1.3 Details of the supplier of the safety data sheet

Halliburton Energy Services  
Halliburton House, Howemoss Place  
Kirkhill Industrial Estate  
Dyce  
Aberdeen, AB21 0GN  
United Kingdom

Emergency Phone Number: +44 1224 795277 or +1 281 575 5000

[www.halliburton.com](http://www.halliburton.com)

For further information, please contact

**E-Mail address:** [fdunexchem@halliburton.com](mailto:fdunexchem@halliburton.com)

##### 1.4 Emergency telephone number

+44 1224 795277 or +1 281 575 5000

Emergency telephone - §45 - (EC)1272/2008	
Europe	112
Denmark	Poison Control Hotline (DK): +45 82 12 12 12
France	ORFILA (FR): + 01 45 42 59 59
Germany	Poison Center Berlin (DE): +49 030 30686 790
Italy	Poison Center, Milan (IT): +39 02 6610 1029
Netherlands	National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals)
Norway	Poisons Information (NO):+ 47 22 591300
Poland	Poison Control and Information Centre, Warsaw (PL): +48 22 619 66 54; +48 22 619 08 97
Spain	Poison Information Service (ES): +34 91 562 04 20
United Kingdom	NHS Direct (UK): +44 0845 46 47

#### 2. HAZARDS IDENTIFICATION

##### Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Aspiration Category	Category 1 - H
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Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases mentioned in this Section, see Section 16

**Classification** Xn - Harmful.  
**Risk Phrases** R65 Harmful: may cause lung damage if swallowed.

## 2.2 Label Elements

### Hazard Pictograms



**Signal Word** Danger

### Hazard Statements

H304 - May be fatal if swallowed and enters airways

### Precautionary Statements - EU (§28, 1272/2008)

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P331 - Do NOT induce vomiting

P405 - Store locked up

P501 - Dispose of contents/container to an approved incineration plant

### Contains

#### Substances

Isooctadecanoic acid, monoester with glycerol

Hexadecene

Octadecene

#### CAS Number

66085-00-5

26952-14-7

27070-58-2

## 2.3 Other Hazards

None known

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	EINECS	CAS Number	PERCENT (w/w)	EEC Classification	EU - CLP Substance Classification	REACH No.
Isooctadecanoic acid, monoester with glycerol	266-124-4	66085-00-5	5 - 10%	Not applicable	Not applicable	No data available
Hexadecene	248-131-4	26952-14-7	30 - 60%	Xn; R65	Asp. Tox. 1, H304	No data available
Octadecene	248-205-6	27070-58-2	30 - 60%	Xn; R65	Asp. Tox. 1, H304	No data available

For the full text of the R-phrases mentioned in this Section, see Section 16

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### Inhalation

If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

#### Eyes

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

#### Skin

Wash with soap and water. Get medical attention if irritation persists.

#### Ingestion

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

### 4.2 Most important symptoms and effects, both acute and delayed

May cause mild eye, skin, and respiratory irritation. May cause lung damage if swallowed.

**4.3 Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media****Suitable Extinguishing Media**

Water fog, carbon dioxide, foam, dry chemical.

**Extinguishing media which must not be used for safety reasons**

None known.

**5.2 Special hazards arising from the substance or mixture****Special Exposure Hazards**

Decomposition in fire may produce toxic gases.

**5.3 Advice for firefighters****Special Protective Equipment for Fire-Fighters**

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

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**

Use appropriate protective equipment.

See Section 12 for additional information

**6.2 Environmental precautions**

Prevent from entering sewers, waterways, or low areas.

**6.3 Methods and material for containment and cleaning up**

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

**6.4 Reference to other sections**

See Section 12 for additional information.

## 7. HANDLING AND STORAGE

**7.1 Precautions for Safe Handling**

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

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice

**7.2 Conditions for safe storage, including any incompatibilities**

Store away from oxidizers. Keep container closed when not in use. Store locked up.

**7.3 Specific End Use(s)**

**Exposure Scenario** No information available

**Other Guidelines** No information available

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters****Exposure Limits**

Substances	CAS Number	EU	UK OEL	Netherlands	France OEL
Isooctadecanoic acid, monoester with glycerol	66085-00-5	Not applicable	Not applicable	Not applicable	Not applicable
Hexadecene	26952-14-7	Not applicable	Not applicable	Not applicable	Not applicable
Octadecene	27070-58-2	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Germany MAK/TRK	Spain	Portugal	Finland
Isooctadecanoic acid, monoester with glycerol	66085-00-5	Not applicable	Not applicable	Not applicable	Not applicable
Hexadecene	26952-14-7	Not applicable	Not applicable	Not applicable	Not applicable
Octadecene	27070-58-2	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Austria	Ireland	Switzerland	Norway

Isooctadecanoic acid, monoester with glycerol	66085-00-5	Not applicable	Not applicable	Not applicable	Not applicable
Hexadecene	26952-14-7	Not applicable	Not applicable	Not applicable	Not applicable
Octadecene	27070-58-2	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Italy	Poland	Hungary	Czech Republic
Isooctadecanoic acid, monoester with glycerol	66085-00-5	Not applicable	Not applicable	Not applicable	Not applicable
Hexadecene	26952-14-7	Not applicable	Not applicable	Not applicable	Not applicable
Octadecene	27070-58-2	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Denmark
Isooctadecanoic acid, monoester with glycerol	66085-00-5	Not applicable
Hexadecene	26952-14-7	Not applicable
Octadecene	27070-58-2	Not applicable

**Derived No Effect Level (DNEL)  
Worker**

No information available.

**General Population**

**Predicted No Effect Concentration (PNEC)**

No information available.

**8.2 Exposure controls**

**Engineering Controls**

Use in a well ventilated area.

**Personal protective equipment**

**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**

Normal work coveralls.

**Eye Protection**

Wear safety glasses or goggles to protect against exposure.

**Other Precautions**

None known.

**Environmental Exposure Controls** No information available

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**9.1 Information on basic physical and chemical properties**

**Physical State:** Liquid

**Color:** Clear light amber

**Odor:** Slight Hydrocarbon

**Odor Threshold:** No information available

Property

Values

Remarks/ - Method

**pH:**

No data available

**Freezing Point/Range**

No data available

**Melting Point/Range**

No data available

**Boiling Point/Range**

> 270 °C

**Flash Point**

> 121 °C Cleveland Open Cup (COC)

**Evaporation rate**

No data available

**Vapor Pressure**

No data available

**Vapor Density**

No data available

**Specific Gravity**

0.79

**Water Solubility**

Insoluble in water

**Solubility in other solvents**

No data available

**Partition coefficient: n-octanol/water**

No data available

**Autoignition Temperature**

No data available

**Decomposition Temperature**

No data available

**Viscosity**

No data available

**Explosive Properties**

No information available

**Oxidizing Properties**

No information available

**9.2 Other information**

**VOC Content (%)**

No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**

Not applicable

**10.2 Chemical Stability**

Stable

**10.3 Possibility of Hazardous Reactions**

Will Not Occur

**10.4 Conditions to Avoid**

None anticipated

**10.5 Incompatible Materials**

Strong oxidizers.

**10.6 Hazardous Decomposition Products**

Carbon monoxide and carbon dioxide. Hydrocarbons.

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on Toxicological Effects****Acute Toxicity**

<b>Inhalation</b>	May cause respiratory irritation.
<b>Eye Contact</b>	May cause eye irritation.
<b>Skin Contact</b>	May cause skin irritation.
<b>Ingestion</b>	May cause abdominal pain, vomiting, nausea, and diarrhea. Aspiration can be a hazard if this material is swallowed.

**Chronic Effects/Carcinogenicity** No data available to indicate product or components present at greater than 1% are chronic health hazards.

**Toxicology data for the components**

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isooctadecanoic acid, monoester with glycerol	66085-00-5	No data available	No data available	No data available
Hexadecene	26952-14-7	> 5050	> 5000 mg/kg	> 2.1 mg/l
Octadecene	27070-58-2	No data available	No data available	No data available

## 12. ECOLOGICAL INFORMATION

**12.1 Toxicity****Ecotoxicity Effects**

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Isooctadecanoic acid, monoester with glycerol	66085-00-5	No information available	No information available	No information available	No information available
Hexadecene	26952-14-7	EC50: >1000 mg/l (Skeletonema costatum)	LC50: >1000 mg/l (Cyprinodon variegatus)	No information available	EC50: >1000 mg/l (Mysidopsis bahia)
Octadecene	27070-58-2	No information available	No information available	No information available	No information available

**12.2 Persistence and degradability**

No information available

**12.3 Bioaccumulative potential**

Bioaccumulation is unlikely

Substances	Log Pow
Hexadecene	> 4

**12.4 Mobility in soil**

No information available

**12.5 Results of PBT and vPvB assessment**

No information available.

**12.6 Other adverse effects****Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors

**13. DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods****Disposal Method**

Disposal should be made in accordance with federal, state, and local regulations. Incineration recommended in approved incinerator according to federal, state, and local regulations.

**Contaminated Packaging**

Follow all applicable national or local regulations. Contaminated packaging may be disposed of by: rendering packaging incapable of containing any substance, or treating packaging to remove residual contents, or treating packaging to make sure the residual contents are no longer hazardous, or by disposing of packaging into commercial waste collection.

**14. TRANSPORT INFORMATION****IMDG/IMO**

**UN Number:** Not restricted.  
**UN Proper Shipping Name:** Not restricted  
**Transport Hazard Class(es):** Not applicable

**RID**

**UN Number:** Not restricted.  
**UN Proper Shipping Name:** Not restricted  
**Transport Hazard Class(es):** Not applicable

**ADR**

**UN Number:** Not restricted.  
**UN Proper Shipping Name:** Not restricted  
**Transport Hazard Class(es):** Not applicable

**IATA/ICAO**

**UN Number:** Not restricted.  
**UN Proper Shipping Name:** Not restricted  
**Transport Hazard Class(es):** Not applicable

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable

**15. REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****International Inventories**

**All of the components in the product are on the following Inventory lists:** All of the components in the product are on the following Inventory lists:.

**EINECS Inventory** This product, and all its components, complies with EINECS  
**US TSCA Inventory** All components listed on inventory or are exempt.  
**Canadian DSL Inventory** Product contains one or more components not listed on the inventory.

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**Germany, Water Endangering Classes (WGK)** WGK 1: Low hazard to waters.

**15.2 Chemical Safety Assessment**

No information available

<b>16. OTHER INFORMATION</b>
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**Full text of R-phrases referred to under Sections 2 and 3**

R65 Harmful: may cause lung damage if swallowed.

**Key literature references and sources for data**www.ChemADVISOR.com/  
NZ CCID**Revision Date:** 25-Sep-2013**Revision Note**

Not applicable

**This safety data sheet complies with the requirements of Regulation (EC) No. 453/2010****Disclaimer Statement**

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**End of Safety Data Sheet**