Safety data sheet number PID10271

Version 12

Revision date 14/Mar/2019 Supercedes Date: 25/Jan/2019



Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name DEFOAM-A* EH
Product code PID10271

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

Recommended Use Defoamer

Uses advised against Consumer use

1.3 Details of the supplier of the safety data sheet

Supplier

M-I Drilling Fluids UK Limited Westhill Business Park Westhill AB32 6JL Aberdeenshire Scotland United Kingdom

+47 51577424

SDS@slb.com

1.4 Emergency Telephone Number

Emergency telephone - (24 Hour) Australia +61 2801 44558, Asia Pacific +65 3158 1074, China +86 10 5100 3039, Europe +44 (0) 1235 239 670, Middle East and Africa +44 (0) 1235 239 671, New Zealand +64 9929 1483, USA 001 281 561 1600

2. Hazards Identification

2.1 Classification of the substance or mixture

GHS Classification

Health hazards

Serious eye damage/eye irritation Category 2

Environmental hazards

Chronic aquatic toxicity Category 2

Physical Hazards Not classified

2.2 Label elements







Signal word WARNING

Hazard Statements

H319 - Causes serious eye irritation

H411 - Toxic to aquatic life with long lasting effects

Precautionary statements

P264 - Wash face, hands and any exposed skin thoroughly after handling

P273 - Avoid release to the environment

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

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

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Supplementary precautionary statements

P391 - Collect spillage

Contains

Alkenes, C11-12, hydroformylation products, low boiling*

2.3 Other hazards

Not classified as PBT/vPvB by current EU criteria

Thermal decomposition can lead to release of irritating gases and vapours

3. Composition/information on Ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical Name	EC No	CAS No	Weight-%
Alkenes, C11-12, hydroformylation products, low boiling*	932-235-8	RM1002971	30-60

Comments

The viscosity of this product is high enough that it is not an aspiration risk and the H304 phrase does not apply.

*Substances which have an EC Number that begins with the number "9" is a Provisional List Number. The list numbers published by ECHA do not have any legal significance. The EC substance definition and related classification & labelling has been developed in the framework of the Regulation (EC) No 1907/2006 (REACH). For information about the related CAS number see section 15 of this SDS.



The product contains other ingredients which do not contribute to the overall classification.

4. First Aid Measures

4.1 First aid measures

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation

develops or if breathing becomes difficult.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious

person. Seek medical attention if irritation occurs.

Skin contactWash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get medical attention if irritation persists.

Eye Contact Promptly wash eyes with lots of water while lifting eye lids. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if any discomfort continues.

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

General advice The severity of the symptoms described will vary dependant of the concentration and the

length of exposure. If adverse symptoms develop, the casualty should be transferred to

hospital as soon as possible.

Symptoms

Inhalation Please see Section 11. Toxicological Information for further information.

Ingestion Please see Section 11. Toxicological Information for further information.

Skin contact Please see Section 11. Toxicological Information for further information.

Eye contact Please see Section 11. Toxicological Information for further information.

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 spray, Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons

None known.

5.2. Special hazards arising from the substance or mixture

Unusual fire and explosion hazards

None known.



Hazardous combustion products

Thermal decomposition can lead to release of irritating gases and vapours

5.3 Advice for firefighters

Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

Special Fire-Fighting Procedures

Containers close to fire should be removed immediately or cooled with water.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. See also section 8.

6.2 Environmental precautions

The product should not be allowed to enter drains, water courses or the soil.

Environmental exposure controls

Avoid release to the environment. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up

Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. After cleaning, flush away traces with water.

6.4 Reference to other sections

See section 13 for more information.

7. Handling and Storage

7.1 Precautions for safe handling

Handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Do not breathe vapors or spray mist. Avoid spills and splashing during use.

Hygiene Measures

Use good work and personal hygiene practices to avoid exposure When using do not eat, drink, smoke, sniff Wash hands and face before breaks and immediately after handling the product Remove contaminated clothing

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/precautions Ensure adequate ventilation.



Keep containers tightly closed in a dry, cool and well-ventilated place Avoid contact with: Storage precautions

Strong oxidising agents

Packaging materials Use specially constructed containers only Mild steel.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits Contains no substances with occupational exposure limit values

Component Information

Chemical Name	Arabic	Australia	Egypt
Alkenes, C11-12, hydroformylation products, low boiling*	Not determined	Not determined	Not determined
Chemical Name	India	Indonesian	Japan
Alkenes, C11-12, hydroformylation products, low boiling*	Not determined	Not determined	Not determined
Chemical Name	Kazakhstan	Kuwait	New Zealand
Alkenes, C11-12, hydroformylation products, low boiling*	Not determined	Not determined	Not determined
Chemical Name	Malaysia	Philippines	Russia
Alkenes, C11-12, hydroformylation products, low boiling*	Not determined	Not determined	Not determined
Chemical Name	Thailand	Vietnam	Turkey
Alkenes, C11-12, hydroformylation products, low boiling*	Not determined	Not determined	Not determined

8.2 Exposure controls

All chemical Personal Protective Equipment (PPE) should be selected based on an assessment of both the chemical hazard present and the risk of exposure to those hazards. The PPE recommendations below are based on an assessment of the chemical hazards associated with this product. Where this product is used in a mixture with other products or fluids, additional hazards may be created and as such further assessment of risk may be required. The risk of exposure and need of respiratory protection will vary from workplace to workplace and should be assessed by the user in each situation.

Engineering Controls

Ensure adequate ventilation Mechanical ventilation or local exhaust ventilation is required.

Personal protective equipment

Eye protection Use eye protection according to EN 166, designed to protect against liquid splashes Safety

glasses with side-shields Tightly fitting safety goggles

Hand protection Wear chemically resistant gloves (tested to EN 374) in combination with 'basic' employee

training Impervious gloves made of: Neoprene Nitrile PVC

Break through time >480 minutes

Glove thickness >=0.4 mm

Be aware that liquid may penetrate the gloves. Frequent change is advisable.

In case of insufficient ventilation wear suitable respiratory equipment Respirator with a Respiratory protection

vapor filter (EN 141) Use respirator with organic vapor protection (A, brown) At work in

confined or poorly ventilated spaces, respiratory protection with air supply must be used. Skin and body protection

Wear suitable protective clothing Eye wash and emergency shower must be available at the

work place.



Hygiene Measures

Wash hands before eating, drinking or smoking Remove and wash contaminated clothing before re-use







8.2.3 Environmental exposure controls

Environmental exposureUse appropriate containment to avoid environmental contamination See section 6 for more

information

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical state Liquid
Appearance Viscous
Odour Pungent

ColourClear - Light yellowOdour thresholdNot applicable

 Property
 Values
 Remarks

 pH
 No information available

pH No information available pH @ dilution 5-7 @ 10 g/l

pri e dilution 5-7 e 10 g/

Melting / freezing point

Boiling point/range

No information available

No information available

Flash point $> 70 \, ^{\circ}\text{C} / > 158 \, ^{\circ}\text{F}$ PMCC

Evaporation rate No information available

Flammability (solid, gas) Not applicable

Flammability Limit in Air
Upper flammability limit Not applicable

Lower flammability limit
Vapour pressure
Vapour density

Not applicable
No information available
No information available

Vapour densityNo information availableSpecific gravity0.85 - 0.86@ 20 °C

Bulk density

No information available

Relative density
Water solubility
No information available
Dispersible

Solubility in other solvents
Autoignition temperature
Decomposition temperature
No information available
No information available

Kinematic viscosity > 20.5 cSt @ 40 °C

Dynamic viscosity

No information available
No information available

Explosive properties No information available Oxidising properties No information available

9.2 Other information



Pour point $< -10^{\circ}$ C / 14°F

Molecular weightNo information availableVOC content(%)No information availableDensityNo information available

Comments

The data listed above are typical physical and chemical properties and should not be construed as product specification.

10. Stability and Reactivity

10.1 Reactivity

No specific reactivity hazards associated with this product.

10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

10.3 Possibility of Hazardous Reactions

Hazardous polymerisation

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Strong oxidising agents.

10.6 Hazardous decomposition products

See Section 5.2.

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

Inhalation Inhalation of vapours in high concentration may cause irritation of respiratory system.

Eye contact Causes serious eye irritation.

Skin contact Prolonged contact may cause redness and irritation.

Ingestion Ingestion may cause stomach discomfort.

Unknown acute toxicity Not applicable.

LD50 Oral > 2000 mg/kg (based on components) (MIXTURE)



Toxicology data for the components

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Alkenes, C11-12, hydroformylation products, low	>2000 mg/kg. Literature data	No data available	No data available
boiling*			

Sensitisation This product does not contain any components suspected to be sensitizing.

Mutagenic effects This product does not contain any known or suspected mutagens.

Carcinogenicity This product does not contain any known or suspected carcinogens.

Reproductive toxicityThis product does not contain any known or suspected reproductive hazards.

Routes of Exposure Eye contact. Skin contact.

Routes of entry No route of entry noted.

Specific target organ toxicity -

Single exposure

Not classified

Specific target organ toxicity -

Repeated exposure

Not classified.

Aspiration hazard The viscosity of this product is high enough that it is not an aspiration risk and the H304

phrase does not apply.

Other information Key literature references and sources for data. See Section 16 for more information.

12. Ecological Information

12.1 Toxicity

Toxic to aquatic life with long lasting effects

Toxicity to algae

See component information below.

Toxicity to fish

See component information below.

Toxicity to daphnia and other aquatic invertebrates

See component information below.

Toxicology data for the components

Chemical Name	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
Alkenes, C11-12, hydroformylation products, low boiling*	LC50 > 1 mg/l - Duration h: 96 -	NOEC = 0.085 mg/l - Duration h: 72	EL50 > 10 mg/l - Duration h: 48 -
	Notes: Literature data.	- Notes: Literature data.	Notes: Literature data.

12.2 Persistence and degradability



See component information below.

Chemical Name	Persistence and degradability
Alkenes, C11-12, hydroformylation	Readily biodegradable - Test OECD 301F 65% Duration : 28 days
products, low boiling*	

12.3 Bioaccumulative potential

See component information below.

Chemical Name	Bioaccumulation
Alkenes, C11-12, hydroformylation	Does not bioaccumulate
products, low boiling*	

12.4 Mobility

Mobility

Dispersible in water. See component information below.

Chemical Name	Mobility
Alkenes, C11-12, hydroformylation	No information available
products, low boiling*	

Mobility in soil

See component information below.

Chemical Name	Mobility in soil
Alkenes, C11-12, hydroformylation	No information available
products, low boiling*	

12.5 Results of PBT and vPvB assessment

Not classified as PBT/vPvB by current EU criteria.

12.6 Other adverse effects.

None known.

12.7 Other information

Key literature references and sources for data. See Section 16 for more information.

13. Disposal considerations

13.1 Waste treatment methods



Waste from residues/unused

products

Dispose of in accordance with local regulations.

Contaminated packaging

Empty containers should be transported/delivered using a registered waste carrier for local recycling or waste disposal.

14. Transport information

14.1. UN number

UN/ID No. (ADR/RID/ADN/ADG)
UN No. (IMDG)
UN No. (ICAO/ANAC)
UN3082
UN3082

14.2. UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: Alkenes, C11-12, hydroformylation products, low boiling)

14.3. Hazard class(es)

ADR/RID/ADN/ADG Hazard class
IMDG Hazard class
ICAO Hazard class/division
9

14.4 Packing group

ADR/RID/ADN/ADG Packing Group III
IMDG Packing group
ICAO Packing group III



14.5 Environmental hazard

Yes

14.6 Special precautions

Not applicable

Hazard ID 90
EmS (IMDG) F-A, S-F
Emergency Action Code (EAC) •3Z
Tunnel restriction code (E)

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

Please contact SDS@slb.com for info regarding transport in Bulk.



15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety data sheet complies with the requirements of:

The Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

International inventories

USA, Toxic Substances Control Act Does not comply

inventory (TSCA)

Canada (DSL) Does not comply Inventory - Japan - Existing and Does not comply

New Chemicals list

China (IECSC) Complies

Australia (AICS)

Korea (KECL)

Inventory - New Zealand - Inventory

Does not comply

Does not comply

of Chemicals (NZIoC)

CAS Number 97552-94-8 can be used to identify the substance given a list number in section 3 in areas not subject to the REACH regulation.

16. Other Information

Prepared by Global Regulatory Compliance - Chemicals (GRC - Chemicals), Anne Karin (Anka) Fosse

Supercedes Date: 25/Jan/2019

Revision date 14/Mar/2019

Version 12

This SDS has been revised in the

following section(s)

1, 15, 16 No changes with regard to classification have been made. Updated according to

GHS/CLP.

Key literature references and sources for data

www.ChemADVISOR.com

Supplier

National Chemical Inventories National regulatory information National occupational exposure limits

HMIS classification

Health	2
Flammability	1
Physical hazard	0
PPÉ	X



*A mark of M-I L.L.C., a Schlumberger Company

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