HALLIBURTON

SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

QUIK-FREE NS

Revision Date: 05-Oct-2015 Revision Number: 10

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product Identifier

Product Name QUIK-FREE NS Internal ID Code HM006476

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

Recommended Use Spotting fluid

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 Manufacturing Services, Ltd. Halliburton House, Howemoss Crescent

Kirkhill Industrial Estate

Dyce

Aberdeen, AB21 0GN United Kingdom

www.halliburton.com

For further information, please contact

E-Mail address: fdunexchem@halliburton.com

1.4. Emergency telephone number +44 8 08 189 0979 / 1-760-476-3961

Emergency telephone - §4	45 - (EC)1272/2008
Europe	112
Croatia	Centar za kontrolu otrovanja (CKO): (+385 1) 23-48-342 (Poison Control Center (PCC) - Institute for Medical Research and Occupational Health)
Cyprus	+210 7793777
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
Romania	+40 21 318 36 06
Spain	Poison Information Service (ES): +34 91 562 04 20
United Kingdom	NHS Direct (UK): +44 0845 46 47

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Serious Eye Damage / Eye Irritation Category 2 - H319

2.2. Label Elements

Hazard Pictograms



Signal Word Warning

Hazard Statements

H319 - Causes serious eye irritation

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

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

P280 - Wear protective gloves/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

Contains

Substances CAS Number Poly(oxy-1,2-ethanediyl), 57635-48-0 a-(carboxymethyl)-w-[(9Z)-9-octadecenyloxy]-

2.3. Other Hazards

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

SECTION 3: Composition/information on Ingredients

3.2. Mixtures Mixture

Substances	EINECS	CAS Number	PERCENT (w/w)	EU - CLP Substance Classification	REACH No.
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9	611-563-2	57635-48-0	1 - 5%	Skin Irrit. 2 (H315) Eye Corr. 1 (H318)	No data available
-octadecenyloxy]-				, , ,	

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

SECTION 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 Do NOT induce vomiting. Give nothing by mouth. Obtain immediate medical

attention.

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

Causes eye irritation. May cause skin irritation.

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

Notes to Physician Treat symptomatically

SECTION 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 harmful 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Ensure adequate ventilation.

See Section 8 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 8 and 13 for additional information.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Ensure adequate ventilation. Wash hands after use. Launder contaminated clothing before reuse. Use appropriate protective equipment.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry location. Store away from oxidizers. Product has a shelf life of 12 months.

7.3. Specific End Use(s)

Exposure Scenario No information available Other Guidelines No information available

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Exposure Limits

Substances	CAS Number	EU	UK	Netherlands	France
Poly(oxy-1,2-ethanediyl),	57635-48-0	Not applicable	Not applicable	Not applicable	Not applicable
a-(carboxymethyl)-w-[(9Z)-9					
-octadecenyloxy]-					

Substances	CAS Number	Germany	Spain	Portugal	Finland
Poly(oxy-1,2-ethanediyl),	57635-48-0	Not applicable	Not applicable	Not applicable	Not applicable
a-(carboxymethyl)-w-[(9Z)-9					
-octadecenyloxy]-					

Substances	CAS Number	Austria	Ireland	Switzerland	Norway
Poly(oxy-1,2-ethanediyl),	57635-48-0	Not applicable	Not applicable	Not applicable	Not applicable
a-(carboxymethyl)-w-[(9Z)-9					
-octadecenyloxy]-					

Substances	CAS Number	Italy	Poland	Hungary	Czech Republic
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-	57635-48-0	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Denmark	Romania	Croatia	Cyprus
Poly(oxy-1,2-ethanediyl),	57635-48-0	Not applicable	Not applicable	Not applicable	Not applicable
a-(carboxymethyl)-w-[(9Z)-9					
-octadecenyloxy]-					

Derived No Effect Level (DNEL)

No information available.

Worker

General Population

Predicted No Effect Concentration (PNEC)
No

No information available.

8.2. Exposure controls

Engineering Controls A well ventilated area to control dust levels.

Personal protective equipment

If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

Respiratory Protection If engineering controls and work practices cannot keep exposure below occupational

exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, AS/NZS 1715:2009, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or other qualified professional.

Dust/mist respirator. (N95, P2/P3)

Hand Protection Chemical-resistant protective gloves (EN 374) Suitable materials for longer, direct

contact (recommended: protection index 6, corresponding to > 480 minutes permeation

time as per EN 374): Nitrile gloves. (>= 0.35 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced. Manufacturer's directions for use should be

observed because of great diversity of types.

Skin Protection Normal work coveralls.

Eye Protection Wear safety glasses or goggles to protect against exposure.

Other Precautions None known.

Environmental Exposure Controls Do not allow material to contaminate ground water system

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State: Liquid Color: Light brown

Odor: Mild fatty Odor Threshold: No information available

Property Values Remarks/ - Method

pH: No data available

No data available Freezing Point/Range Melting Point/Range No data available **Boiling Point/Range** No data available > 180 PMCC **Flash Point** Flammability (solid, gas) No data available upper flammability limit No data available No data available lower flammability limit No data available **Evaporation rate Vapor Pressure** No data available **Vapor Density** No data available

Specific Gravity 0.98

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 No data available Viscosity No information available **Explosive Properties** No information available **Oxidizing Properties**

9.2. Other information

VOC Content (%) No data available

SECTION 10: Stability and Reactivity

10.1. Reactivity

Not expected to be reactive.

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

Acrolein. Carbon monoxide and carbon dioxide.

SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

Inhalation May cause mild respiratory irritation.

Eye Contact Skin ContactCauses eye irritation.
May cause skin irritation.

Ingestion Large doses may cause nausea, vomiting and diarrhea.

Chronic Effects/Carcinogenicity No data available to indicate product or components present at greater than 0.1% are

chronic health hazards.

Toxicology data for the components

Substances	CAS	LD50 Oral	LD50 Dermal	LC50 Inhalation
	Number			
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxyl-	57635-48-0	> 2000 mg/kg (Rat)	> 10000 mg/kg (Rabbit) (similar substance)	No data available

	CAS Number	Skin corrosion/irritation
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-		Causes skin irritation.

Substances	CAS	Eye damage/irritation
	Number	
-)(-) ,),		Corrosive to eyes
a-(carboxymethyl)-w-[(9Z)-9		
-octadecenyloxy]-		

Substances	CAS Number	Skin Sensitization
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-		Did not cause sensitization on laboratory animals (similar substances)

Substances	CAS Number	Respiratory Sensitization
Poly(oxy-1,2-ethanediyl),	57635-48-0	No information available
a-(carboxymethyl)-w-[(9Z)-9)	

	CAS Number	Mutagenic Effects
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-		In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects. (similar substances)
Substances	CAS	Carcinogenic Effects

		Carcinogenic Effects	
	Number		
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9		No information available.	
-octadecenyloxy]-			

	CAS Number	Reproductive toxicity
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-		No data of sufficient quality are available.

Substances	CAS	STOT - single exposure	
	Number		
Poly(oxy-1,2-ethanediyl),	57635-48-0	No information available	
a-(carboxymethyl)-w-[(9Z)-9			
-octadecenyloxy]-			

Substances	CAS	STOT - repeated exposure	
	Number	·	
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9		No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)	
-octadecenyloxy]-			

Substances	CAS	Aspiration hazard
	Number	
Poly(oxy-1,2-ethanediyl),	57635-48-0	Not applicable
a-(carboxymethyl)-w-[(9Z)-9		
-octadecenyloxy]-		

SECTION 12: Ecological Information

12.1. Toxicity Ecotoxicity Effects

-octadecenyloxy]-

	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9-octadecenyloxy]-			EC50 (96h): 29.25 mg/L (Scopthalmus maximus) NOEC(10d): 416.78 mg/kg (Corophium volutator)	No information available	EC50 (48h): 597.37 mg/L (Acartia tonsa)

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Poly(oxy-1,2-ethanediyl),	57635-48-0	Readily biodegradable (83% @ 28d)
a-(carboxymethyl)-w-[(9Z)-9-octadecenyloxy]-		

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Poly(oxy-1,2-ethanediyl),	57635-48-0	4.91
a-(carboxymethyl)-w-[(9Z)-9-octadecenyloxy]-		

12.4. Mobility in soil

Substances	CAS Number	Mobility
Poly(oxy-1,2-ethanediyl),	57635-48-0	No information available

a-(carboxymethyl)-w-[(9Z)-9-octadecenyloxyl-	
a-(carboxyrrietriyr)-w-[(32)-3-octadecerryloxyj-	

12.5. Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

Substances	PBT and vPvB assessment		
Poly(oxy-1,2-ethanediyl),		Not PBT/vPvB	
a-(carboxymethyl)-w-[(9Z)-9-octadecenyloxy]-			

12.6. Other adverse effects

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Disposal Method
Contaminated Packaging

Disposal should be made in accordance with federal, state, and local regulations.

Follow all applicable national or local regulations.

SECTION 14: Transport Information

IMDG/IMO

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

RID

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

ADR

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

IATA/ICAO

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

14.1. UN Number: Not restricted

14.2. UN Proper Shipping Name: Not restricted

14.3. Transport Hazard Class(es): Not applicable

14.4. Packing Group: Not applicable

14.5. Environmental Hazards: Not applicable

14.6. Special Precautions for User: None

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

SECTION 15: Regulatory Information

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

International Inventories

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)

Not determined.

15.2. Chemical Safety Assessment

No information available

SECTION 16: Other Information

Full text of H-Statements referred to under sections 2 and 3

H315 - Causes skin irritation

H318 - Causes serious eye damage

H319 - Causes serious eye irritation

Key or legend to abbreviations and acronyms

bw - body weight

CAS - Chemical Abstracts Service

CLP - REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on Classification,

Labelling and Packaging of substances and mixtures

EC - European Commission

EC10 - Effective Concentration 10%

EC50 - Effective Concentration 50%

EEC - European Economic Community

ErC50 – Effective Concentration growth rate 50%

IBC Code - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

LC50 - Lethal Concentration 50%

LD50 - Lethal Dose 50%

LL0 - Lethal Loading 0%

LL50 - Lethal Loading 50%

MARPOL - International Convention for the Prevention of Pollution from Ships

mg/kg – milligram/kilogram

mg/L - milligram/liter

NIOSH - National Institute for Occupational Safety and Health

NOEC - No Observed Effect Concentration

NTP - National Toxicology Program

OEL - Occupational Exposure Limit

PBT - Persistent Bioaccumulative and Toxic

PC - Chemical Product category

PEL - Permissible Exposure Limit

ppm - parts per million

PROC - Process category

REACH - REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the

Registration, Evaluation, Authorisation and Restriction of Chemicals

STEL - Short Term Exposure Limit

SU - Sector of Use category

Key literature references and sources for data

www.ChemADVISOR.com/

Revision Date: 05-Oct-2015

Revision Note

SDS sections updated: 1

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

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End of Safety Data Sheet