HALLIBURTON

SAFETY DATA SHEET

Product Trade Name: QUIK-TROL®

Revision Date: 17-Sep-2018 Revision Number: 19

1. Identification

1.1. Product Identifier

Product Trade Name: QUIK-TROL®

Synonyms None

Chemical Family: Carbohydrate Internal ID Code HM003749

1.2 Recommended use and restrictions on use Application: Filtrate Reducer

Uses advised against No information available

1.3 Manufacturer's Name and Contact Details

Manufacturer/Supplier

Baroid Fluid Services

Product Service Line of Halliburton Energy Services, Inc.

P.O. Box 1675 Houston, TX 77251

Telephone: (281) 871-4000

Halliburton Group Canada 645 - 7th Ave SW Suite 1800 Calgary, AB, T2P 4G8, Canada Telephone: 1-403-231-9300

Prepared By Chemical Stewardship

Telephone: 1-281-871-6107

e-mail: fdunexchem@halliburton.com

1.4. Emergency telephone number:

Emergency Telephone Number 1-866-519-4752 or 1-760-476-3962 (accessible 24 hours a day / 7 days a week)

Global Incident Response Access Code: 334305

Contract Number: 14012

2. Hazards Identification

2.1 Classification in accordance with paragraph (d) of §1910.1200

Combustible dust Combustible dust

2.2. Label Elements

Hazard Pictograms

Signal Word: Warning

Hazard Statements

May form combustible dust concentrations in air.

Precautionary Statements

PreventionNoneResponseNoneStorageNoneDisposalNone

2.3 Hazards not otherwise classified

None known

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Polysaccharide	Proprietary	60 - 100%	Combustible Dust

The specific chemical identity of the composition has been withheld as proprietary. The exact percentage (concentration) of the composition has been withheld as proprietary.

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 Under normal conditions, first aid procedures are not required.

4.2 Most important symptoms/effects, acute and delayed

No significant hazards expected.

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

Notes to Physician Treat symptomatically.

5. Fire-fighting 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 Specific hazards arising from the substance or mixture

Special exposure hazards in a fire

Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential.

5.3 Special protective equipment and precautions for fire-fighters

Special protective equipment for firefighters

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. Avoid creating and breathing dust. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

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

Scoop up and remove.

7. Handling and storage

7.1. Precautions for safe handling

Handling Precautions

Avoid creating or inhaling dust. Avoid dust accumulations. Ensure adequate ventilation. Slippery when wet. Avoid contact with eyes, skin, or clothing. 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

Storage Information

Store away from oxidizers. Store in a dry location. Product has a shelf life of 36 months.

8. Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Polysaccharide	Proprietary	Not applicable	Not applicable

8.2 Appropriate engineering controls

Engineering Controls A well ventilated area to control dust levels. Local exhaust ventilation should be

used in areas without good cross ventilation.

8.3 Individual protection measures, such as personal protective equipment

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.

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 Normal work gloves.

Skin Protection Normal work coveralls.

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

Other Precautions None known.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State: Solid Color White to off white

Odor: Mild Odor No information available

Threshold:

<u>Property</u> <u>Values</u>

Remarks/ - Method pH: 6.5-9 (1%)

Freezing Point / Range No data available **Melting Point / Range** No data available Pour Point / Range No data available **Boiling Point / Range** No data available Flash Point 221 °C / 430 °F Flammability (solid. gas) No data available **Upper flammability limit** No data available Lower flammability limit No data available

Evaporation rate
Vapor Pressure
Vapor Density
No data available

Specific Gravity 1.6

Water Solubility
Soluble in water
Solubility in other solvents
Partition coefficient: n-octanol/water
Autoignition Temperature
Decomposition Temperature
Viscosity
Soluble in water
No data available
No data available
No data available
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 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

Carbon monoxide and carbon dioxide.

11. Toxicological Information

11.1 Information on likely routes of exposure

Principle Route of Exposure Eye or skin contact, inhalation.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Acute Toxicity

Inhalation May cause mild respiratory irritation.

Eye Contact May cause mild eye irritation. **Skin Contact** May cause mild skin irritation.

Ingestion None known.

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

are chronic health hazards.

11.3 Toxicity data

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation			
Polysaccharide	Proprietary	27,000 mg/kg bw (rats)	> 2000 mg/kg bw (rabbits)	> 5800 mg/m ³ (4 hr) (rat)			
Substances	CAS Number	Skin corrosion/irritation					
Polysaccharide		Not irritating to skin in rabbits.					
Substances	CAS Number	Serious eye damage/irritation	Serious eye damage/irritation				
Polysaccharide		Non-irritating to rabbit's eye					
Substances	CAS Number	Skin Sensitization					
Polysaccharide		Did not cause sensitization on lab	oratory animals				
oryodocriando	<u> </u>	Did not dadd densitization on lab	oratory ariimais				
Substances	CAS Number	Respiratory Sensitization					
Polysaccharide		No information available					
Substances	CAS Number	Mutagenic Effects					
Polysaccharide			nic effects. In vivo tests did not show	w mutagenic effects. (similar			
		substances)					
Substances	CAS Number	Carcinogenic Effects					
Polysaccharide			in animal experiments (similar subs	stances)			
Substances	CAS Number	Reproductive toxicity					
Polysaccharide			ffects on fertility. Did not show terate	ogenic effects in animal			
		experiments.					
Substances	CAS Number	STOT - single exposure					
Polysaccharide		No information available					
Substances	CAS Number	CTOT reported expecure					
Polysaccharide		STOT - repeated exposure	animal studies at concentration req	uiring classification			
oiysaccilande		ino significant toxicity observed in	animai studies at concentration req	unnig dassilication.			
Substances	CAS Number	Aspiration hazard					
Polysaccharide		Not applicable					

12. Ecological Information

12.1. Toxicity

Substance Ecotoxicity Data

Substance Ecoto	<u> </u>				
Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to	Toxicity to Invertebrates
				Microorganisms	
Polysaccharide	Proprietary	No information available	TLM96: 10000 ppm	No information available	EC50 (48h) 1000-3300
1			(Oncorhynchus mykiss)		mg/L (Crangon crangon)

	LC50 (96	h) 20000 mg/L	
	(Oncorhy	nchus mykiss)	

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Polysaccharide	Proprietary	No information available

12.3. Bioaccumulative potential

Substances	CAS Number	Bioaccumulation
Polysaccharide	Proprietary	No information available

12.4. Mobility in soil

Substances	CAS Number	Mobility
Polysaccharide	Proprietary	No information available

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1. Waste treatment methods

Disposal methodsBury in a licensed landfill according to federal, state, and local regulations.

Contaminated Packaging Follow all applicable national or local regulations.

14. Transport Information

US DOT

UN Number
UN proper shipping name:
Transport Hazard Class(es):
Packing Group:
Environmental Hazards:
Not restricted
Not restricted
Not applicable
Not applicable

Canadian TDG

UN Number
UN proper shipping name:
Transport Hazard Class(es):
Packing Group:
Not applicable
Not applicable
Not applicable
Not applicable

IMDG/IMO

UN Number Not restricted
UN proper shipping name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: 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

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

Special Precautions for User None

15. Regulatory Information

US Regulations

US TSCA Inventory All components listed on inventory or are exempt.

TSCA Significant New Use Rules - S5A2

Substances			TSCA Section 5(E) Consent Orders
Polysaccharide	Proprietary	Not applicable	Not applicable

EPA SARA Title III Extremely Hazardous Substances

Substances	CAS Number	EPA SARA Title III Extremely Hazardous
		Substances
Polysaccharide	Proprietary	Not applicable

EPA SARA (311,312) Hazard Class

Combustible dust

None

EPA SARA (313) Chemicals

Substances	CAS Number	Toxic Release Inventory (TRI) -	Toxic Release Inventory (TRI) -
		Group I	Group II
Polysaccharide	Proprietary	Not applicable	Not applicable

EPA CERCLA/Superfund Reportable Spill Quantity

Substances	CAS Number	CERCLA RQ
Polysaccharide	Proprietary	Not applicable

EPA RCRA Hazardous Waste Classification

If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

California Proposition 65

Substances	CAS Number	California Proposition 65	
Polysaccharide	Proprietary	Not applicable	

U.S. State Right-to-Know Regulations

Substances	CAS Number	MA Right-to-Know Law	NJ Right-to-Know Law	PA Right-to-Know Law
Polysaccharide	Proprietary	Not applicable	Not applicable	Not applicable

NFPA Ratings: Health 1, Flammability 1, Reactivity 0

HMIS Ratings: Health 1, Flammability 1, Physical Hazard 0, PPE: A

Canadian Regulations

Canadian Domestic Substances All components listed on inventory or are exempt. List (DSL)

16. Other information

Preparation Information

Prepared By Chemical Stewardship

Telephone: 1-281-871-6107

e-mail: fdunexchem@halliburton.com

Revision Date: 17-Sep-2018

Reason for Revision SDS sections updated:

1

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 Stewardship at 1-580-251-4335.

Key or legend to abbreviations and acronyms used in the safety data sheet

bw - body weight

CAS - Chemical Abstracts Service

d - day

EC50 – Effective Concentration 50%

ErC50 - Effective Concentration growth rate 50%

h - hour

LC50 - Lethal Concentration 50%

LD50 - Lethal Dose 50%

LL50 - Lethal Loading 50%

mg/kg - milligram/kilogram

mg/L - milligram/liter

mg/m³ - milligram/cubic meter

mm - millimeter

mmHg - millimeter mercury

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OEL - Occupational Exposure Limit

PEL – Permissible Exposure Limit

ppm – parts per million

STEL - Short Term Exposure Limit

TWA - Time-Weighted Average

UN - United Nations

w/w - weight/weight

Key literature references and sources for data

www.ChemADVISOR.com/

Disclaimer Statement

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End of Safety Data Sheet