HALLIBURTON

SAFETY DATA SHEET

Product Trade Name: BARABLOK™ NA

Revision Date: 11-Jun-2015 Revision Number: 3

1. Identification

1.1. Product Identifier

Product Trade Name: BARABLOK™ NA

Synonyms: None
Chemical Family: Asphalt
Internal ID Code HM007523

1.2 Recommended use and restrictions on use

Application: Fluid Loss Additive

Uses Advised Against No information available

1.3 Manufacturer's Name and Contact Details

Manufacturer/Supplier Baroid Fluid Services

Product Service Line of Halliburton

P.O. Box 1675 Houston, TX 77251

Telephone: (281) 871-4000

Emergency Telephone: (281) 575-5000

Prepared By Chemical Stewardship

Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

1.4. Emergency telephone number

Emergency Telephone Number (281) 575-5000

2. Hazard(s) 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

Prevention None

Response None

Storage None

Disposal None

Contains

SubstancesCAS NumberNatural asphalt12002-43-6

2.3 Hazards not otherwise classified

None known

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Natural asphalt	12002-43-6	60 - 100%	Combustible Dust

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

attention.

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

Decomposition in fire may produce toxic gases. 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 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. Avoid creating and breathing dust.

See Section 8 for additional information

6.2. Environmental precautions

None known.

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 contact with eyes, skin, or clothing. Avoid creating or inhaling dust.

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 cool, dry location. Product has a shelf life of 60 months.

8. Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Natural asphalt	12002-43-6	Not applicable	Not applicable

8.2 Appropriate engineering controls

Engineering Controls Use in a well ventilated area.

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.

Respiratory Protection Not normally needed. But if significant exposures are possible then the following

respirator is recommended:

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: Powder Color: Black

Odor: Asphalt Odor No information available

Threshold:

Property Values

Remarks/ - Method

pH: 5.8

Freezing Point/Range

Melting Point/Range

No data available
No data available
No data available
No data available

Flash Point 315 °C / 599 °F Cleveland Open Cup (COC)

Flammability (solid, gas)
upper flammability limit
lower flammability limit
No data available
No data available
Evaporation rate
No data available
Vapor Pressure
No data available
Vapor Density
No data available

Specific Gravity 1.05

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

Oxidizing Properties No information available 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. Toxic fumes.

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 respiratory irritation.

Eye Contact May cause mechanical irritation to eye.

Skin Contact May cause mild skin irritation.

Ingestion Not determined

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 f Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
	12002-43-6			
Natural asphalt	12002-43-6	> 5000 mg/kg (Rat) (similar substance)	> 2000 mg/kg (Rat) (similar substance)	> 94 mg/m³ (Rat) 4h
		cascanos	cubotanico)	
Substances	CAS Number	Skin corrosion/irritation		
Natural asphalt	12002-43-6	Non-irritating to the skin (similar su	bstances)	
		T		
Substances		Eye damage/irritation		
Natural asphalt	12002-43-6	Non-irritating to the eye (Rabbit) (s	imilar substances)	
Substances	CAS Number	Skin Sensitization		
Natural asphalt	12002-43-6		oratory animals (guinea pig) (similar	ouhotopooo\
ivaturai aspiiait	12002-43-0	Did not cause sensitization on labo	riatory ariimais (guinea pig) (similar	substances)
Substances	CAS Number	Respiratory Sensitization		
Natural asphalt	12002-43-6	No information available		
	•			
Substances	CAS Number	Mutagenic Effects		
Natural asphalt	12002-43-6	In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects. (similar		
		substances)		
Substances	CAS Number	Carcinogenic Effects		
Natural asphalt	12002-43-6		n animal experiments (similar subst	ances)
. tatarar aopinan	1.2002 10 0	Dia not onon caroniogomic onotic	aa. experimente (emmar eusee	u
Substances	CAS Number	Reproductive toxicity		
Natural asphalt	12002-43-6		fects on fertility. Did not show terator	genic effects in animal
		experiments. (similar substances)		
0	0.4.0.11	la=a= · ·		
Substances		STOT - single exposure		
Natural asphalt	12002-43-6	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)		
		joubotanoos)		
Substances	CAS Number	STOT - repeated exposure		
Natural asphalt	12002-43-6	No significant toxicity observed in animal studies at concentration requiring classification. (similar		
		substances)		
011	0.4.0.41	I		
Substances		Aspiration hazard		
Natural asphalt	12002-43-6	Not applicable		

12. Ecological Information

12.1. Toxicity

Ecotoxicity Effects

Product Ecotoxicity Data

No data available

Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Natural asphalt	12002-43-6	No information available	LL50 (95h) > 1000 mg/L (Oncorhynchus mykiss) (similar substance)		TLM96: 869400 ppm (Mysidopsis bahia) EL50 (48h) > 1000 mg/L (Daphnia magna) (similar substance)

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Natural asphalt	12002-43-6	Not readily biodegradable

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Natural asphalt	12002-43-6	No information available

12.4. Mobility in soil

Substances	CAS Number	Mobility
Natural asphalt	12002-43-6	No information available

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1. Waste treatment methods

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

US DOT Bulk

DOT (Bulk) Not applicable

Canadian TDG

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

EPA SARA Title III Extremely

Hazardous Substances

Not applicable

EPA SARA (311,312) Hazard

Class

None

EPA SARA (313) Chemicals This product does not contain a toxic chemical for routine annual "Toxic Chemical

Release Reporting" under Section 313 (40 CFR 372).

EPA CERCLA/Superfund Reportable Spill Quantity

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 All components listed do not apply to the California Proposition 65 Regulation.

MA Right-to-Know Law Does not apply.

NJ Right-to-Know Law Does not apply.

PA Right-to-Know Law Does not apply.

Canadian Regulations

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

16. Other information

Preparation Information

Prepared By Chemical Stewardship

Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

Revision Date: 11-Jun-2015

Reason for Revision SDS sections updated:

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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

bw - body weight

CAS - Chemical Abstracts Service

EC50 - Effective Concentration 50%

ErC50 – Effective Concentration growth rate 50%

LC50 - Lethal Concentration 50%

LD50 - Lethal Dose 50%

LL50 - Lethal Loading 50%

mg/kg - milligram/kilogram

mg/L - milligram/liter

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

h - hour

mg/m³ - milligram/cubic meter

mm - millimeter

mmHg - millimeter mercury

w/w - weight/weight

d - day

Key literature references and sources for data

www.ChemADVISOR.com/

Disclaimer Statement

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End of Safety Data Sheet