## **HALLIBURTON**

# **SAFETY DATA SHEET**

Product Trade Name: BC-140C

Revision Date: 02-Jun-2015 Revision Number: 16

1. Identification

1.1. Product Identifier

Product Trade Name: BC-140C
Synonyms: None
Chemical Family: Blend
Internal ID Code HM000110

1.2 Recommended use and restrictions on use

Application: Crosslinker

Uses Advised Against No information available

1.3 Manufacturer's Name and Contact Details

Manufacturer/Supplier Halliburton Energy Services Inc.

P.O. Box 1431

Duncan, Oklahoma 73536-0431

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

As adopted by the competent authority, this product does not require an SDS or hazard warning label.

Not classified

#### 2.2. Label Elements

**Hazard Pictograms** 

Signal Word Not Classified

Hazard Statements Not Hazardous

**Precautionary Statements** 

**Prevention** None

Response None

Storage None

**Disposal** None

**Contains** 

Substances CAS Number

Contains no hazardous substances in concentrations above

cut-off values according to the competent authority

#### 2.3 Hazards not otherwise classified

None known

# 3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	60 - 100%	Not classified

NA

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, move victim to fresh air and seek medical attention.

**Eyes** In case of contact, or suspected contact, immediately flush eyes with plenty of

water for at least 15 minutes and get medical attention immediately after flushing.

**Skin** In case of contact, immediately flush skin with plenty of soap and water for at least

15 minutes. Get medical attention. Remove contaminated clothing and launder

before reuse.

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

attention.

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

May cause eye, skin, and respiratory irritation.

#### 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.

## 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 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.

## 7. Handling and storage

## 7.1. Precautions for Safe Handling

#### **Handling Precautions**

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

## **Storage Information**

Store away from oxidizers. Store in a cool well ventilated area. Keep container closed when not in use. 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
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable	Not applicable

## 8.2 Appropriate engineering controls

**Engineering Controls**Use in a well ventilated area. 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.

**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 ProtectionRubber apron.Eye ProtectionSafety glasses.

**Other Precautions** Eyewash fountains and safety showers must be easily accessible.

# 9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State: Liquid Color: Blue

Odor: Amine Odor No information available

Threshold:

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

Remarks/ - Method

**pH**: 7.9

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

Specific Gravity 1.16

Water Solubility
Soluble in water
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

9.2. Other information

VOC Content (%)

Liquid Density

No data available
9.66 lbs/gal @ 20 C

## 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. Dehydrating agents.

#### 10.6. Hazardous Decomposition Products

Toxic fumes. 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** 

InhalationMay cause mild respiratory irritation.Eye ContactMay cause mild eye irritation.Skin ContactMay 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

Toxioology data for th	kioology data for the components			
Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	No data available	No data available	No data available

## 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
				Microorganisms	
Contains no	NA	No information available	No information available	No information available	No information available
hazardous substances					
in concentrations					
above cut-off values					
according to the					
competent authority					

## 12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
------------	------------	-------------------------------

Contains no hazardous substances in	NA	No information available
concentrations above cut-off values according to		
the competent authority		

## 12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Contains no hazardous substances in	NA	No information available
concentrations above cut-off values according to		
the competent authority		

## 12.4. Mobility in soil

Substances	CAS Number	Mobility
Contains no hazardous substances in concentrations	NA	No information available
above cut-off values according to the competent authority		

#### 12.5 Other adverse effects

No information available

# 13. Disposal Considerations

#### 13.1. Waste treatment methods

**Disposal Method**Disposal should be made in accordance with 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 restricted
Not applicable
Not applicable

IMDG/IMO

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

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: 02-Jun-2015

Reason for Revision SDS sections updated:

2

#### 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/m<sup>3</sup> - 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**

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

**End of Safety Data Sheet**