

## SAFETY DATA SHEET

Product Trade Name: DCA-32003

Revision Date: 03-Apr-2018

Revision Number: 20

**1. Identification****1.1. Product Identifier**

Product Trade Name: DCA-32003  
Synonyms: None  
Chemical Family: Blend  
Internal ID Code: HM007684

**1.2 Recommended use and restrictions on use**

Application: Surfactant  
Uses advised against: Consumer use

**1.3 Manufacturer's Name and Contact Details**

Manufacturer/Supplier  
Multi-Chem Group LLC  
3000 N. Sam Houston Pkwy E., Houston, TX 77032  
Phone: 1 281 871 4000

Halliburton Energy Services, Inc.  
645 - 7th Ave SW Suite 1800  
Calgary, AB  
T2P 4G8  
Canada

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  
Global Incident Response Access Code: 334305  
Contract Number: 14012

**2. Hazards Identification****2.1 Classification in accordance with paragraph (d) of §1910.1200**

Acute Oral Toxicity	Category 3 - H301
Acute toxicity - Dermal	Category 3 - H311
Acute inhalation toxicity - vapor	Category 3 - H331
Skin Corrosion / Irritation	Category 2 - H315
Serious Eye Damage/Irritation	Category 1 - H318
Reproductive Toxicity	Category 1B - H360
Specific Target Organ Toxicity - (Single Exposure)	Category 1 - H370
Acute Aquatic Toxicity	Category 2 - H401
Flammable liquids.	Category 2 - H225

**2.2. Label Elements**

**Hazard Pictograms****Signal Word:**

Danger

**Hazard Statements**

H225 - Highly flammable liquid and vapor  
H301 - Toxic if swallowed  
H311 - Toxic in contact with skin  
H315 - Causes skin irritation  
H318 - Causes serious eye damage  
H331 - Toxic if inhaled  
H360 - May damage fertility or the unborn child  
H370 - Causes damage to organs  
H401 - Toxic to aquatic life

**Precautionary Statements****Prevention**

P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 - Keep container tightly closed  
P240 - Ground and bond container and receiving equipment.  
P241 - Use explosion-proof electrical/ventilating/lighting/equipment  
P242 - Use only non-sparking tools  
P243 - Take action to prevent static discharges.  
P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
P264 - Wash face, hands and any exposed skin thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P271 - Use only outdoors or in a well-ventilated area  
P273 - Avoid release to the environment

**Response**

P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
P330 - Rinse mouth  
P302 + P352 - IF ON SKIN: Wash with plenty of water.  
P312 - Call a POISON CENTER or doctor/physician if you feel unwell  
P362 + P364 - Take off contaminated clothing and wash before reuse  
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P311 - Call a POISON CENTRE or doctor/physician  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P310 - Immediately call a POISON CENTER or doctor/physician  
P307 + P311 - IF exposed: Call a POISON CENTER or doctor/physician

<b>Storage</b>	P370 + P378 - In case of fire: Use water spray for extinction P403 + P233 - Store in a well-ventilated place. Keep container tightly closed P403 + P235 - Store in a well-ventilated place. Keep cool P405 - Store locked up
<b>Disposal</b>	P501 - Dispose of contents/container in accordance with local/regional/national/international regulations

**2.3 Hazards not otherwise classified**

None known

**3. Composition/information on Ingredients**

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Methanol	67-56-1	60 - 100%	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Repr. 1B (H360) STOT SE 1 (H370) Flam. Liq. 2 (H225)
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	5 - 10%	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Corr. 1 (H318) STOT SE 3 (H335) Aquatic Acute 2 (H401) Aquatic Chronic 3 (H412)
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	5 - 10%	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Aquatic Acute 2 (H401)

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**

<b>Inhalation</b>	Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.
<b>Eyes</b>	In case of contact, immediately flush eyes with plenty of water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Seek immediate medical attention/advice. Suitable emergency eye wash facility should be immediately available
<b>Skin</b>	In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Obtain immediate medical attention.

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

Causes severe eye irritation which may damage tissue. Causes skin irritation. Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled. Potential reproductive hazard. May cause birth defects. May cause damage to internal organs.

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

<b>Notes to Physician</b>	Gastric lavage or emesis should be performed as soon as possible to minimize absorption, and is recommended within 4 hours of ingestion. Ethanol may be given intravenously to prevent build-up of toxic effects of methanol metabolites. Visual disturbances and metabolic acidosis may occur and dialysis, preferably hemodialysis may be employed to treat these
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complications.

## 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

Do NOT spray pool fires directly with water. A solid stream of water directed into hot burning liquid can cause splattering.

### 5.2 Specific hazards arising from the substance or mixture

#### Special exposure hazards in a fire

Decomposition in fire may produce harmful gases.

### 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

Ensure adequate ventilation. Use appropriate protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Remove sources of ignition. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. 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

Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Remove ignition sources and work with non-sparking tools.

## 7. Handling and storage

### 7.1. Precautions for safe handling

#### Handling Precautions

Do not breathe dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation. Use appropriate protective equipment. Remove sources of ignition. Ground and bond containers when transferring from one container to another. Avoid contact with eyes, skin, or clothing.

#### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Storage Information

Store in a cool well ventilated area. Keep from heat, sparks, and open flames.

## 8. Exposure Controls/Personal Protection

### 8.1 Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
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Methanol	67-56-1	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	TWA: 200 ppm STEL: 250 ppm
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	Not applicable	Not applicable
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	Not applicable	Not applicable

## 8.2 Appropriate engineering controls

### Engineering Controls

Ensure adequate ventilation, especially in confined areas

## 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

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.

Positive pressure self-contained breathing apparatus if methanol is released.

### Hand Protection

Use gloves which are suitable for the chemicals present in this product as well as other environmental factors in the workplace.

### Skin Protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron, rain jacket, pants or coverall, as appropriate, to prevent skin contact.

### Eye Protection

Safety glasses with side-shields. If splashes are likely to occur, wear: Goggles, Face-shield.

### 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**

Clear to Slightly Hazy , Colorless to Amber

**Odor:** Mild

**Odor**

No information available

**Threshold:**

Property

Values

Remarks/ - Method

**pH:**

5.0 - 7.0 (10% in 1:1 IPA:H<sub>2</sub>O)

**Freezing Point / Range**

-40 °C / -40 °F

**Melting Point / Range**

No data available

**Boiling Point / Range**

No data available

**Flash Point**

16 °C / 60.8 °F (SFCC)

**Flammability (solid, gas)**

No data available

Upper flammability limit

No data available

Lower flammability limit

No data available

**Evaporation rate**

**Vapor Pressure**

No data available

**Vapor Density**

No data available

**Specific Gravity**

0.8778-0.9028 (20 °C/68 °F)

**Water Solubility**

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

**9.2. Other information**

VOC Content (%)	No data available
Liquid Density	7.32-7.53 lbs/gal
Bulk Density	877 - 903 kg/m <sup>3</sup>

**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**

Keep away from heat, sparks and flame.

**10.5. Incompatible materials**

Strong oxidizers. Strong acids. Strong alkalis.

**10.6. Hazardous decomposition products**

Oxides of nitrogen. Oxides of sulfur. Carbon oxides.

**11. Toxicological Information****11.1 Information on likely routes of exposure**

**Principle Route of Exposure** Skin contact. Eye contact. Ingestion. Inhalation.

**11.2 Symptoms related to the physical, chemical and toxicological characteristics****Acute Toxicity****Inhalation**

Toxic if inhaled. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

**Eye Contact**

Causes severe eye irritation which may damage tissue.

**Skin Contact**

Toxic in contact with skin. Causes skin irritation.

**Ingestion**

Toxic if swallowed. Ingestion of this product may cause blindness due to the presence of methanol. May cause headache, dizziness, nausea, vomiting, gastrointestinal irritation and central nervous system depression.

**Chronic Effects/Carcinogenicity** Prolonged or repeated exposure may cause reproductive system damage. May cause birth defects.

**11.3 Toxicity data****Toxicology data for the components**

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methanol	67-56-1	300 mg/kg-bw (human) < 790 to 13,000 mg/kg (rat)	1000 mg/kg-bw (human) 17,100 mg/kg (rabbit)	10 mg/L (human, vapor, 4h)

Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	1300 mg/kg-bw (rat) (similar substance)	>2000 mg/kg-bw (Rat) (similar substance)	No data available
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	1300 mg/kg (similar substance)	No data available	No data available

Substances	CAS Number	Skin corrosion/irritation
Methanol	67-56-1	Non-irritating to the skin (Rabbit)
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	Causes moderate skin irritation. (Rabbit) (similar substances) Skin, rabbit: May cause moderate skin irritation.
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	May cause moderate skin irritation. (similar substances)

Substances	CAS Number	Serious eye damage/irritation
Methanol	67-56-1	Non-irritating to the eye (Rabbit)
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	Eye, rabbit: Causes severe eye irritation which may damage tissue. (similar substances)
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	May cause moderate eye irritation. (similar substances)

Substances	CAS Number	Skin Sensitization
Methanol	67-56-1	Did not cause sensitization on laboratory animals (guinea pig)
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	Did not cause sensitization on laboratory animals (guinea pig) (similar substances)
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	No information available

Substances	CAS Number	Respiratory Sensitization
Methanol	67-56-1	No information available
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	No information available
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	No information available

Substances	CAS Number	Mutagenic Effects
Methanol	67-56-1	The weight of evidence from available in vitro and in vivo studies indicates that this substance is not expected to be mutagenic.
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects. (similar substances)
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	No information available

Substances	CAS Number	Carcinogenic Effects
Methanol	67-56-1	No data of sufficient quality are available.
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	Not regarded as carcinogenic. (similar substances)
Benzenesulfonic acid, C10-16-alkyl derivs.,	68584-25-8	No information available

compds. with triethanolamine		
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Substances	CAS Number	Reproductive toxicity
Methanol	67-56-1	Experiments have shown reproductive toxicity effects on laboratory animals
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments. (similar substances)
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	No information available

Substances	CAS Number	STOT - single exposure
Methanol	67-56-1	May cause disorder and damage to the Central Nervous System (CNS) No information available
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	May cause respiratory irritation. (similar substances)
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	No information available

Substances	CAS Number	STOT - repeated exposure
Methanol	67-56-1	No data of sufficient quality are available.
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	No information available

Substances	CAS Number	Aspiration hazard
Methanol	67-56-1	Not applicable No information available
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	Not applicable
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	Not applicable

## 12. Ecological Information

### 12.1. Toxicity

#### Ecotoxicity effects

Toxic to aquatic life.

#### Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Methanol	67-56-1	EC50 (96 h) =22000 mg/L (Pseudokirchnerella subcapitata) NOEC (8 d) =8000 mg/L (Scenedesmus quadricauda)	LC50(96 h)=15400 mg/L (Lepomis macrochirus)	IC50 (3h) > 1000 mg/L (activated sludge)	NOEC(21 d)=208 mg/L (Daphnia magna)
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	EC50(72 h) 5.1 mg/L (Pseudokirchnerella subcapitata)	LC50(96 h) 1.67 mg/L (Lepomis macrochirus) NOEC(72 d)=0.23 mg/L (Salmo gairdneri)	No information available	EC50(48 h) 2.9 mg/L (Daphnia magna)
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	No information available	EC50 (96h) 10 mg/L (similar substance)	No information available	EC50 (48h) 2.2 mg/L (Daphnia magna) (similar substance)



triethanolamine					
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**12.2. Persistence and degradability**

Substances	CAS Number	Persistence and Degradability
Methanol	67-56-1	Readily biodegradable (95% @ 20d)
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	Readily biodegradable (90% @ 28d)
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	No information available

**12.3. Bioaccumulative potential**

Substances	CAS Number	Log Pow
Methanol	67-56-1	Not Bioaccumulative; BCF=1
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	No information available
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	No information available

**12.4. Mobility in soil**

Substances	CAS Number	Mobility
Methanol	67-56-1	No information available
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	No information available
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	No information available

**12.5 Other adverse effects**

No information available

**13. Disposal Considerations****13.1. Waste treatment methods**

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

**Contaminated Packaging** Dispose of container according to national or local regulations.

**14. Transport Information****US DOT**

**UN Number** UN1230

**UN proper shipping name:** Methanol Solution

**Transport Hazard Class(es):** 3 (6.1)

**Packing Group:** II

**Environmental Hazards:** Not applicable

**Reportable Quantity:** RQ (Methanol - 2273 kg.)

**NAERG:** NAERG 131

**Canadian TDG**

**UN Number** UN1230

**UN proper shipping name:** Methanol Solution

**Transport Hazard Class(es):** 3 (6.1)

**Packing Group:** II

**Environmental Hazards:** Not applicable

**IMDG/IMO**

**UN Number** UN1230  
**UN proper shipping name:** Methanol Solution  
**Transport Hazard Class(es):** 3 (6.1)  
**Packing Group:** II  
**Environmental Hazards:** Not applicable  
**Reportable Quantity:** RQ (Methanol - 2273 kg.)  
**EMS:** EmS F-E, S-D

**IATA/ICAO**

**UN Number** UN1230  
**UN proper shipping name:** Methanol Solution  
**Transport Hazard Class(es):** 3 (6.1)  
**Packing Group:** II  
**Environmental Hazards:** Not applicable  
**Reportable Quantity:** RQ (Methanol - 2273 kg.)

**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	CAS Number	TSCA Significant New Use Rules - S5A2
Methanol	67-56-1	Not applicable
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	Not applicable
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	Not applicable

### EPA SARA Title III Extremely Hazardous Substances

Substances	CAS Number	EPA SARA Title III Extremely Hazardous Substances
Methanol	67-56-1	Not applicable
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	Not applicable
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	Not applicable

### EPA SARA (311,312) Hazard Class

Acute Health Hazard  
 Chronic Health Hazard  
 Fire Hazard

### EPA SARA (313) Chemicals

Substances	CAS Number	Toxic Release Inventory (TRI) - Group I	Toxic Release Inventory (TRI) - Group II
Methanol	67-56-1	1.0%	Not applicable
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	Not applicable	Not applicable
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	Not applicable	Not applicable

### EPA CERCLA/Superfund Reportable Spill Quantity

Substances	CAS Number	CERCLA RQ
Methanol	67-56-1	5000 lb 2270 kg

Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	Not applicable
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	Not applicable

**EPA RCRA Hazardous Waste Classification**

If product becomes a waste, it does meet the criteria of a hazardous waste as defined by the US EPA, because of:

Ignitability D001

**California Proposition 65**

Substances	CAS Number	California Proposition 65
Methanol	67-56-1	developmental toxicity
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	Not applicable
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	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
Methanol	67-56-1	Present	1222	Environmental hazard
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with 2-propanamine	68584-24-7	Not applicable	Not applicable	Not applicable
Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	Not applicable	Not applicable	Not applicable

**NFPA Ratings:**

Health 2, Flammability 3, Reactivity 0

**HMIS Ratings:**

Health 2\*, Flammability 3, Physical Hazard 0, PPE: X

**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:**

03-Apr-2018

**Reason for Revision**

SDS sections updated:  
2  
11  
14

**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/m<sup>3</sup> - 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/](http://www.ChemADVISOR.com/)

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**End of Safety Data Sheet**