

A HALLIBURTON SERVICE

SAFETY DATA SHEET MC C-6031

Product Trade Name:

Revision Date: 22-Apr-2019

Revision Number: 3

1. Identification

1.1. Product Identifier	
Product Trade Name:	MC C-6031
Synonyms	None
Chemical Family:	Blend
Internal ID Code	MC000668

1.2 Recommended use and restrictions on useApplication:Corrosion InhibitorUses advised againstConsumer 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 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-

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

Acute Oral Toxicity	Category 4 - H302
Skin Corrosion / Irritation	Category 1 - H314
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 1 - H400
Chronic Aquatic Toxicity	Category 2 - H411
Flammable liquids.	Category 3 - H226

2.2. Label Elements

Hazard Pictograms	
Signal Word:	Danger
Hazard Statements	H226 - Flammable liquid and vapor H302 - Harmful if swallowed H314 - Causes severe skin burns and eye damage H318 - Causes serious eye damage H360 - May damage fertility or the unborn child H370 - Causes damage to organs H400 - Very toxic to aquatic life H411 - Toxic to aquatic life with long lasting effects
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 P273 - Avoid release to the environment P280 - Wear protective gloves/protective clothing/eye protection/face protection P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P363 - Wash contaminated clothing before reuse P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing 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 P310 - Immediately call a POISON CENTER or doctor/physician P310 - Immediately call a POISON CENTER or doctor/physician P310 - Is a of fire: Use CO2, dry chemical, or foam P391 - Collect spillage

Storage

Disposal

P403 + P235 - Store in a well-ventilated place. Keep cool P405 - Store locked up 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
n-Benzyl dimethyl cocoamine, C12-C18	61789-71-7	10 - 30%	Acute Tox. 4 (H302)
quaternary salt			Acute Tox. 3 (H311)
			Skin Corr. 1B (H314)
			Eye Corr. 1 (H318)
			STOT SE 3 (H335)
			Aquatic Acute 1 (H400)
			Aquatic Chronic 1 (H410)
Methanol	67-56-1	5 - 10%	Acute Tox. 3 (H301)
			Acute Tox. 3 (H311)
			Acute Tox. 3 (H331)
			Repr. 1B (H360)
			STOT SE 1 (H370)
			Flam. Liq. 2 (H225)
Isopropanol	67-63-0	1 - 5%	Eye Irrit. 2 (H319)
			STOT SE 3 (H336)
			Flam. Liq. 2 (H225)
Ammonium bisulfite	10192-30-0	1 - 5%	Eye Irrit. 2A (H319)
			STOT SE 3 (H335)
			Aquatic Acute 3 (H402)

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 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
Skin	In case of contact, immediately flush skin with plenty of soap and water for at least 30 minutes and remove contaminated clothing, shoes and leather goods immediately. Get medical attention immediately.
Ingestion	Following ingestion, onset of symptoms may be delayed by 12 to 24 hours. Admission to hospital should be the first priority even if symptoms are absent. 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

Harmful if swallowed. Causes severe skin irritation with tissue destruction. Causes severe eye irritation which may damage tissue. 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

Notes to Physician 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 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
n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt	61789-71-7	Not applicable	Not applicable
Methanol	67-56-1	TWA: 200 ppm TWA: 260 mg/m ³	TWA: 200 ppm STEL: 250 ppm
Isopropanol	67-63-0	TWA: 400 ppm TWA: 980 mg/m ³	TWA: 200 ppm STEL: 400 ppm
Ammonium bisulfite	10192-30-0	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.
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	Colorless to Light Amber , Clear to Slightly Hazy
Odor:	Pungent	Odor	No information available
	-	Threshold:	
Property		Values	
Remarks/ - Metho	<u>bd</u>		
pH:		6.83 - 8.83 (10%	6 in 1:1 IPA:H2O)
Freezing Point	/ Range	-9.4 °C / 15 °	'F
Melting Point /	Range	No data availabl	le
Pour Point / Ra	nge	No data availabl	le
Boiling Point /	Range	No data availabl	le
Flash Point		59.4 °C / 139	°F (SFCC)
Flammability (s	solid, gas)	No data availabl	le
Upper flamr	nability limit	No data availabl	le
Lower flam	nability limit	No data availabl	le
Evaporation rat	te	No data availabl	le
Vapor Pressure	9	No data availabl	le
Vapor Density		No data availabl	le
Specific Gravity	у	0.9883 - 1.0133	(20 °C/68 °F)

Water Solubility Solubility in other solvents Partition coefficient: n-octanol/water Autoignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties

9.2. Other information VOC Content (%) Liquid Density No data available No information available No information available

No data available 8.23 - 8.44 lb/gal

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

Carbon oxides. Oxides of nitrogen. Oxides of sulfur. Ammonia.

11. Toxicological Information

11.1 Information on likely routes of exposure

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

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Acute Toxicity	
Inhalation	May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and
	unconsciousness.
Eye Contact	Causes serious eye damage.
Skin Contact	Causes severe burns.
Ingestion	Ingestion of this product may cause blindness due to the presence of methanol.
-	Harmful if swallowed. Causes burns of the mouth, throat and stomach.

Chronic Effects/Carcinogenicity May cause birth defects. Contains known or suspected reproductive toxins.

11.3 Toxicity data

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
n-Benzyl dimethyl cocoamine, C12-C18	61789-71-7	304.5 mg/kg (Rat)	930 mg/kg (rat)	No data available

quaternary salt				
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)
Isopropanol	67-63-0	5840 mg/kg-bw (rat)	12870 mg/kg-bw (rabbit)	72.6 mg/L (Rat, 4h, vapor)
Ammonium bisulfite	10192-30-0	11200 mg/kg 2610 mg/kg (Rat) (similar substance)	> 2000 mg/kg (Rat) (similar substance)	> 5.5 mg/L (Rat) 4h (similar substance)
Substances	CAS Number	Skin corrosion/irritation		
n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt	61789-71-7	Causes burns (Rabbit)		
Methanol	67-56-1	Non-irritating to the skin (Rabbit)		
Isopropanol	67-63-0	Non-irritating to the skin (Rabbit)		
Ammonium bisulfite	10192-30-0	Not irritating to skin in rabbits.		
Substances	CAS Number	Serious eye damage/irritatior	1	
n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt	61789-71-7	Causes eye burns (Rabbit)		
Methanol	67-56-1	Non-irritating to the eye (Rabbit)		
Isopropanol	67-63-0	Causes moderate eye irritation (Ra	,	
Ammonium bisulfite	10192-30-0	Eye, rabbit: Causes mild eye irritati	on. (similar substances)	
Substances	CAS Number	Skin Sensitization		
n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt	61789-71-7	Did not cause sensitization on labo	ratory animals (guinea pig)	
Vethanol	67-56-1	Did not cause sensitization on labo	ratory animals (quinea pig)	
sopropanol	67-63-0	Did not cause sensitization on labo		
Ammonium bisulfite	10192-30-0	Did not cause sensitization on labo		bstances)
Substances	CAS Number	Respiratory Sensitization		
n-Benzyl dimethyl cocoamine, C12-C18	61789-71-7	No information available		
quaternary salt Methanol	67-56-1	No information available		
Isopropanol	67-63-0	No information available		
Ammonium bisulfite		No information available		
Ammonium bisuinte	10192-30-0			
		_		
Substances n-Benzyl dimethyl cocoamine, C12-C18		Mutagenic Effects Did not show mutagenic effects in a	animal experiments	
Substances n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt	CAS Number 61789-71-7 67-56-1	Mutagenic Effects Did not show mutagenic effects in a The weight of evidence from availa expected to be mutagenic.	ble in vitro and in vivo studies indic	
Substances n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt Methanol	CAS Number 61789-71-7 67-56-1 67-63-0	Mutagenic Effects Did not show mutagenic effects in a The weight of evidence from availa expected to be mutagenic. In vitro tests did not show mutagen	ble in vitro and in vivo studies indici	w mutagenic effects.
Substances n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt Methanol	CAS Number 61789-71-7 67-56-1	Mutagenic Effects Did not show mutagenic effects in a The weight of evidence from availa expected to be mutagenic.	ble in vitro and in vivo studies indici	w mutagenic effects.
Substances n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt Methanol Isopropanol Ammonium bisulfite	CAS Number 61789-71-7 67-56-1 67-63-0 10192-30-0	Mutagenic Effects Did not show mutagenic effects in a The weight of evidence from availa expected to be mutagenic. In vitro tests did not show mutagen Did not show mutagenic effects in a	ble in vitro and in vivo studies india ic effects. In vivo tests did not shor animal experiments (similar substa	w mutagenic effects.
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Substances n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt Methanol Isopropanol Ammonium bisulfite Substances n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt Methanol Isopropanol	CAS Number 61789-71-7 67-56-1 67-63-0 10192-30-0 CAS Number 61789-71-7 67-56-1 67-56-1 67-63-0	Mutagenic Effects Did not show mutagenic effects in a The weight of evidence from availa expected to be mutagenic. In vitro tests did not show mutagenic Did not show mutagenic effects in a Carcinogenic Effects Did not show carcinogenic effects i No data of sufficient quality are availad not show carcinogenic effects	ble in vitro and in vivo studies india ic effects. In vivo tests did not shor animal experiments (similar substa n animal experiments ilable. n animal experiments	w mutagenic effects. inces)
Substances n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt Methanol Isopropanol Ammonium bisulfite Substances n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt Methanol Isopropanol	CAS Number 61789-71-7 67-56-1 67-63-0 10192-30-0 CAS Number 61789-71-7 67-56-1	Mutagenic Effects Did not show mutagenic effects in a The weight of evidence from availa expected to be mutagenic. In vitro tests did not show mutagen Did not show mutagenic effects in a Carcinogenic Effects Did not show carcinogenic effects i No data of sufficient quality are available	ble in vitro and in vivo studies india ic effects. In vivo tests did not shor animal experiments (similar substa n animal experiments ilable. n animal experiments	w mutagenic effects. inces)
Substances n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt Methanol Isopropanol Ammonium bisulfite Substances n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt Methanol	CAS Number 61789-71-7 67-56-1 67-63-0 10192-30-0 CAS Number 61789-71-7 67-56-1 67-63-0 10192-30-0	Mutagenic Effects Did not show mutagenic effects in a The weight of evidence from availa expected to be mutagenic. In vitro tests did not show mutagenic Did not show mutagenic effects in a Carcinogenic Effects Did not show carcinogenic effects i No data of sufficient quality are availad Did not show carcinogenic effects i Did not show carcinogenic or terato Reproductive toxicity	ble in vitro and in vivo studies india ic effects. In vivo tests did not shor animal experiments (similar substa n animal experiments n animal experiments ogenic effects in animal experimen	w mutagenic effects. inces)
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Substances	CAS Number	STOT - single exposure

n-Benzyl dimethyl	61789-71-7	Causes moderate respiratory irritation.
cocoamine, C12-C18		
quaternary salt		
Methanol	67-56-1	May cause disorder and damage to the Central Nervous System (CNS)
Isopropanol	67-63-0	May cause headache, dizziness, and other central nervous system effects.
Ammonium bisulfite	10192-30-0	No significant toxicity observed in animal studies at concentration requiring classification. (similar
		substances)

Substances	CAS Number	STOT - repeated exposure
n-Benzyl dimethyl cocoamine, C12-C18	61789-71-7	None under normal use conditions
quaternary salt		
Methanol	67-56-1	No data of sufficient quality are available.
Isopropanol		No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Ammonium bisulfite		No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)

Substances	CAS Number	Aspiration hazard
n-Benzyl dimethyl	61789-71-7	No information available
cocoamine, C12-C18		
quaternary salt		
Methanol	67-56-1	No information available
Isopropanol	67-63-0	Not applicable
Ammonium bisulfite	10192-30-0	Not applicable

12. Ecological Information

<u>12.1. Toxicity</u> Ecotoxicity effects Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt	61789-71-7	EC50 (72h) < 0.1 mg/L (Skeletonema costatum)	LC50 (96h) 0.44 mg/L (Scophthalmus maximus)	No information available	LC50 (48h) 0.72 mg/L (Acartia tonsa)
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) EC50 (200h)=14536 mg/L (Oryzias latipes)	No information available	NOEC(21 d)=208 mg/L (Daphnia magna) EC50 (48h)=22200 mg/L (Daphnia obtuse)
Isopropanol	67-63-0	EC50 (72h) > 1000 mg/L (Desmodesmus subspicatus) EC50 (7d) 1800 mg/L (meanextinction value)(Scenedesmus quadricauda)	LC50 (96h) 9640 mg/L (Pimephales promelas) LC50 (7d) 7060 mg/L (Poecilia reticulata)	TT (16h) 1050 mg/L (Pseudomonas putida)	EC50 (48 h)=2285 mg/L (Daphnia sp.) EC50 (24h) > 10,000 mg/L (Daphnia magna)
Ammonium bisulfite	10192-30-0	ErC50 (72h) 43.8 mg/L (Desmodesmus subspicatus) (similar substance)	LC50 5000 mg/L (Lepomis macrochirus) LC50 (96h) 681.2 mg/L (Danio rerio) (similar substance) LC50 (96h) 316 mg/L (Leuciscus idus) (similar substance) NOEC (34d) => 316 mg/L (Danio rerio) (similar substance)	EC50 (17h) 410 mg/L (Pseudomonas putida) (similar substance) EC50 (17h) 65 mg/L (Pseudomonas putida) (similar substance)	EC50 (48h) >1000 mg/L (Daphnia magna) EC50 (48 hr) 89 mg/L (Daphnia magna) (similar substance) NOEC (21d) > 10 mg/L (Daphnia magna) (reproduction) (similar substance)

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability	

MC C-6031

n-Benzyl dimethyl cocoamine, C12-C18 quaternary	61789-71-7	Biodegradable.
salt		
Methanol	67-56-1	Readily biodegradable (95% @ 20d)
Isopropanol	67-63-0	Readily biodegradable (53% @ 5d)
Ammonium bisulfite		The methods for determining biodegradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

Substances	CAS Number	Bioaccumulation
n-Benzyl dimethyl cocoamine, C12-C18 quaternary	61789-71-7	No information available
salt		
Methanol	67-56-1	Not Bioaccumulative; BCF=1
Isopropanol	67-63-0	LogPow < 4.5
Ammonium bisulfite	10192-30-0	No information available

12.4. Mobility in soil

Substances	CAS Number	Mobility
n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt	61789-71-7	No information available
Methanol	67-56-1	No information available
Isopropanol	67-63-0	No information available
Ammonium bisulfite	10192-30-0	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_	UN2924
UN Number	Flammable Liquid, Corrosive, N.O.S. (Contains Methanol, Quaternary Ammonium
UN proper shipping name:	Compounds)
Transport Hazard Class(es):	3 (8)
Packing Group:	III
Environmental Hazards:	Marine Pollutant
NAERG:	NAERG 132
<u>Canadian TDG</u>	UN2924
UN Number	Flammable Liquid, Corrosive, N.O.S. (Contains Methanol, Quaternary Ammonium
UN proper shipping name:	Compounds)
Transport Hazard Class(es):	3 (8)
Packing Group:	III
Environmental Hazards:	Marine Pollutant
IMDG/IMO	UN2924
UN Number	Flammable Liquid, Corrosive, N.O.S. (Contains Methanol, Quaternary Ammonium
UN proper shipping name:	Compounds)
Transport Hazard Class(es):	3 (8)

Packing Group: Environmental Hazards: EMS:	III Marine Pollutant EmS F-E, S-C
UN Number	UN2924
UN proper shipping name:	Flammable Liquid, Corrosive, N.O.S. (Contains Methanol, Quaternary Ammonium Compounds)
Transport Hazard Class(es):	3 (8)
Packing Group:	
Environmental Hazards:	Marine Pollutant

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
n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt	61789-71-7	Not applicable
Methanol	67-56-1	Not applicable
Isopropanol	67-63-0	Not applicable
Ammonium bisulfite	10192-30-0	Not applicable

EPA SARA Title III Extremely Hazardous Substances

Substances	CAS Number	EPA SARA Title III Extremely Hazardous	
		Substances	
n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt	61789-71-7	Not applicable	
Methanol	67-56-1	Not applicable	
Isopropanol	67-63-0	Not applicable	
Ammonium bisulfite	10192-30-0	Not applicable	

EPA SARA (311,312) Hazard Class

Flammable (gases, aerosols, liquids, or solids) Acute toxicity (any route of exposure) Skin Corrosion or Irritation Serious eye damage or eye irritation Specific target organ toxicity (single or repeated exposure) Reproductive toxicity

EPA SARA (313) Chemicals

Substances	CAS Number	Toxic Release Inventory (TRI) -	Toxic Release Inventory (TRI) -
		Group I	Group II
n-Benzyl dimethyl cocoamine, C12-C18	61789-71-7	Not applicable	Not applicable
quaternary salt			
Methanol	67-56-1	1.0%	Not applicable
Isopropanol	67-63-0	1.0%	Not applicable
Ammonium bisulfite	10192-30-0	1.0%	Not applicable

EPA CERCLA/Superfund Reportable Spill Quantity

Substances	CAS Number	CERCLA RQ
n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt	61789-71-7	Not applicable
Methanol	67-56-1	5000 lb
		2270 kg
Isopropanol	67-63-0	Not applicable
Ammonium bisulfite	10192-30-0	5000 lb
		2270 kg

EPA RCRA Hazardous Waste Classification

Ignitability D001 Corrosivity D002

California Proposition 65

Substances	CAS Number	California Proposition 65
n-Benzyl dimethyl cocoamine, C12-C18 quaternary salt	61789-71-7	Not applicable
Methanol	67-56-1	developmental toxicity
Isopropanol	67-63-0	Not applicable
Ammonium bisulfite	10192-30-0	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
n-Benzyl dimethyl cocoamine,	61789-71-7	Not applicable	Not applicable	Not applicable
C12-C18 quaternary salt				
Methanol	67-56-1	Present	Present	Environmental hazard
Isopropanol	67-63-0	Present	Present	Environmental hazard
Ammonium bisulfite	10192-30-0	Present	Present	Environmental hazard

NFPA Ratings:	Health 3, Flammability 2, Reactivity 0
HMIS Ratings:	Health 3*, Flammability 2, 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:	22-Apr-2019	
Reason for Revision	Update to Format	
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/ ECHA C&L OSHA

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End of Safety Data Sheet