

# SAFETY DATA SHEET

**Product Trade Name:** MC MX 6-4570B

**Revision Date:** 11-Jun-2021

**Revision Number:** 1

## 1. Identification

### 1.1. Product Identifier

**Product Trade Name:** MC MX 6-4570B  
**Synonyms:** None  
**Chemical Family:** Blend  
**Internal ID Code:** MC006429

### 1.2 Recommended use and restrictions on use

**Application:** Corrosion Inhibitor  
**Uses advised against:** Consumer use

### 1.3 Manufacturer's Name and Contact Details

#### Manufacturer/Supplier

Multi-Chem Group LLC  
 A Halliburton Energy Services, Inc. Company  
 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  
 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

Acute Oral Toxicity	Category 4 - H302
Skin Corrosion / Irritation	Category 2 - H315
Serious Eye Damage/Irritation	Category 2 - H319
Specific Target Organ Toxicity - (Single Exposure)	Category 1 - H370
Acute Aquatic Toxicity	Category 2 - H401
Chronic Aquatic Toxicity	Category 3 - H412
Flammable liquids.	Category 4 - H227

## 2.2. Label Elements

### Hazard Pictograms

**Signal Word:**

Danger

**Hazard Statements**

H227 - Combustible liquid  
 H302 - Harmful if swallowed  
 H315 - Causes skin irritation  
 H319 - Causes serious eye irritation  
 H370 - Causes damage to organs  
 H401 - Toxic to aquatic life  
 H412 - Harmful to aquatic life with long lasting effects

**Precautionary Statements****Prevention**

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 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

**Response**

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  
 P330 - Rinse mouth  
 P302 + P352 - IF ON SKIN: Wash with plenty of water.  
 P332 + P313 - If skin irritation occurs: Get medical advice/attention  
 P362 + P364 - Take off contaminated clothing and wash before reuse  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P337 + P313 - If eye irritation persists: Get medical advice/attention  
 P307 + P311 - IF exposed: Call a POISON CENTER or doctor/physician  
 P370 + P378 - In case of fire: Use CO<sub>2</sub>, dry chemical, or foam

**Storage**

P403 + P235 - Store in a well-ventilated place. Keep cool

**Disposal**

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
Ethylene glycol	107-21-1	10 - 30%	Acute Tox. 4 (H302) STOT SE 1 (H370)
Methanol	67-56-1	5 - 10%	Acute Tox. 3 (H301) Acute Tox. 3 (H311)

			Acute Tox. 3 (H331) STOT SE 1 (H370) Flam. Liq. 2 (H225)
Modified Tall Oil	Proprietary	1 - 5%	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) Aquatic Acute 1 (H400)
Ethoxylated nonylphenol	Proprietary	1 - 5%	Skin Irrit. 2 (H315) Eye Corr. 1 (H318) STOT SE 2 (H371) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Phosphonic Acid Salt	Proprietary	1 - 5%	Skin Irrit. 2 (H315) Eye Irrit. 2A (H319)
Quaternary ammonium compounds	Proprietary	1 - 5%	Acute Tox. 4 (H302) Skin Corr. 1B (H314) Eye Corr. 1 (H318) STOT SE 3 (H335) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Phosphonic Acid Salt	Proprietary	1 - 5%	Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) STOT SE 3 (H335)

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

Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

#### Skin

In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention.

#### 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

Causes eye irritation. Causes skin irritation. Harmful if swallowed. 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**

Avoid contact with skin, eyes and clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation. Use appropriate protective equipment. Remove sources of ignition. All equipment used when handling the product must be grounded.

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**

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

## **7. Handling and storage**

### **7.1. Precautions for safe handling**

#### **Handling Precautions**

Avoid contact with eyes, skin, or clothing. 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.

#### **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. Store away from oxidizers. Keep from heat, sparks, and open flames. Keep container closed when not in use.

## **8. Exposure Controls/Personal Protection**

### **8.1 Occupational Exposure Limits**

<b>Substances</b>	<b>CAS Number</b>	<b>OSHA PEL-TWA</b>	<b>ACGIH TLV-TWA</b>
Ethylene glycol	107-21-1	Not applicable	TWA: 25 ppm STEL: 50 ppm STEL: 10 mg/m <sup>3</sup>
Methanol	67-56-1	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	TWA: 200 ppm STEL: 250 ppm
Modified Tall Oil	Proprietary	Not applicable	Not applicable
Ethoxylated nonylphenol	Proprietary	Not applicable	Not applicable
Phosphonic Acid Salt	Proprietary	Not applicable	Not applicable
Quaternary ammonium	Proprietary	Not applicable	Not applicable

compounds			
Phosphonic Acid Salt	Proprietary	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.

**Hand Protection** Impervious gloves Manufacturer's directions for use should be observed because of great diversity of types.

**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** Chemical goggles; also wear a face shield if splashing hazard exists.

**Other Precautions** None known.

## 9. Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

**Physical State:** Liquid **Color** Amber  
**Odor:** Alcohol **Odor** No information available  
**Threshold:**

<u>Property</u>	<u>Values</u>
<u>Remarks/ - Method</u>	
<b>pH:</b>	5.22 - 6.22 (10% in 3:1/IPA:H <sub>2</sub> O)
<b>Freezing Point / Range</b>	No data available
<b>Melting Point / Range</b>	No data available
<b>Pour Point / Range</b>	-20.6 °C / -5 °F
<b>Boiling Point / Range</b>	No data available
<b>Flash Point</b>	62.7 °C / 144.9 °F (PMCC)
<b>Flammability (solid, gas)</b>	No data available
<b>Upper flammability limit</b>	No data available
<b>Lower flammability limit</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Vapor Pressure</b>	No data available
<b>Vapor Density</b>	No data available
<b>Specific Gravity</b>	1.014 - 1.039 (15.6 °C/60 °F)
<b>Water Solubility</b>	Soluble in water
<b>Solubility in other solvents</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive Properties</b>	No information available
<b>Oxidizing Properties</b>	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

Keep away from heat, sparks and flame.

### 10.5. Incompatible materials

Strong oxidizers.

### 10.6. Hazardous decomposition products

Carbon oxides. Oxides of nitrogen. Oxides of phosphorus.

## 11. Toxicological Information

### 11.1 Information on likely routes of exposure

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

### 11.2 Symptoms related to the physical, chemical and toxicological characteristics

#### Acute Toxicity

##### Inhalation

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

##### Eye Contact

Causes serious eye irritation.

##### Skin Contact

Causes skin irritation.

##### Ingestion

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

**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
Ethylene glycol	107-21-1	1400 mg/kg bw (Human)	9530 mg/kg (Rabbit)	> 2.5 mg/L (Rat, mist, 6h) (saturated concentration)
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)
Modified Tall Oil	Proprietary	No data available	No data available	No data available
Ethoxylated nonylphenol	Proprietary	2000 - 5000 mg/kg (Rat) (Similar substance)	> 2000 mg/kg (Rabbit) (similar substance)	No data available
Phosphonic Acid Salt	Proprietary	No data available	No data available	No data available
Quaternary ammonium compounds	Proprietary	329 mg/kg-bw (rat) (similar substance)	2930 mg/kg-bw (rabbit) (similar substance)	>45 mg/L (rat, 4 h, aerosol) (similar substance)
Phosphonic Acid Salt	Proprietary	No data available	No data available	No data available

Substances	CAS Number	Skin corrosion/irritation
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Ethylene glycol	107-21-1	Non-irritating to the skin (Rabbit)
Methanol	67-56-1	Non-irritating to the skin (Rabbit)
Modified Tall Oil		May cause moderate skin irritation.
Ethoxylated nonylphenol		Causes moderate skin irritation. (Rabbit)
Phosphonic Acid Salt		May cause moderate skin irritation.
Quaternary ammonium compounds		Skin, rabbit: Causes severe skin irritation with tissue destruction. (similar substances)
Phosphonic Acid Salt		May cause irritation.

Substances	CAS Number	Serious eye damage/irritation
Ethylene glycol	107-21-1	Non-irritating to the eye (Rabbit)
Methanol	67-56-1	Non-irritating to the eye (Rabbit)
Modified Tall Oil		May cause moderate eye irritation.
Ethoxylated nonylphenol		Causes severe eye irritation which may damage tissue. (Rabbit)
Phosphonic Acid Salt		May cause moderate eye irritation.
Quaternary ammonium compounds		Causes severe irritation and or burns (similar substances)
Phosphonic Acid Salt		May cause eye irritation

Substances	CAS Number	Skin Sensitization
Ethylene glycol	107-21-1	Did not cause sensitization on laboratory animals (guinea pig) Patch test on human volunteers did not demonstrate sensitization properties
Methanol	67-56-1	Did not cause sensitization on laboratory animals (guinea pig)
Modified Tall Oil		No information available
Ethoxylated nonylphenol		Patch test on human volunteers did not demonstrate sensitization properties
Phosphonic Acid Salt		No information available
Quaternary ammonium compounds		Did not cause sensitization on laboratory animals (guinea pig) (similar substances)
Phosphonic Acid Salt		No data of sufficient quality are available.

Substances	CAS Number	Respiratory Sensitization
Ethylene glycol	107-21-1	No information available
Methanol	67-56-1	No information available
Modified Tall Oil		No information available
Ethoxylated nonylphenol		No information available
Phosphonic Acid Salt		No information available
Quaternary ammonium compounds		No information available
Phosphonic Acid Salt		No data of sufficient quality are available.

Substances	CAS Number	Mutagenic Effects
Ethylene glycol	107-21-1	In vitro tests did not show mutagenic effects. In vivo tests did not show 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.
Modified Tall Oil		No information available
Ethoxylated nonylphenol		In vitro tests did not show mutagenic effects (similar substances)
Phosphonic Acid Salt		No information available
Quaternary ammonium compounds		In vitro tests did not show mutagenic effects (similar substances) In vivo tests did not show mutagenic effects.
Phosphonic Acid Salt		No information available

Substances	CAS Number	Carcinogenic Effects
Ethylene glycol	107-21-1	Did not show carcinogenic effects in animal experiments
Methanol	67-56-1	No data of sufficient quality are available.
Modified Tall Oil		No information available
Ethoxylated nonylphenol		Did not show carcinogenic or teratogenic effects in animal experiments (similar substances)
Phosphonic Acid Salt		No information available
Quaternary ammonium compounds		Did not show carcinogenic effects in animal experiments (similar substances)
Phosphonic Acid Salt		No information available

Substances	CAS Number	Reproductive toxicity
Ethylene glycol	107-21-1	Data are inconclusive or insufficient for classification. Fetotoxic and teratogenic effects observed in

		experimental animals at concentrations that did not produce maternal toxicity.
Methanol	67-56-1	Based on available data, the classification criteria are not met. Experiments have shown reproductive toxicity effects on laboratory animals
Modified Tall Oil		No information available
Ethoxylated nonylphenol		Not a confirmed teratogen or embryotoxin. (similar substances)
Phosphonic Acid Salt		No information available
Quaternary ammonium compounds		Did not show teratogenic effects in animal experiments. Animal testing did not show any effects on fertility. (similar substances)
Phosphonic Acid Salt		No data of sufficient quality are available.

Substances	CAS Number	STOT - single exposure
Ethylene glycol	107-21-1	May cause disorder and damage to the Kidney; Central Nervous System (CNS)
Methanol	67-56-1	May cause disorder and damage to the Central Nervous System (CNS)
Modified Tall Oil		May cause respiratory irritation.
Ethoxylated nonylphenol		May cause disorder and damage to the Central Nervous System (CNS)
Phosphonic Acid Salt		No information available
Quaternary ammonium compounds		May cause respiratory irritation. (similar substances)
Phosphonic Acid Salt		May cause respiratory irritation.

Substances	CAS Number	STOT - repeated exposure
Ethylene glycol	107-21-1	Causes damage to organs through prolonged or repeated exposure: Kidney
Methanol	67-56-1	No data of sufficient quality are available.
Modified Tall Oil		No information available
Ethoxylated nonylphenol		No significant toxicity observed in animal studies at concentration requiring classification.
Phosphonic Acid Salt		No information available
Quaternary ammonium compounds		No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Phosphonic Acid Salt		No information available

Substances	CAS Number	Aspiration hazard
Ethylene glycol	107-21-1	No information available
Methanol	67-56-1	Not applicable
Modified Tall Oil		Not applicable
Ethoxylated nonylphenol		Not applicable
Phosphonic Acid Salt		No information available
Quaternary ammonium compounds		Not applicable
Phosphonic Acid Salt		Not applicable

## 12. Ecological Information

### 12.1. Toxicity

#### Ecotoxicity effects

Toxic to aquatic life. Harmful 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
Ethylene glycol	107-21-1	EC50 (72h) 6500 - 13000 mg/L (Selenastrum capricornutum)	LC50 (96h) 72860 mg/L (Pimephales promelas) NOEC (7d) 15380 mg/L (Pimephales promelas)	No information available	EC50(48 hr)>100 mg/L (Daphnia magna ) NOEC (7d) 8590 mg/L (Ceriodaphnia dubia)
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)
Modified Tall Oil	Proprietary	No information available	No information available	No information available	No information available
Ethoxylated nonylphenol	Proprietary	EC50 (72h) > 3 mg/L (Pseudokirchnerella subcapitata) (similar	LC50 (96h) 0.323 mg/L (Pimephales promelas) (similar substance)	EC50 (3h) 104 mg/L (Activated sludge) (similar substance)	LC50 (48h) 0.148 mg/L (Daphnia magna) (similar substance)



		substance)			NOEC (21d) 0.1 mg/L (Daphnia magna) (similar substance)
Phosphonic Acid Salt	Proprietary	No information available	No information available	No information available	No information available
Quaternary ammonium compounds	Proprietary	ErC50 (96 h) 0.053 mg/L (Pseudokirchnerella subcapitata)	LC50 (96 h) 0.97 mg/L (Danio rerio) NOEC (33 d) 0.23 mg/L (Pimephales promelas)	EC50 (3 h) 17.95 mg/L (Activated sludge)	EC50 (48 h) 0.057 mg/L (Daphnia magna) NOEC (21 d) 0.021 mg/L (Daphnia magna)
Phosphonic Acid Salt	Proprietary	No information available	No information available	No information available	No information available

## 12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Ethylene glycol	107-21-1	Readily biodegradable (100% @ <4d)
Methanol	67-56-1	Readily biodegradable (95% @ 20d)
Modified Tall Oil	Proprietary	Readily biodegradable
Ethoxylated nonylphenol	Proprietary	Readily biodegradable (81% @ 28d) (similar substances)
Phosphonic Acid Salt	Proprietary	No information available
Quaternary ammonium compounds	Proprietary	No information available
Phosphonic Acid Salt	Proprietary	No information available

## 12.3. Bioaccumulative potential

Substances	CAS Number	Bioaccumulation
Ethylene glycol	107-21-1	LogKow-1.36
Methanol	67-56-1	Not Bioaccumulative; BCF=1
Modified Tall Oil	Proprietary	No information available
Ethoxylated nonylphenol	Proprietary	3.59-4.24
Phosphonic Acid Salt	Proprietary	No information available
Quaternary ammonium compounds	Proprietary	No information available
Phosphonic Acid Salt	Proprietary	No information available

## 12.4. Mobility in soil

Substances	CAS Number	Mobility
Ethylene glycol	107-21-1	No information available
Methanol	67-56-1	No information available
Modified Tall Oil	Proprietary	No information available
Ethoxylated nonylphenol	Proprietary	No information available
Phosphonic Acid Salt	Proprietary	No information available
Quaternary ammonium compounds	Proprietary	No information available
Phosphonic Acid Salt	Proprietary	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** 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**

NA1993, Combustible Liquid, N.O.S. (Contains Methanol), Combustible Liquid, III

**Canadian TDG**

**UN Number:** Not restricted  
**UN proper shipping name:** Not restricted  
**Transport Hazard Class(es):** Not applicable  
**Packing Group:** Not applicable  
**Environmental Hazards:** 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	CAS Number	TSCA Significant New Use Rules - S5A2	TSCA Section 5(E) Consent Orders
Ethylene glycol	107-21-1	Not applicable	Not applicable
Methanol	67-56-1	Not applicable	Not applicable
Modified Tall Oil	Proprietary	Not applicable	Not applicable
Ethoxylated nonylphenol	Proprietary	Not applicable	Not applicable
Phosphonic Acid Salt	Proprietary	Not applicable	Not applicable
Quaternary ammonium compounds	Proprietary	Not applicable	Not applicable
Phosphonic Acid Salt	Proprietary	Not applicable	Not applicable

**EPA SARA Title III Extremely Hazardous Substances**

Substances	CAS Number	EPA SARA Title III Extremely Hazardous Substances
Ethylene glycol	107-21-1	Not applicable
Methanol	67-56-1	Not applicable
Modified Tall Oil	Proprietary	Not applicable
Ethoxylated nonylphenol	Proprietary	Not applicable
Phosphonic Acid Salt	Proprietary	Not applicable
Quaternary ammonium compounds	Proprietary	Not applicable
Phosphonic Acid Salt	Proprietary	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)

**EPA SARA (313) Chemicals:**

Substances	CAS Number	Toxic Release Inventory (TRI) - Group I	Toxic Release Inventory (TRI) - Group II
Ethylene glycol	107-21-1	1.0%	Not applicable
Methanol	67-56-1	1.0%	Not applicable
Modified Tall Oil	Proprietary	Not applicable	Not applicable
Ethoxylated nonylphenol	Proprietary	1.0%	Not applicable
Phosphonic Acid Salt	Proprietary	Not applicable	Not applicable
Quaternary ammonium compounds	Proprietary	Not applicable	Not applicable
Phosphonic Acid Salt	Proprietary	Not applicable	Not applicable

**EPA CERCLA/Superfund Reportable Spill Quantity**

Substances	CAS Number	CERCLA RQ
Ethylene glycol	107-21-1	5000 lb 2270 kg
Methanol	67-56-1	5000 lb 2270 kg
Modified Tall Oil	Proprietary	Not applicable
Ethoxylated nonylphenol	Proprietary	Not applicable
Phosphonic Acid Salt	Proprietary	Not applicable
Quaternary ammonium compounds	Proprietary	Not applicable
Phosphonic Acid Salt	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
Ethylene glycol	107-21-1	developmental toxicity
Methanol	67-56-1	developmental toxicity
Modified Tall Oil	Proprietary	Not applicable
Ethoxylated nonylphenol	Proprietary	Not applicable
Phosphonic Acid Salt	Proprietary	Not applicable
Quaternary ammonium compounds	Proprietary	Not applicable
Phosphonic Acid Salt	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
Ethylene glycol	107-21-1	Present	Present	Environmental hazard
Methanol	67-56-1	Present	Present	Environmental hazard
Modified Tall Oil	Proprietary	Not applicable	Not applicable	Not applicable
Ethoxylated nonylphenol	Proprietary	Not applicable	Not applicable	Not applicable
Phosphonic Acid Salt	Proprietary	Not applicable	Not applicable	Not applicable
Quaternary ammonium compounds	Proprietary	Not applicable	Not applicable	Not applicable
Phosphonic Acid Salt	Proprietary	Not applicable	Not applicable	Not applicable

**NFPA Ratings:** Health 1, Flammability 2, Reactivity 0

**Canadian Regulations**

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

**16. Other information**

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**Preparation Information**

**Prepared By** Chemical Stewardship  
e-mail: fdunexchem@halliburton.com

**Revision Date:** 11-Jun-2021

**Reason for Revision** Initial Release

**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/)

**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**