

# SAFETY DATA SHEET

**Product Trade Name:** MC MX 3-4084

**Revision Date:** 19-Jun-2020

**Revision Number:** 3

## 1. Identification

### 1.1. Product Identifier

**Product Trade Name:** MC MX 3-4084  
**Synonyms:** None  
**Chemical Family:** Blend  
**Internal ID Code:** MC003768

### 1.2 Recommended use and restrictions on use

**Application:** Paraffin/Asphaltene Solvent  
**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  
 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 (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

Aspiration Toxicity	Category 1 - H304
Skin Corrosion / Irritation	Category 2 - H315
Serious Eye Damage/Irritation	Category 2 - H319
Reproductive Toxicity	Category 1B - H360
Specific Target Organ Toxicity - (Single Exposure)	Category 1 - H370; Category 3 - H335+H336

Specific Target Organ Toxicity - (Repeated Exposure)	Category 1 - H372
Acute Aquatic Toxicity	Category 2 - H401
Chronic Aquatic Toxicity	Category 2 - H411
Flammable liquids.	Category 2 - H225

## 2.2. Label Elements

### Hazard Pictograms



### Signal Word:

Danger

### Hazard Statements

H225 - Highly flammable liquid and vapor  
 H304 - May be fatal if swallowed and enters airways  
 H315 - Causes skin irritation  
 H319 - Causes serious eye irritation  
 H335 - May cause respiratory irritation  
 H336 - May cause drowsiness or dizziness  
 H360 - May damage fertility or the unborn child  
 H370 - Causes damage to organs  
 H372 - Causes damage to organs through prolonged or repeated exposure  
 H401 - 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  
 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  
 P331 - Do NOT induce vomiting  
 P302 + P352 - IF ON SKIN: Wash with plenty of water.  
 P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all

contaminated clothing. Rinse skin with water [or shower].  
 P332 + P313 - If skin irritation occurs: Get medical advice/attention  
 P362 + P364 - Take off contaminated clothing and wash before reuse  
 P304 + P340 - IF INHALED: Remove person to fresh air and keep 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  
 P337 + P313 - If eye irritation persists: Get medical advice/attention  
 P308 + P313 - IF exposed or concerned: Get medical advice/attention  
 P370 + P378 - In case of fire: Use CO2, dry chemical, or foam  
 P391 - Collect spillage

**Storage**  
 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

**Disposal**  
 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
Toluene	108-88-3	30 - 60%	Skin Irrit. 2 (H315) Eye Irrit. 2B (H320) Repr. 1B (H360) STOT SE 3 (H336) STOT RE 2 (H373) Asp. Tox. 1 (H304) Aquatic Acute 2 (H401) Aquatic Chronic 3 (H412) Flam. Liq. 2 (H225)
Hexane	110-54-3	30 - 60%	Skin Irrit. 2 (H315) Repr. 2 (H361) STOT SE 3 (H336) STOT RE 1 (H372) Asp. Tox. 1 (H304) Aquatic Acute 2 (H401) Aquatic Chronic 2 (H411) Flam. Liq. 2 (H225)
Alkylbenzenesulfonic acid	Proprietary	1 - 5%	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Skin Corr. 1C (H314) Eye Corr. 1 (H318) STOT SE 3 (H335) Aquatic Acute 2 (H401) Aquatic Chronic 3 (H412)
Methanol	67-56-1	1 - 5%	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) STOT SE 1 (H370) Flam. Liq. 2 (H225)

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>	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
<b>Eyes</b>	Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.
<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>	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

Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal. Causes skin irritation. Causes eye irritation. Potential reproductive hazard. May cause birth defects. May cause damage to internal organs. May cause respiratory irritation. May cause headache, dizziness, and other central nervous system effects. May cause damage to organs through prolonged or repeated exposure.

### 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 complications. Aspiration may cause severe lung damage. Evacuate stomach in a way which avoids aspiration.
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## 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
Toluene	108-88-3	TWA: 200 ppm	TWA: 20 ppm
Hexane	110-54-3	TWA: 500 ppm TWA: 1800 mg/m <sup>3</sup>	TWA: 50 ppm
Alkylbenzenesulfonic acid	Proprietary	Not applicable	Not applicable
Methanol	67-56-1	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	TWA: 200 ppm STEL: 250 ppm

**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**

Use gloves which are suitable for the chemicals present in this product as well as other environmental factors in the workplace. Manufacturer's directions for use should be observed because of great diversity of types. Impervious gloves

**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**

None known.

## 9. Physical and Chemical Properties

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

<b>Physical State:</b> Liquid	<b>Color</b>	Clear to Slightly Hazy , Colorless to Light Amber
<b>Odor:</b> Aromatic hydrocarbon	<b>Odor Threshold:</b>	No information available
<u>Property</u> <u>Remarks/ - Method</u>	<u>Values</u>	
<b>pH:</b>	1.69-3.69 (10% in 1:1 IPA:H2O)	
<b>Freezing Point / Range</b>	-40 °C / -40 °F	
<b>Melting Point / Range</b>	No data available	
<b>Pour Point / Range</b>	No data available	
<b>Boiling Point / Range</b>	No data available	
<b>Flash Point</b>	12.8 °C / 55 °F (SFCC)	
<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>		
<b>Vapor Pressure</b>	No data available	
<b>Vapor Density</b>	No data available	
<b>Specific Gravity</b>	0.7578-0.7828 (20 °C/68 °F)	
<b>Water Solubility</b>	No data available	
<b>Solubility in other solvents</b>	Oil soluble	
<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	
<b>9.2. Other information</b>		
<b>VOC Content (%)</b>	No data available	
<b>Liquid Density</b>	6.31-6.53 lbs/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 sulfur.

## 11. Toxicological Information

### 11.1 Information on likely routes of exposure

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

### 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. May cause respiratory irritation.

##### Eye Contact

Causes serious eye irritation.

##### Skin Contact

Causes skin irritation.

##### Ingestion

Ingestion of this product may cause blindness due to the presence of methanol. May be fatal if swallowed and enters airways.

**Chronic Effects/Carcinogenicity** May cause birth defects. Contains known or suspected reproductive toxins. Causes damage to organs through prolonged or repeated exposure.

### 11.3 Toxicity data

#### Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Toluene	108-88-3	5580 mg/kg (rat)	5000 mg/kg-bw (rabbit)	No data available
Hexane	110-54-3	25,000 mg/kg (Rat) 16,000 mg/kg (Rat)	3000 mg/kg (Rabbit) >2000 mg/kg (Rabbit)	48000 ppm (Rat) 4h >17,600 mg/m <sup>3</sup> (Rat) 24h
Alkylbenzenesulfonic acid	Proprietary	530 mg/kg (Rat) 775 mg/kg (Rat) 1350 mg/kg (Rat) 1470 mg/kg (Rat) (similar substance)	530 mg/kg (Rat) 2000 mg/kg (Rabbit)	No data available
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)

Substances	CAS Number	Skin corrosion/irritation
Toluene	108-88-3	Skin, rabbit: Causes moderate skin irritation.
Hexane	110-54-3	Prolonged skin contact may defat the skin and produce dermatitis
Alkylbenzenesulfonic acid		Skin, rabbit: Causes burns
Methanol	67-56-1	Non-irritating to the skin (Rabbit)

Substances	CAS Number	Serious eye damage/irritation
Toluene	108-88-3	Causes moderate eye irritation
Hexane	110-54-3	Non-irritating to rabbit's eye
Alkylbenzenesulfonic acid		Eye, rabbit: Causes eye burns
Methanol	67-56-1	Non-irritating to the eye (Rabbit)

Substances	CAS Number	Skin Sensitization
Toluene	108-88-3	Did not cause sensitization on laboratory animals (guinea pig)
Hexane	110-54-3	Did not cause sensitization on laboratory animals (mouse)
Alkylbenzenesulfonic acid		Did not cause sensitization on laboratory animals (guinea pig)
Methanol	67-56-1	Did not cause sensitization on laboratory animals (guinea pig)

Substances	CAS Number	Respiratory Sensitization
Toluene	108-88-3	No information available
Hexane	110-54-3	No information available
Alkylbenzenesulfonic acid		No information available
Methanol	67-56-1	No information available

Substances	CAS Number	Mutagenic Effects
Toluene	108-88-3	The weight of evidence from available in vitro and in vivo studies indicates that this substance is not expected to be mutagenic.
Hexane	110-54-3	In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects.

Alkylbenzenesulfonic acid		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.

Substances	CAS Number	Carcinogenic Effects
Toluene	108-88-3	No data of sufficient quality are available.
Hexane	110-54-3	Not regarded as carcinogenic.
Alkylbenzenesulfonic acid		No information available
Methanol	67-56-1	No data of sufficient quality are available.

Substances	CAS Number	Reproductive toxicity
Toluene	108-88-3	Fetotoxic and teratogenic effects observed in experimental animals at concentrations that did not produce maternal toxicity.
Hexane	110-54-3	Experiments have shown reproductive toxicity effects on laboratory animals
Alkylbenzenesulfonic acid		No data of sufficient quality are available.
Methanol	67-56-1	Based on available data, the classification criteria are not met. Experiments have shown reproductive toxicity effects on laboratory animals

Substances	CAS Number	STOT - single exposure
Toluene	108-88-3	May cause headache, dizziness, and other central nervous system effects. No information available
Hexane	110-54-3	May cause headache, dizziness, and other central nervous system effects.
Alkylbenzenesulfonic acid		May cause respiratory irritation.
Methanol	67-56-1	May cause disorder and damage to the Central Nervous System (CNS)

Substances	CAS Number	STOT - repeated exposure
Toluene	108-88-3	Causes damage to organs through prolonged or repeated exposure if inhaled: Central Nervous System (CNS)
Hexane	110-54-3	Causes damage to organs through prolonged or repeated exposure: Central Nervous System (CNS)
Alkylbenzenesulfonic acid		No data of sufficient quality are available.
Methanol	67-56-1	No data of sufficient quality are available.

Substances	CAS Number	Aspiration hazard
Toluene	108-88-3	Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.
Hexane	110-54-3	Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.
Alkylbenzenesulfonic acid		Not applicable
Methanol	67-56-1	Not applicable

## 12. Ecological Information

### 12.1. Toxicity Ecotoxicity effects

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
Toluene	108-88-3	EC50 (3h) 134 mg/L (Chlamydomonas angulosa) EC50 (72h) 12.5 mg/L (Selenastrum capricornutum)	LC50 (96h) 5.8 mg/L (Oncorhynchus mykiss) LC50 (96h) 5.5 mg/L (Oncorhynchus kisutch) NOEC (40d) 1.4 mg/L (Oncorhynchus kisutch)	IC50 (24h) 84 mg/L (Nitrosomonas sp.)	LC50 (48h) 3.78 mg/L (Ceriodaphnia dubia) EC50 (48h) 11.5 mg/L (Daphnia magna) NOEC (7d) 0.74 mg/L (Ceriodaphnia dubia) NOEC (21d) 1 mg/L (Daphnia magna)
Hexane	110-54-3	EC50 (10d) 2.66% v/v (Chlorella pyrenoidosa)	LC50 (96h) 2.5 mg/L (Pimephales promelas) LC50 (48h) >1 mg/L (Oryzias latipes)	No information available	EC50 (48h) 45 mmol/m <sup>3</sup> (Daphnia magna)
Alkylbenzenesulfonic acid	Proprietary	EC50 (96h) 170 mg/L (Selenastrum capricornutum)	LC50 (96h) 3 mg/L (Oncorhynchus mykiss) NOEC (90d) 0.25 mg/L (Tilapia mossambica)	No information available	EC50 (48h) 2.9 mg/L (Daphnia magna) EC50 (24h) 5.9 mg/L (Daphnia magna)



			(similar substance)		
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)

## 12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Toluene	108-88-3	Readily biodegradable
Hexane	110-54-3	No information available
Alkylbenzenesulfonic acid	Proprietary	(94% @ 28d)
Methanol	67-56-1	Readily biodegradable (95% @ 20d)

## 12.3. Bioaccumulative potential

Substances	CAS Number	Bioaccumulation
Toluene	108-88-3	LogPow2.73
Hexane	110-54-3	4
Alkylbenzenesulfonic acid	Proprietary	Log Pow = 4.15
Methanol	67-56-1	Not Bioaccumulative; BCF=1

## 12.4. Mobility in soil

Substances	CAS Number	Mobility
Toluene	108-88-3	No information available
Hexane	110-54-3	KOC = <2
Alkylbenzenesulfonic acid	Proprietary	No information available
Methanol	67-56-1	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** UN1993  
**UN proper shipping name:** Flammable Liquid, N.O.S. (Contains Toluene, Hexanes)  
**Transport Hazard Class(es):** 3  
**Packing Group:** II  
**Environmental Hazards:** Marine Pollutant  
**NAERG:** NAERG 128

### Canadian TDG

**UN Number** UN1993  
**UN proper shipping name:** Flammable Liquid, N.O.S. (Contains Toluene, Hexanes)  
**Transport Hazard Class(es):** 3  
**Packing Group:** II  
**Environmental Hazards:** Marine Pollutant

**IMDG/IMO**

**UN Number** UN1993  
**UN proper shipping name:** Flammable Liquid, N.O.S. (Contains Toluene, Hexanes)  
**Transport Hazard Class(es):** 3  
**Packing Group:** II  
**Environmental Hazards:** Marine Pollutant  
**EMS:** EmS F-E, S-E

**IATA/ICAO**

**UN Number** UN1993  
**UN proper shipping name:** Flammable Liquid, N.O.S. (Contains Toluene, Hexanes)  
**Transport Hazard Class(es):** 3  
**Packing Group:** II  
**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	TSCA Section 5(E) Consent Orders
Toluene	108-88-3	Not applicable	Not applicable
Hexane	110-54-3	Not applicable	Not applicable
Alkylbenzenesulfonic acid	Proprietary	Not applicable	Not applicable
Methanol	67-56-1	Not applicable	Not applicable

**EPA SARA Title III Extremely Hazardous Substances**

Substances	CAS Number	EPA SARA Title III Extremely Hazardous Substances
Toluene	108-88-3	Not applicable
Hexane	110-54-3	Not applicable
Alkylbenzenesulfonic acid	Proprietary	Not applicable
Methanol	67-56-1	Not applicable

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

Flammable (gases, aerosols, liquids, or solids)  
 Aspiration Hazard  
 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) - Group I	Toxic Release Inventory (TRI) - Group II
Toluene	108-88-3	1.0%	>= 1.0 %
Hexane	110-54-3	1.0%	>= 1.0 %
Alkylbenzenesulfonic acid	Proprietary	Not applicable	Not applicable
Methanol	67-56-1	1.0%	Not applicable

**EPA CERCLA/Superfund Reportable Spill Quantity**

Substances	CAS Number	CERCLA RQ
Toluene	108-88-3	1000 lb

		454 kg 1 lb 0.454 kg
Hexane	110-54-3	5000 lb 2270 kg
Alkylbenzenesulfonic acid	Proprietary	Not applicable
Methanol	67-56-1	5000 lb 2270 kg

**EPA RCRA Hazardous Waste Classification**

Ignitability D001

**California Proposition 65**

Substances	CAS Number	California Proposition 65
Toluene	108-88-3	developmental toxicity
Hexane	110-54-3	Not applicable
Alkylbenzenesulfonic acid	Proprietary	Not applicable
Methanol	67-56-1	developmental toxicity

**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
Toluene	108-88-3	Present	Present	Environmental hazard
Hexane	110-54-3	Present	Present	Present
Alkylbenzenesulfonic acid	Proprietary	Not applicable	Not applicable	Not applicable
Methanol	67-56-1	Present	Present	Environmental hazard

**NFPA Ratings:** Health 2, Flammability 3, Reactivity 0**HMIS Ratings:** Health 2\*, Flammability 3, Physical Hazard 0, PPE: X**Canadian Regulations****Canadian Domestic Substances List (DSL)** All components listed on inventory or are exempt.**16. Other information****Preparation Information**

**Prepared By** Chemical Stewardship  
 Telephone: 1-281-871-6107  
 e-mail: fdunexchem@halliburton.com

**Revision Date:** 19-Jun-2020**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/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**

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**End of Safety Data Sheet**