

# SAFETY DATA SHEET

**Product Trade Name:** MC MX 1-2872

**Revision Date:** 05-Apr-2016

**Revision Number:** 2

## 1. Identification

### 1.1. Product Identifier

**Product Trade Name:** MC MX 1-2872  
**Synonyms:** None  
**Chemical Family:** Blend  
**Internal ID Code:** MC001123

### 1.2 Recommended use and restrictions on use

**Application:** Emulsion Breaker  
**Uses advised against:** Consumer use

### 1.3 Manufacturer's Name and Contact Details

#### Manufacturer/Supplier

Multi-Chem Group LLC  
 424 S Chadbourne St  
 San Angelo, TX 76903  
 Phone: 1 325 223 6200  
 Emergency Phone Number: 1-866-519-4752 (US, Canada, Mexico) or 1-760-476-3962

Halliburton Energy Services  
 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

## 2. Hazard(s) Identification

### 2.1 Classification in accordance with paragraph (d) of §1910.1200

Aspiration Toxicity	Category 1 - H304
Acute Oral Toxicity	Category 4 - H302
Skin Corrosion / Irritation	Category 1 B - H314
Serious Eye Damage/Irritation	Category 1 - H318
Carcinogenicity	Category 2 - H351
Specific Target Organ Toxicity - (Single Exposure)	Category 3 - H335 + H336

Specific Target Organ Toxicity - (Repeated Exposure)	Category 2 - H373
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  
 H304 - May be fatal if swallowed and enters airways  
 H314 - Causes severe skin burns and eye damage  
 H318 - Causes serious eye damage  
 H335 - May cause respiratory irritation  
 H336 - May cause drowsiness or dizziness  
 H351 - Suspected of causing cancer  
 H373 - May cause damage to organs through prolonged or repeated exposure  
 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/sparks/open flames/hot surfaces. - No smoking  
 P233 - Keep container tightly closed  
 P240 - Ground/Bond container and receiving equipment  
 P241 - Use explosion-proof electrical/ventilating/lighting/equipment  
 P242 - Use only non-sparking tools  
 P243 - Take precautionary measures against static discharge  
 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  
 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/shower  
 P363 - Wash contaminated clothing before reuse

P304 + P340 - IF INHALED: Remove 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  
 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
Xylene	1330-20-7	30 - 60%	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) Asp. Tox. 1 (H304) Aquatic Acute 2 (H401) Flam. Liq. 3 (H226)
Didecyldimethylammonium chloride	7173-51-5	10 - 30%	Acute Tox. 4 (H302) Skin Corr. 1B (H314) Eye Corr. 1 (H318) STOT SE 3 (H335) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Ethyl benzene	100-41-4	10 - 30%	Acute Tox. 4 (H332) Eye Irrit. 2B (H320) STOT SE 3 (H336) STOT RE 2 (H373) Asp. Tox. 1 (H304) Aquatic Acute 2 (H401) Aquatic Chronic 3 (H412) Flam. Liq. 2 (H225)
Heavy aromatic petroleum naphtha	64742-94-5	10 - 30%	STOT SE 3 (H336) Asp. Tox. 1 (H304) Aquatic Acute 2 (H401) Aquatic Chronic 2 (H411)
Ethanol	64-17-5	1 - 5%	Eye Irrit. 2A (H319) Flam. Liq. 2 (H225)
Naphthalene	91-20-3	1 - 5%	Acute Tox. 4 (H302) Carc. 2 (H351) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Flam. Sol. 2 (H228)

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

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<b>Eyes</b>	irritation develops or if breathing becomes difficult. 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 30 minutes and remove contaminated clothing, shoes and leather goods immediately. Get medical attention immediately.
<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**

Harmful if swallowed. Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal. Causes severe skin irritation with tissue destruction. Causes severe eye irritation which may damage tissue. Potential carcinogen. May cause respiratory irritation. May cause headache, dizziness, and other central nervous system effects. Prolonged or repeated exposure may cause damage to organs.

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

**Notes to Physician** Aspiration may cause severe lung damage. Evacuate stomach in a way which avoids aspiration.

### **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
Xylene	1330-20-7	100 ppm	TWA: 100 ppm STEL: 150 ppm
Didecyldimethylammonium chloride	7173-51-5	Not applicable	Not applicable
Ethyl benzene	100-41-4	100 ppm	TWA: 100 ppm STEL: 125 ppm
Heavy aromatic petroleum naphtha	64742-94-5	Not applicable	Not applicable
Ethanol	64-17-5	1000 ppm	STEL: 1000 ppm
Naphthalene	91-20-3	10 ppm	TWA: 10 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.

**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**

<b>Physical State:</b> Liquid	<b>Color</b>	Clear to Slightly Hazy , Light Amber to Dark Amber
<b>Odor:</b> Aromatic hydrocarbon	<b>Odor</b>	No information available

<u>Property</u> <u>Remarks/ - Method</u>	<u>Threshold:</u> <u>Values</u>
<b>pH:</b>	7.86-8.95 (10% in 1:1 IPA:H2O)
<b>Freezing Point / Range</b>	No data available
<b>Melting Point / Range</b>	No data available
<b>Boiling Point / Range</b>	No data available
<b>Flash Point</b>	27.7 °C / 81.9 °F (SFCC)
<b>Flammability (solid, gas)</b>	No data available
Upper flammability limit	No data available
Lower flammability limit	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>	0.8735-0.8985
<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>	7.28-7.49 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. Hydrogen chloride. Amines.

## **11. Toxicological Information**

### **11.1 Information on likely routes of exposure**

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

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

#### **Acute Toxicity**

##### **Inhalation**

May cause respiratory irritation. May cause central nervous system depression

**Eye Contact**  
**Skin Contact**  
**Ingestion**

including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

Causes serious eye damage.

Causes severe burns.

Harmful if swallowed. May be fatal if swallowed and enters airways. Causes burns of the mouth, throat and stomach.

**Chronic Effects/Carcinogenicity** Contains known or suspected carcinogens. May cause 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
Xylene	1330-20-7	3523 mg/kg (Rat)	> 4200 mg/kg (Rabbit)	27.6 mg/L (Rat) 4h
Didecyldimethylammonium chloride	7173-51-5	329 mg/kg-bw (rat)	2930 mg/kg-bw (rabbit)	No data available
Ethyl benzene	100-41-4	3500 - 5460 mg/kg (Rat)	15354 mg/kg (Rabbit) 15400 mg/kg (Rabbit)	17.2 mg/L (Rat) 4h 17.8 mg/L (Rat) 4h
Heavy aromatic petroleum naphtha	64742-94-5	>5000 mg/kg-bw (rat)	>2000 mg/kg-bw (rabbit)	> 4.778 mg/L (rat, 4 h, vapour, saturated)
Ethanol	64-17-5	7060 mg/kg (Rat) 10,470 mg/kg (Rat)	> 15,800 mg/kg (Rabbit) 17,100 mg/kg (Rabbit)	124.7 mg/L (Rat) 4h
Naphthalene	91-20-3	490 mg/kg ( Rat ) 1110 mg/kg ( Rat )	1120 mg/kg ( Rabbit ) 20 g/kg ( Rabbit )	340 mg/m <sup>3</sup> ( Rat ) 1 h

Substances	CAS Number	Skin corrosion/irritation
Xylene	1330-20-7	Causes skin irritation.
Didecyldimethylammonium chloride	7173-51-5	Skin, rabbit: Causes severe skin irritation with tissue destruction. Causes burns
Ethyl benzene	100-41-4	Causes mild skin irritation
Heavy aromatic petroleum naphtha	64742-94-5	Non-irritating to the skin (Rabbit) (similar substances)
Ethanol	64-17-5	Not irritating to skin in rabbits.
Naphthalene	91-20-3	Non-irritating to the skin (Rabbit)

Substances	CAS Number	Serious eye damage/irritation
Xylene	1330-20-7	Causes moderate eye irritation (Rabbit)
Didecyldimethylammonium chloride	7173-51-5	Corrosive to eyes Causes severe irritation and or burns Eye, rabbit:
Ethyl benzene	100-41-4	Causes mild eye irritation.
Heavy aromatic petroleum naphtha	64742-94-5	Non-irritating to rabbit's eye (similar substances)
Ethanol	64-17-5	Causes moderate eye irritation (Rabbit)
Naphthalene	91-20-3	May cause mechanical irritation to eye. (human) Non-irritating to rabbit's eye

Substances	CAS Number	Skin Sensitization
Xylene	1330-20-7	Did not cause sensitization on laboratory animals (mouse)
Didecyldimethylammonium chloride	7173-51-5	Did not cause sensitization on laboratory animals (guinea pig)
Ethyl benzene	100-41-4	Not regarded as a sensitizer.
Heavy aromatic petroleum naphtha	64742-94-5	Patch test on human volunteers did not demonstrate sensitization properties (guinea pig) Did not cause sensitization on laboratory animals (similar substances)
Ethanol	64-17-5	Did not cause sensitization on laboratory animals
Naphthalene	91-20-3	Did not cause sensitization on laboratory animals (guinea pig)

Substances	CAS Number	Respiratory Sensitization
Xylene	1330-20-7	No information available
Didecyldimethylammonium chloride	7173-51-5	No information available
Ethyl benzene	100-41-4	No information available
Heavy aromatic petroleum naphtha	64742-94-5	No information available
Ethanol	64-17-5	Did not cause sensitization on laboratory animals

Naphthalene	91-20-3	No information available
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Substances	CAS Number	Mutagenic Effects
Xylene	1330-20-7	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects.
Didecyldimethylammonium chloride	7173-51-5	In vivo tests did not show mutagenic effects. In vitro tests did not show mutagenic effects
Ethyl benzene	100-41-4	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects.
Heavy aromatic petroleum naphtha	64742-94-5	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects. (similar substances)
Ethanol	64-17-5	Not regarded as mutagenic.
Naphthalene	91-20-3	In vitro tests did not show mutagenic effects.

Substances	CAS Number	Carcinogenic Effects
Xylene	1330-20-7	Did not show carcinogenic effects in animal experiments
Didecyldimethylammonium chloride	7173-51-5	Did not show carcinogenic effects in animal experiments
Ethyl benzene	100-41-4	Not regarded as carcinogenic.
Heavy aromatic petroleum naphtha	64742-94-5	Did not show carcinogenic effects in animal experiments (similar substances) Not regarded as carcinogenic.
Ethanol	64-17-5	Did not show carcinogenic effects in animal experiments
Naphthalene	91-20-3	Substances which should be regarded as if they are carcinogenic to man

Substances	CAS Number	Reproductive toxicity
Xylene	1330-20-7	Did not show teratogenic effects in animal experiments. Animal testing did not show any effects on fertility.
Didecyldimethylammonium chloride	7173-51-5	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.
Ethyl benzene	100-41-4	Animal testing did not show any effects on fertility. Adverse developmental effects were only observed at maternally toxic doses.
Heavy aromatic petroleum naphtha	64742-94-5	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments. (similar substances)
Ethanol	64-17-5	Animal testing did not show any effects on fertility.
Naphthalene	91-20-3	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.

Substances	CAS Number	STOT - single exposure
Xylene	1330-20-7	May cause respiratory irritation.
Didecyldimethylammonium chloride	7173-51-5	May cause respiratory irritation.
Ethyl benzene	100-41-4	May cause anesthetic or narcotic effects. May cause disorder and damage to the Central Nervous System (CNS)
Heavy aromatic petroleum naphtha	64742-94-5	May cause disorder and damage to the Central Nervous System (CNS)
Ethanol	64-17-5	No significant toxicity observed in animal studies at concentration requiring classification.
Naphthalene	91-20-3	No data of sufficient quality are available.

Substances	CAS Number	STOT - repeated exposure
Xylene	1330-20-7	No significant toxicity observed in animal studies at concentration requiring classification.
Didecyldimethylammonium chloride	7173-51-5	No data of sufficient quality are available. Not applicable due to corrosivity of the substance.
Ethyl benzene	100-41-4	Causes damage to organs through prolonged or repeated exposure if inhaled: Ears
Heavy aromatic petroleum naphtha	64742-94-5	No significant toxicity observed in animal studies at concentration requiring classification.
Ethanol	64-17-5	No significant toxicity observed in animal studies at concentration requiring classification.
Naphthalene	91-20-3	No significant toxicity observed in animal studies at concentration requiring classification.

Substances	CAS Number	Aspiration hazard
Xylene	1330-20-7	Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.
Didecyldimethylammonium chloride	7173-51-5	Not applicable
Ethyl benzene	100-41-4	Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.
Heavy aromatic petroleum naphtha	64742-94-5	Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.
Ethanol	64-17-5	Not applicable
Naphthalene	91-20-3	No information available



## 12. Ecological Information

### 12.1. Toxicity

#### Ecotoxicity effects

Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

#### Product Ecotoxicity Data

No data available

#### Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Xylene	1330-20-7	No information available	NOEC (56d) > 1.3 mg/L (Oncorhynchus mykiss) LC50 (96h) 2.6 mg/L (Oncorhynchus mykiss)	No information available	No information available
Didecyldimethylammonium chloride	7173-51-5	ErC50 (96 h) =0.053 mg/L (Pseudokirchnerella subcapitata)	LC50 (96 h) =0.97 mg/L (Danio rerio)	EC50 (3h) 17.95 mg/L (Activated sludge)	EC50 (48 h) =0.057 mg/L (Daphnia magna) NOEC (21 d) =0.021 mg/L (Daphnia magna)
Ethyl benzene	100-41-4	EC50 (96h) 3.6 mg/L (Pseudokirchnerella subcapitata) EC50 (96h) 7.7 mg/L (Skeletonema costatum) EC50 (8d) 4.8 mg/L (Selenastrum capricornutum)	LC50 (96h) 5.1 mg/L (Menidia menidia) LC50 (96h) 4.2 mg/L (Oncorhynchus mykiss)	EC50 (24h) 96 mg/L (Nitrosomonas sp.)	EC50 (48h) 1.8 - 2.4 mg/L (Daphnia magna) LC50 (96h) 2.5 mg/L (Americamysis bahia) NOEC (7d) 0.96 mg/L (Ceriodaphnia dubia)
Heavy aromatic petroleum naphtha	64742-94-5	EC50 (72h) 7.8 mg/L (Pseudokirchnerella subcapitata)	LL50 (96 h) =3.6 mg/L (Oncorhynchus mykiss) LC50 (96 h) =357.7 mg/L (Scophthalmus maximus)	No information available	EL50 (48h) 1.1 mg/L (Daphnia magna) (similar substance)
Ethanol	64-17-5	No information available	LC50 > 100 mg/L (Pimephales promelas)	No information available	LC50 9268 - 14,221 mg/L (Daphnia magna) LC50 5012 mg/L (Ceriodaphnia dubia) NOEC 9.6 mg/L (Daphnia magna)
Naphthalene	91-20-3	EC50 (72 h) =0.4 mg/L (Skeletonema costatum)	LC50 (96 h) =1.6 mg/L (Oncorhynchus mykiss) NOAEC (40 d) =0.37 mg/L (Oncorhynchus kisutch)	IC50 (24 h) =29 mg/L (Nitrosomonas sp.)	EC50 (48 h) =2.16 mg/L (Daphnia magna) NOAEC (125 d) =0.59 mg/L (Daphnia pulex)

### 12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Xylene	1330-20-7	Readily biodegradable (87.8% @ 28d)
Didecyldimethylammonium chloride	7173-51-5	Readily biodegradable (69% @ 28d)
Ethyl benzene	100-41-4	Readily biodegradable (79% @ 28d)
Heavy aromatic petroleum naphtha	64742-94-5	Readily biodegradable (58% @ 28d)
Ethanol	64-17-5	No information available
Naphthalene	91-20-3	Readily biodegradable (100% @ 7d)

### 12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Xylene	1330-20-7	2.77 - 3.15 BCF = 25.9
Didecyldimethylammonium chloride	7173-51-5	-0.41 BCF = 2.1
Ethyl benzene	100-41-4	3.6 BCF = 1
Heavy aromatic petroleum naphtha	64742-94-5	LogPow 5.2
Ethanol	64-17-5	-0.32

Naphthalene	91-20-3	LogPow 3.3
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**12.4. Mobility in soil**

Substances	CAS Number	Mobility
Xylene	1330-20-7	KOC = 537
Didecyldimethylammonium chloride	7173-51-5	KOC = >667
Ethyl benzene	100-41-4	KOC = 520
Heavy aromatic petroleum naphtha	64742-94-5	No information available
Ethanol	64-17-5	No information available
Naphthalene	91-20-3	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** UN2924  
**UN proper shipping name:** Flammable Liquid, Corrosive, N.O.S. (Contains Xylene, Didecyldimethylammonium chloride)  
**Transport Hazard Class(es):** 3 (8)  
**Packing Group:** III  
**Environmental Hazards** Marine Pollutant  
**NAERG:** NAERG 132

**Canadian TDG**

**UN Number** UN2924  
**UN proper shipping name:** Flammable Liquid, Corrosive, N.O.S. (Contains Xylene, Didecyldimethylammonium chloride)  
**Transport Hazard Class(es):** 3 (8)  
**Packing Group:** III  
**Environmental Hazards** Marine Pollutant

**IMDG/IMO**

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

**IATA/ICAO**

**UN Number** UN2924  
**UN proper shipping name:** Flammable Liquid, Corrosive, N.O.S. (Contains Xylene, Didecyldimethylammonium chloride)  
**Transport Hazard Class(es):** 3 (8)  
**Packing Group:** III  
**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
Xylene	1330-20-7	Not applicable
Didecyldimethylammonium chloride	7173-51-5	Not applicable
Ethyl benzene	100-41-4	Not applicable
Heavy aromatic petroleum naphtha	64742-94-5	Not applicable
Ethanol	64-17-5	Not applicable
Naphthalene	91-20-3	Not applicable

#### EPA SARA Title III Extremely Hazardous Substances

Substances	CAS Number	EPA SARA Title III Extremely Hazardous Substances
Xylene	1330-20-7	Not applicable
Didecyldimethylammonium chloride	7173-51-5	Not applicable
Ethyl benzene	100-41-4	Not applicable
Heavy aromatic petroleum naphtha	64742-94-5	Not applicable
Ethanol	64-17-5	Not applicable
Naphthalene	91-20-3	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
Xylene	1330-20-7	1.0%	Not applicable
Didecyldimethylammonium chloride	7173-51-5	Not applicable	Not applicable
Ethyl benzene	100-41-4	0.1%	Not applicable
Heavy aromatic petroleum naphtha	64742-94-5	Not applicable	Not applicable
Ethanol	64-17-5	Not applicable	Not applicable
Naphthalene	91-20-3	0.1%	Not applicable

#### EPA CERCLA/Superfund Reportable Spill Quantity

Substances	CAS Number	CERCLA RQ
Xylene	1330-20-7	100 lb 45.4 kg
Didecyldimethylammonium chloride	7173-51-5	Not applicable
Ethyl benzene	100-41-4	1000 lb 454 kg
Heavy aromatic petroleum naphtha	64742-94-5	Not applicable
Ethanol	64-17-5	Not applicable
Naphthalene	91-20-3	100 lb 45.4 kg 1 lb 0.454 kg

#### EPA RCRA Hazardous Waste Classification

Ignitability D001  
 Corrosivity D002

<b>California Proposition 65</b>	The California Proposition 65 regulations apply to this product.
<b>MA Right-to-Know Law</b>	One or more components listed.
<b>NJ Right-to-Know Law</b>	One or more components listed.
<b>PA Right-to-Know Law</b>	One or more components listed.
<b>NFPA Ratings:</b>	Health 3, Flammability 2, Reactivity 0
<b>HMIS Ratings:</b>	Health 3*, Flammability 2, 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  
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**Revision Date:** 05-Apr-2016

**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  
EC50 – Effective Concentration 50%  
ErC50 – Effective Concentration growth rate 50%  
LC50 – Lethal Concentration 50%  
LD50 – Lethal Dose 50%  
LL50 – Lethal Loading 50%  
mg/kg – milligram/kilogram  
mg/L – milligram/liter  
NIOSH – National Institute for Occupational Safety and Health  
NTP – National Toxicology Program  
OEL – Occupational Exposure Limit  
PEL – Permissible Exposure Limit  
ppm – parts per million  
STEL – Short Term Exposure Limit  
TWA – Time-Weighted Average  
UN – United Nations  
h - hour  
mg/m<sup>3</sup> - milligram/cubic meter  
mm - millimeter  
mmHg - millimeter mercury

w/w - weight/weight

d - day

**Key literature references and sources for data**

OSHA

ECHA C&L

[www.ChemADVISOR.com/](http://www.ChemADVISOR.com/)

**Disclaimer Statement**

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**End of Safety Data Sheet**