multi-chem®
A HALLIBURTON SERVICE

SAFETY DATA SHEET

Product Trade Name: **MC MX 3-1449**

Revision Date: 08-Sep-2017 **Revision Number:** 4

1. Identification

1.1. Product Identifier

Product Trade Name: MC MX 3-1449
Synonyms None
Chemical Family: Blend
Internal ID Code MC001327

1.2 Recommended use and restrictions on use

Application: Paraffin Dispersant
Uses advised against Consumer use

1.3 Manufacturer's Name and Contact Details

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

Halliburton 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

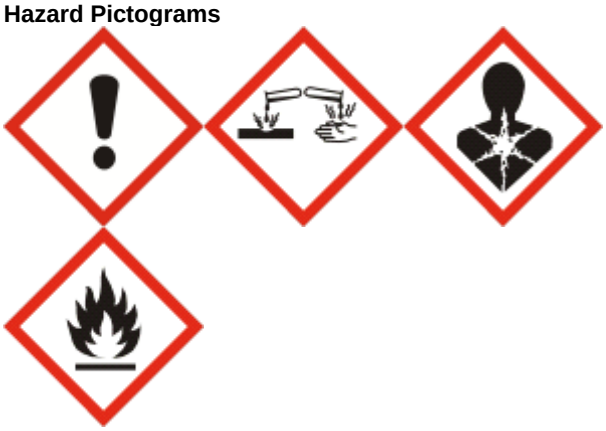
2.1 Classification in accordance with paragraph (d) of §1910.1200

Aspiration Toxicity	Category 1 - H304
Skin Corrosion / Irritation	Category 2 - H315
Serious Eye Damage/Irritation	Category 1 - H318
Germ Cell Mutagenicity	Category 1B - H340
Carcinogenicity	Category 1B - H350
Reproductive Toxicity	Category 1B - H360
Specific Target Organ Toxicity - (Single Exposure)	Category 3 - H336
Specific Target Organ Toxicity - (Repeated Exposure)	Category 1 - H372

Acute Aquatic Toxicity	Category 2 - H401
Chronic Aquatic Toxicity	Category 3 - H412
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
H318 - Causes serious eye damage
H336 - May cause drowsiness or dizziness
H340 - May cause genetic defects
H350 - May cause cancer
H360 - May damage fertility or the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure
H401 - Toxic to aquatic life
H412 - Harmful 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
P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response

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].

	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 P310 - Immediately call a POISON CENTER or doctor/physician P370 + P378 - In case of fire: Use CO2, dry chemical, or foam
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	60 - 100%	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)
Light aromatic solvent	64742-95-6	5 - 10%	Skin Irrit. 2 (H315) Muta. 1B (H340) Carc. 1B (H350) STOT SE 3 (H336) Asp. Tox. 1 (H304) Aquatic Acute 2 (H401) Aquatic Chronic 3 (H412) Flam. Liq. 3 (H226)
Alkylbenzene sulfonate	Proprietary	1 - 5%	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Corr. 1 (H318) STOT SE 3 (H335) Aquatic Acute 2 (H401) Aquatic Chronic 3 (H412)
Light aliphatic solvent naphtha	64742-89-8	1 - 5%	Skin Irrit. 2 (H315) Muta. 1B (H340) Carc. 1B (H350) Repr. 2 (H361) STOT SE 3 (H336) Asp. Tox. 1 (H304) Aquatic Acute 2 (H401) Aquatic Chronic 4 (H413) Flam. Liq. 3 (H226)
1,2,4 Trimethylbenzene	95-63-6	1 - 5%	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) STOT RE 1 (H372) Aquatic Acute 2 (H401) Aquatic Chronic 2 (H411) Flam. Liq. 3 (H226)

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

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 15 minutes. Get medical attention.

Ingestion 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 severe eye irritation which may damage tissue. May cause heritable genetic damage. Carcinogen. Potential reproductive hazard. May cause birth defects. 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

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
Toluene	108-88-3	TWA: 200 ppm	TWA: 20 ppm
Light aromatic solvent	64742-95-6	Not applicable	Not applicable
Alkylbenzene sulfonate	Proprietary	Not applicable	Not applicable
Light aliphatic solvent naphtha	64742-89-8	Not applicable	Not applicable
1,2,4 Trimethylbenzene	95-63-6	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**	Clear to Slightly Hazy , Pale clear to light amber
Odor:	Aromatic hydrocarbon	**Odor Threshold:**	No information available

Property Remarks/ - Method	Values
pH:	2.7-3.7 (10% in 1:1 IPA:H2O)
Freezing Point / Range	-40 °C / -40 °F
Melting Point / Range	No data available
Pour Point / Range	No data available
Boiling Point / Range	No data available
Flash Point	22.2 °C / 72 °F (SFCC)
Flammability (solid, gas)	No data available
Upper flammability limit	No data available
Lower flammability limit	No data available
Evaporation rate	
Vapor Pressure	No data available
Vapor Density	No data available
Specific Gravity	0.8655-0.8905 (20 °C/68 °F)
Water Solubility	No data available
Solubility in other solvents	Oil soluble
Partition coefficient: n-octanol/water	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No information available
Oxidizing Properties	No information available

9.2. Other information

VOC Content (%)	No data available
Liquid Density	7.22-7.42 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. Oxides of nitrogen.

11. Toxicological Information

11.1 Information on likely routes of exposure

Principle Route of Exposure Eye contact. Inhalation. Skin 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 skin irritation.

Ingestion May be fatal if swallowed and enters airways.

Chronic Effects/Carcinogenicity May cause heritable genetic damage. Contains known or suspected carcinogens. 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
Light aromatic solvent	64742-95-6	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 8.53 mg/L (vapor, 4 hr, rat)
Alkylbenzene sulfonate	Proprietary	1300 mg/kg-bw (rat) (similar substance)	>2000 mg/kg-bw (Rat) (similar substance)	No data available
Light aliphatic solvent naphtha	64742-89-8	> 5000 mg/kg bw (Rat)	> 2000 mg/kg (Rabbit)	> 5.6 mg/L (Rat) 4h
1,2,4 Trimethylbenzene	95-63-6	3415 mg/kg-bw (rat)	>3440 mg/kg-bw (rat) (similar substance)	>10.2 mg/L (rat, 4 h, aerosol) (similar substance)

Substances	CAS Number	Skin corrosion/irritation
Toluene	108-88-3	Skin, rabbit: Causes moderate skin irritation.
Light aromatic solvent	64742-95-6	Causes moderate skin irritation. (Rabbit)
Alkylbenzene sulfonate		Causes moderate skin irritation. (Rabbit) (similar substances) Skin, rabbit: May cause moderate skin irritation.
Light aliphatic solvent naphtha	64742-89-8	Skin, rabbit: Causes moderate skin irritation.
1,2,4 Trimethylbenzene	95-63-6	Irritating to skin. (Rabbit) Causes moderate skin irritation. (similar substances)

Substances	CAS Number	Serious eye damage/irritation
Toluene	108-88-3	Causes moderate eye irritation
Light aromatic solvent	64742-95-6	Non-irritating to rabbit's eye
Alkylbenzene sulfonate		Eye, rabbit: Causes severe eye irritation which may damage tissue. (similar substances)
Light aliphatic solvent naphtha	64742-89-8	Non-irritating to rabbit's eye
1,2,4 Trimethylbenzene	95-63-6	Irritating to eyes (Rabbit) May cause moderate eye irritation.

Substances	CAS Number	Skin Sensitization
Toluene	108-88-3	Did not cause sensitization on laboratory animals (guinea pig)
Light aromatic solvent	64742-95-6	Did not cause sensitization on laboratory animals (guinea pig)
Alkylbenzene sulfonate		Did not cause sensitization on laboratory animals (guinea pig) (similar substances)
Light aliphatic solvent naphtha	64742-89-8	Did not cause sensitization on laboratory animals (guinea pig)
1,2,4 Trimethylbenzene	95-63-6	Did not cause sensitization on laboratory animals (guinea pig) (similar substances)

Substances	CAS Number	Respiratory Sensitization
Toluene	108-88-3	No information available
Light aromatic solvent	64742-95-6	No information available
Alkylbenzene sulfonate		No information available
Light aliphatic solvent naphtha	64742-89-8	No information available
1,2,4 Trimethylbenzene	95-63-6	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.
Light aromatic solvent	64742-95-6	Some in vivo tests have shown mutagenic effects. In vitro tests have shown mutagenic effects
Alkylbenzene sulfonate		In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects. (similar substances)
Light aliphatic solvent naphtha	64742-89-8	Some in vivo tests have shown mutagenic effects. Some in vitro tests have shown mutagenic effects.
1,2,4 Trimethylbenzene	95-63-6	In vivo tests did not show mutagenic effects. In vitro tests did not show mutagenic effects

Substances	CAS Number	Carcinogenic Effects
Toluene	108-88-3	No data of sufficient quality are available.
Light aromatic solvent	64742-95-6	Contains a known or suspected carcinogen
Alkylbenzene sulfonate		Not regarded as carcinogenic. (similar substances)
Light aliphatic solvent naphtha	64742-89-8	This substance is a potential carcinogen.
1,2,4 Trimethylbenzene	95-63-6	No information 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.
Light aromatic solvent	64742-95-6	No data of sufficient quality are available.
Alkylbenzene sulfonate		Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments. (similar substances)
Light aliphatic solvent naphtha	64742-89-8	May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility
1,2,4 Trimethylbenzene	95-63-6	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances) Adverse developmental effects were only observed at maternally toxic doses.

Substances	CAS Number	STOT - single exposure
Toluene	108-88-3	May cause headache, dizziness, and other central nervous system effects. No information available
Light aromatic solvent	64742-95-6	May cause headache, dizziness, and other central nervous system effects. No information available
Alkylbenzene sulfonate		May cause respiratory irritation. (similar substances)
Light aliphatic solvent naphtha	64742-89-8	May cause disorder and damage to the Central Nervous System (CNS)
1,2,4 Trimethylbenzene	95-63-6	May cause respiratory irritation. No information available

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)
Light aromatic solvent	64742-95-6	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Alkylbenzene sulfonate		No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Light aliphatic solvent naphtha	64742-89-8	No significant toxicity observed in animal studies at concentration requiring classification.
1,2,4 Trimethylbenzene	95-63-6	Causes damage to organs through prolonged or repeated exposure if inhaled: (Hematopoietic System) Central Nervous System (CNS) (Central nervous system)

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.
Light aromatic solvent	64742-95-6	May be fatal if swallowed and enters airways
Alkylbenzene sulfonate		Not applicable
Light aliphatic solvent naphtha	64742-89-8	Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.
1,2,4 Trimethylbenzene	95-63-6	Risk of serious damage to the lungs (by aspiration) Aspiration can be a hazard if this material is swallowed.

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
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)
Light aromatic solvent	64742-95-6	EL50 (72h) 3.1 mg/L (Pseudokirchnerella subcapitata)	LC50 (96h) 1.03 mg/L (Oncorhynchus mykiss)	No information available	EC50 (48h) 1.2 mg/L (Daphnia magna)
Alkylbenzene sulfonate	Proprietary	EC50(72 h) 5.1 mg/L (Pseudokirchneriella subcapitata)	LC50(96 h) 1.67 mg/L (Lepomis macrochirus) NOEC(72 d)=0.23 mg/L (Salmo gairdneri)	No information available	EC50(48 h) 2.9 mg/L (Daphnia magna)
Light aliphatic solvent naphtha	64742-89-8	No information available	LL50 (96h) 8.2mg/L (Pimephales promelas)	No information available	NOELR (21d) 2.6 mg/L (Daphnia magna)
1,2,4 Trimethylbenzene	95-63-6	No information available	LC50 (96 h) 7.72 mg/L (Pimephales promelas)	No information available	LC50 (48 h) 3.6 mg/L (Daphnia magna) Chronic Value (ChV) (16 d) 0.367 mg/L (Daphnia sp.)

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Toluene	108-88-3	Readily biodegradable
Light aromatic solvent	64742-95-6	(77.05% @ 28d)
Alkylbenzene sulfonate	Proprietary	Readily biodegradable (90% @ 28d)
Light aliphatic solvent naphtha	64742-89-8	Readily biodegradable (77.05% @ 28d)
1,2,4 Trimethylbenzene	95-63-6	Readily biodegradable

12.3. Bioaccumulative potential

Substances	CAS Number	Bioaccumulation
Toluene	108-88-3	LogPow2.73
Light aromatic solvent	64742-95-6	3.20 - 3.63 BCF = 119 - 142
Alkylbenzene sulfonate	Proprietary	No information available
Light aliphatic solvent naphtha	64742-89-8	Log Kow > 3
1,2,4 Trimethylbenzene	95-63-6	LogPow 3.42

12.4. Mobility in soil

Substances	CAS Number	Mobility
Toluene	108-88-3	No information available
Light aromatic solvent	64742-95-6	KOC = 372 - 617
Alkylbenzene sulfonate	Proprietary	No information available
Light aliphatic solvent naphtha	64742-89-8	No information available
1,2,4 Trimethylbenzene	95-63-6	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, Alkylbenzene sulfonate)
Transport Hazard Class(es):	3
Packing Group:	II
Environmental Hazards:	Not applicable
NAERG:	NAERG 128

Canadian TDG

UN Number	UN1993
UN proper shipping name:	Flammable Liquid, N.O.S. (Contains Toluene, Alkylbenzene)
Transport Hazard Class(es):	3
Packing Group:	II
Environmental Hazards:	Not applicable

IMDG/IMO

UN Number	UN1993
UN proper shipping name:	Flammable Liquid, N.O.S. (Contains Toluene, Alkylbenzene sulfonate)
Transport Hazard Class(es):	3
Packing Group:	II
Environmental Hazards:	Not applicable
EMS:	EmS F-E, S-E

IATA/ICAO

UN Number	UN1993
UN proper shipping name:	Flammable Liquid, N.O.S. (Contains Toluene, Alkylbenzene sulfonate)
Transport Hazard Class(es):	3
Packing Group:	II
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
Toluene	108-88-3	Not applicable
Light aromatic solvent	64742-95-6	Not applicable
Alkylbenzene sulfonate	Proprietary	Not applicable
Light aliphatic solvent naphtha	64742-89-8	Not applicable
1,2,4 Trimethylbenzene	95-63-6	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
Light aromatic solvent	64742-95-6	Not applicable
Alkylbenzene sulfonate	Proprietary	Not applicable
Light aliphatic solvent naphtha	64742-89-8	Not applicable
1,2,4 Trimethylbenzene	95-63-6	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)
Germ cell mutagenicity
Carcinogenicity
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 %
Light aromatic solvent	64742-95-6	Not applicable	Not applicable
Alkylbenzene sulfonate	Proprietary	Not applicable	Not applicable
Light aliphatic solvent naphtha	64742-89-8	Not applicable	Not applicable
1,2,4 Trimethylbenzene	95-63-6	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
Light aromatic solvent	64742-95-6	Not applicable
Alkylbenzene sulfonate	Proprietary	Not applicable
Light aliphatic solvent naphtha	64742-89-8	Not applicable
1,2,4 Trimethylbenzene	95-63-6	Not applicable

EPA RCRA Hazardous Waste Classification

Ignitability D001

California Proposition 65

Substances	CAS Number	California Proposition 65
Toluene	108-88-3	developmental toxicity
Light aromatic solvent	64742-95-6	Not applicable
Alkylbenzene sulfonate	Proprietary	Not applicable
Light aliphatic solvent naphtha	64742-89-8	Not applicable
1,2,4 Trimethylbenzene	95-63-6	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
Toluene	108-88-3	Present	Present	Environmental hazard
Light aromatic solvent	64742-95-6	Not applicable	Not applicable	Not applicable
Alkylbenzene sulfonate	Proprietary	Not applicable	Not applicable	Not applicable
Light aliphatic solvent naphtha	64742-89-8	Not applicable	Not applicable	Not applicable
1,2,4 Trimethylbenzene	95-63-6	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: 08-Sep-2017

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^3 - 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/

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End of Safety Data Sheet