

SAFETY DATA SHEET

Product Trade Name: MC MX 519-3

Revision Date: 10-Feb-2016

Revision Number: 4

1. Identification

1.1. Product Identifier

Product Trade Name: MC MX 519-3
Synonyms: None
Chemical Family: Blend
Internal ID Code: MC001812

1.2 Recommended use and restrictions on use

Application: Paraffin Inhibitor
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 2200
 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 Category	Category 1 - H304
Skin Corrosion / Irritation	Category 2 - H315
Serious Eye Damage / Eye Irritation	Category 2B - H320
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 2 - H411
Flammable liquids.	Category 3 - H226

2.2. Label Elements

Hazard Pictograms



Signal Word

Danger

Hazard Statements

H226 - Flammable liquid and vapor
 H304 - May be fatal if swallowed and enters airways
 H315 - Causes skin irritation
 H320 - Causes mild eye irritation
 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
 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
 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
 P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P332 + P313 - If skin irritation occurs: Get medical advice/attention

P362 - 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
 P308 + P313 - IF exposed or concerned: Get medical advice/attention
 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)
Mineral oil	8042-47-5	10 - 30%	Asp. Tox. 1 (H304)
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)
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)
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) Flam. Liq. 3 (H226)
Light aromatic solvent	64742-95-6	1 - 5%	Skin Irrit. 2 (H315) Muta. 1 (H340) Carc. 1B (H350) STOT SE 3 (H336) Asp. Tox. 1 (H304) Aquatic Acute 2 (H401) Aquatic Chronic 3 (H412) Flam. Liq. 3 (H226)

The exact percentage (concentration) of the composition has been withheld as proprietary.

4. First-Aid Measures

4.1. Description of first aid measures

Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Seek immediate medical attention/advice.
Eyes	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.
Skin	Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. Get medical attention if irritation persists.
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. May cause mild eye irritation. May cause heritable genetic damage. Carcinogen. Potential reproductive hazard. May cause birth defects. 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

Decomposition in fire may produce harmful gases. Vapors are heavier than air and may accumulate in low areas. Vapors may travel along the ground to be ignited at distant locations.

5.3 Special protective equipment and precautions for fire-fighters

Special Protective Equipment for Fire-Fighters

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

Remove sources of ignition. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Use appropriate protective equipment.

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

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

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Ensure adequate ventilation. Use appropriate protective equipment. Remove sources of ignition.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Information

Keep from heat, sparks, and open flames. Store in a cool well ventilated area.

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 Ceiling: 300 ppm	TWA: 20 ppm
Mineral oil	8042-47-5	5 mg/m ³	5 mg/m ³
Heavy aromatic petroleum naphtha	64742-94-5	Not applicable	Not applicable
Naphthalene	91-20-3	10 ppm	TWA: 10 ppm STEL: 15 ppm
1,2,4 Trimethylbenzene	95-63-6	Not applicable	25 ppm
Light aromatic solvent	64742-95-6	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 protective clothing appropriate for the work environment.

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 , Light Amber to Dark Amber

Odor: Organic

Odor

No information available

Threshold:

Property

Values

Remarks/ - Method

pH:	4.7
Freezing Point/Range	-3.9 °C / 25 °F
Melting Point/Range	No data available
Boiling Point/Range	No data available
Flash Point	27.7 °C / 82 °F
Flammability (solid, gas)	No data available
upper flammability limit	No data available
lower flammability limit	No data available
Evaporation rate	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Specific Gravity	0.8540-0.8790
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	7.12-7.33 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. Fumes of aromatic hydrocarbons.

11. Toxicological Information**11.1 Information on likely routes of exposure**

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

Eye Contact
Skin Contact
Ingestion

Causes eye irritation.
 Causes skin irritation.
 May cause headache, dizziness, nausea, vomiting, gastrointestinal irritation and central nervous system depression. Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.

Chronic Effects/Carcinogenicity May cause heritable genetic damage. Contains known or suspected reproductive toxins. 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
Toluene	108-88-3	5580 mg/kg (Rat)	12,000 mg/kg (Rat)	28.1 mg/L (Rat) 4h
Mineral oil	8042-47-5	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5 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)
Naphthalene	91-20-3	533 mg/kg-bw (mouse)	>2000 mg/kg-bw (rabbit)	No data available
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)
Light aromatic solvent	64742-95-6	8400 mg/kg (Rat) >5000 mg/kg (Rat)	>2000 mg/kg (Rabbit)	5.2 mg/L (Rat) 4h 3400 ppm (Rat) 4h >8.53 mg/L (Rat) 4h

Substances	CAS Number	Skin corrosion/irritation
Toluene	108-88-3	Skin, rabbit: Causes moderate skin irritation.
Mineral oil	8042-47-5	Non-irritating to the skin (Rabbit)
Heavy aromatic petroleum naphtha	64742-94-5	Non-irritating to the skin (Rabbit) (similar substances) Not irritating to skin in rabbits.
Naphthalene	91-20-3	Non-irritating to the skin (Rabbit) Not irritating to skin in rabbits.
1,2,4 Trimethylbenzene	95-63-6	Irritating to skin. (Rabbit) Causes moderate skin irritation. (similar substances) Skin, rabbit:
Light aromatic solvent	64742-95-6	Causes moderate skin irritation. (Rabbit)

Substances	CAS Number	Eye damage/irritation
Toluene	108-88-3	Causes moderate eye irritation.
Mineral oil	8042-47-5	Non-irritating to the eye (Rabbit)
Heavy aromatic petroleum naphtha	64742-94-5	Non-irritating to the eye (Rabbit) Non-irritating to rabbit's eye (similar substances)
Naphthalene	91-20-3	May cause mechanical irritation to eye. (human) Non-irritating to rabbit's eye
1,2,4 Trimethylbenzene	95-63-6	Irritating to eyes. (Rabbit) May cause moderate eye irritation.
Light aromatic solvent	64742-95-6	Non-irritating to rabbit's eye

Substances	CAS Number	Skin Sensitization
Toluene	108-88-3	Did not cause sensitization on laboratory animals (guinea pig)
Mineral oil	8042-47-5	Did not cause sensitization on humans or laboratory animals. (guinea pig)
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)
Naphthalene	91-20-3	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)
Light aromatic solvent	64742-95-6	Did not cause sensitization on laboratory animals (guinea pig)

Substances	CAS Number	Respiratory Sensitization
Toluene	108-88-3	No information available
Mineral oil	8042-47-5	No information available
Heavy aromatic petroleum naphtha	64742-94-5	No information available
Naphthalene	91-20-3	No information available
1,2,4 Trimethylbenzene	95-63-6	No information available
Light aromatic solvent	64742-95-6	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.
Mineral oil	8042-47-5	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects. (similar substances)
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)
Naphthalene	91-20-3	In vitro tests did not show mutagenic effects. In vivo tests did not show 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
Light aromatic solvent	64742-95-6	Some in vivo tests have shown mutagenic effects. In vitro tests have shown mutagenic effects

Substances	CAS Number	Carcinogenic Effects
Toluene	108-88-3	No data of sufficient quality are available.
Mineral oil	8042-47-5	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.
Naphthalene	91-20-3	Substances which should be regarded as if they are carcinogenic to man
1,2,4 Trimethylbenzene	95-63-6	No information available.
Light aromatic solvent	64742-95-6	Contains a known or suspected carcinogen

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.
Mineral oil	8042-47-5	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.
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)
Naphthalene	91-20-3	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.
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.
Light aromatic solvent	64742-95-6	No data of sufficient quality are available.

Substances	CAS Number	STOT - single exposure
Toluene	108-88-3	May cause headache, dizziness, and other central nervous system effects.
Mineral oil	8042-47-5	No information available.
Heavy aromatic petroleum naphtha	64742-94-5	May cause disorder and damage to the Central Nervous System (CNS)
Naphthalene	91-20-3	No data of sufficient quality are available.
1,2,4 Trimethylbenzene	95-63-6	May cause respiratory irritation.
Light aromatic solvent	64742-95-6	May cause headache, dizziness, and other central nervous system effects.

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)
Mineral oil	8042-47-5	No significant toxicity observed in animal studies at concentration requiring classification.
Heavy aromatic petroleum naphtha	64742-94-5	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.
1,2,4 Trimethylbenzene	95-63-6	Causes damage to organs through prolonged or repeated exposure if inhaled: (Central nervous system) (Hematopoietic System) Central Nervous System (CNS) May cause disorder and damage to the
Light aromatic solvent	64742-95-6	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)

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.
Mineral oil	8042-47-5	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.
Naphthalene	91-20-3	No information available Not applicable
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.
Light aromatic solvent	64742-95-6	May be fatal if swallowed and enters airways

12. Ecological Information

12.1. Toxicity

Ecotoxicity Effects

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
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)
Mineral oil	8042-47-5	NOEL (72h) > 100 mg/L (Pseudokirchnerella subcapitata)	LL50 (96h) > 1000 mg/L (Oncorhynchus mykiss)	No information available	LL50 (48h) > 100 mg/L (Daphnia magna)
Heavy aromatic petroleum naphtha	64742-94-5	EC50 (72h) 7.8 mg/L (Pseudokirchneriella 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)
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)
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.)
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)

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Toluene	108-88-3	Readily biodegradable
Mineral oil	8042-47-5	(31% @ 28d)
Heavy aromatic petroleum naphtha	64742-94-5	Readily biodegradable (58% @ 28d)
Naphthalene	91-20-3	Readily biodegradable (100% @ 7d)
1,2,4 Trimethylbenzene	95-63-6	Readily biodegradable
Light aromatic solvent	64742-95-6	(77.05% @ 28d)

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Toluene	108-88-3	2.73
Mineral oil	8042-47-5	> 6
Heavy aromatic petroleum naphtha	64742-94-5	LogPow 5.2
Naphthalene	91-20-3	LogPow 3.3
1,2,4 Trimethylbenzene	95-63-6	LogPow 3.42
Light aromatic solvent	64742-95-6	3.20 - 3.63 BCF = 119 - 142

12.4. Mobility in soil

Substances	CAS Number	Mobility
Toluene	108-88-3	No information available

Mineral oil	8042-47-5	No information available
Heavy aromatic petroleum naphtha	64742-94-5	No information available
Naphthalene	91-20-3	No information available
1,2,4 Trimethylbenzene	95-63-6	No information available
Light aromatic solvent	64742-95-6	KOC = 372 - 617

12.5 Other adverse effects

No information available

13. Disposal Considerations**13.1. Waste treatment methods**

Disposal Method 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, Trimethylbenzene)
Transport Hazard Class(es): 3
Packing Group: III
Environmental Hazards: Marine Pollutant
NAERG: NAERG 128

Canadian TDG

UN Number: UN1993
UN Proper Shipping Name: Flammable Liquid, N.O.S. (Contains Toluene, Trimethylbenzene)
Transport Hazard Class(es): 3
Packing Group: III
Environmental Hazards: Marine Pollutant

IMDG/IMO

UN Number: UN1993
UN Proper Shipping Name: Flammable Liquid, N.O.S. (Contains Toluene, Trimethylbenzene)
Transport Hazard Class(es): 3
Packing Group: III
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, Trimethylbenzene)
Transport Hazard Class(es): 3
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
Toluene	108-88-3	Not applicable
Mineral oil	8042-47-5	Not applicable
Heavy aromatic petroleum naphtha	64742-94-5	Not applicable
Naphthalene	91-20-3	Not applicable
1,2,4 Trimethylbenzene	95-63-6	Not applicable
Light aromatic solvent	64742-95-6	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
Mineral oil	8042-47-5	Not applicable
Heavy aromatic petroleum naphtha	64742-94-5	Not applicable
Naphthalene	91-20-3	Not applicable
1,2,4 Trimethylbenzene	95-63-6	Not applicable
Light aromatic solvent	64742-95-6	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
Toluene	108-88-3	1.0%	>= 1.0 %
Mineral oil	8042-47-5	Not applicable	Not applicable
Heavy aromatic petroleum naphtha	64742-94-5	Not applicable	Not applicable
Naphthalene	91-20-3	0.1%	Not applicable
1,2,4 Trimethylbenzene	95-63-6	1.0%	Not applicable
Light aromatic solvent	64742-95-6	Not applicable	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
Mineral oil	8042-47-5	Not applicable
Heavy aromatic petroleum naphtha	64742-94-5	Not applicable
Naphthalene	91-20-3	100 lb 45.4 kg
1,2,4 Trimethylbenzene	95-63-6	Not applicable
Light aromatic solvent	64742-95-6	Not applicable

EPA RCRA Hazardous Waste Classification

Ignitability D001

California Proposition 65

The California Proposition 65 regulations apply to this product.

MA Right-to-Know Law

One or more components listed.

NJ Right-to-Know Law

One or more components listed.

PA Right-to-Know Law

One or more components listed.

NFPA Ratings:

Health 2, Flammability 3, Reactivity 0

HMIS Ratings:

Health 2*, Flammability 3, Physical Hazard 0, PPE: X

Canadian Regulations

Canadian DSL Inventory 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: 10-Feb-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

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/m³ - milligram/cubic meter
mm - millimeter
mmHg - millimeter mercury
w/w - weight/weight
d - day

Key literature references and sources for data

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