

SAFETY DATA SHEET

Product Trade Name: MC P-3013

Revision Date: 21-Mar-2016

Revision Number: 3

1. Identification

1.1. Product Identifier

Product Trade Name: MC P-3013
Synonyms: None
Chemical Family: Blend
Internal ID Code: MC003005

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
 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 Toxicity	Category 1 - H304
Skin Corrosion / Irritation	Category 1 - H314
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 2 - H373
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
 H314 - Causes severe skin burns and eye damage
 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
 H373 - May cause 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/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
 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
 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
	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
	P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
	P310 - Immediately call a POISON CENTER or doctor/physician
Storage	P370 + P378 - In case of fire: Use CO ₂ , dry chemical, or foam
	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
Light aliphatic solvent naphtha	64742-89-8	60 - 100%	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)
Toluene	108-88-3	10 - 30%	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)
Acetic acid	64-19-7	5 - 10%	Skin Corr. 1A (H314) Eye Corr. 1 (H318) STOT SE 3 (H335) Flam. Liq. 3 (H226)
Ethylene glycol monobutyl ether	111-76-2	1 - 5%	Acute Tox. 4 (H302) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Flam. Liq. 4 (H227)
Isopropanol	67-63-0	1 - 5%	Eye Irrit. 2 (H319) STOT SE 3 (H336) Flam. Liq. 2 (H225)

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 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 30 minutes and remove contaminated clothing, shoes and leather goods immediately. Get medical attention immediately.
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 severe skin irritation with tissue destruction. 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. 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
Light aliphatic solvent naphtha	64742-89-8	Not applicable	Not applicable
Toluene	108-88-3	TWA: 200 ppm Ceiling: 300 ppm	TWA: 20 ppm
Acetic acid	64-19-7	TWA: 10 ppm	TWA: 10 ppm STEL: 15 ppm
Ethylene glycol monobutyl ether	111-76-2	TWA: 50 ppm Skin	TWA: 20 ppm Skin
Isopropanol	67-63-0	TWA: 400 ppm	TWA: 200 ppm STEL: 400 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

Physical State: Liquid	Color	Clear to Slightly Hazy Light Amber to Dark Amber
Odor: Aromatic hydrocarbon	Odor Threshold:	No information available
<u>Property</u>	<u>Values</u>	

Remarks/ - Method

pH:	2.67-3.67 (10% in 1:1 IPA:H2O)
Freezing Point / Range	No data available
Melting Point / Range	No data available
Boiling Point / Range	No data available
Flash Point	-7.8 °C / 18 °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	0.7745-0.7995
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	6.46-6.67 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 Inhalation. Eye contact. Ingestion. Skin contact.

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
Ingestion**

Causes severe burns.
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. 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
Light aliphatic solvent naphtha	64742-89-8	> 5000 mg/kg bw (Rat)	> 2000 mg/kg (Rabbit)	> 5.6 mg/L (Rat) 4h
Toluene	108-88-3	5580 mg/kg (Rat)	12,000 mg/kg (Rat)	28.1 mg/L (Rat) 4h
Acetic acid	64-19-7	No data available	1060 mg/kg-bw (rabbit)	11.4 mg/L (rat, 4 h, vapor)
Ethylene glycol monobutyl ether	111-76-2	1414 mg/kg-bw (guinea pig)	>2000 mg/kg (Rabbit)	No data available
Isopropanol	67-63-0	4396 mg/kg (Rat) 5840 mg/kg (Rat) 3600 mg/kg (Mouse)	12,800 mg/kg (Rat) 12,870 mg/kg (Rabbit) 6280 mg/kg (Rabbit)	72.6 mg/L (Rat) 4h > 10,000 mg/L (Rat) 6h

Substances	CAS Number	Skin corrosion/irritation
Light aliphatic solvent naphtha	64742-89-8	Skin, rabbit: Causes moderate skin irritation.
Toluene	108-88-3	Skin, rabbit: Causes moderate skin irritation.
Acetic acid	64-19-7	Corrosive to skin Extremely corrosive and destructive to tissue Skin, rabbit:
Ethylene glycol monobutyl ether	111-76-2	Causes moderate skin irritation. (Rabbit) Skin, rabbit:
Isopropanol	67-63-0	Non-irritating to the skin (Rabbit)

Substances	CAS Number	Serious eye damage/irritation
Light aliphatic solvent naphtha	64742-89-8	Non-irritating to rabbit's eye
Toluene	108-88-3	Causes moderate eye irritation
Acetic acid	64-19-7	Corrosive to eyes Eye, rabbit: Causes serious eye damage
Ethylene glycol monobutyl ether	111-76-2	Causes moderate eye irritation (Rabbit) Eye, rabbit:
Isopropanol	67-63-0	Causes moderate eye irritation (Rabbit)

Substances	CAS Number	Skin Sensitization
Light aliphatic solvent naphtha	64742-89-8	Did not cause sensitization on laboratory animals (guinea pig)
Toluene	108-88-3	Did not cause sensitization on laboratory animals (guinea pig)
Acetic acid	64-19-7	Not regarded as a sensitizer.
Ethylene glycol monobutyl ether	111-76-2	Did not cause sensitization on laboratory animals (guinea pig)
Isopropanol	67-63-0	Did not cause sensitization on laboratory animals (guinea pig)

Substances	CAS Number	Respiratory Sensitization
Light aliphatic solvent naphtha	64742-89-8	No information available
Toluene	108-88-3	No information available
Acetic acid	64-19-7	No information available
Ethylene glycol monobutyl ether	111-76-2	No information available
Isopropanol	67-63-0	No information available

Substances	CAS Number	Mutagenic Effects
Light aliphatic solvent naphtha	64742-89-8	Some in vivo tests have shown mutagenic effects. Some in vitro tests have shown 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.
Acetic acid	64-19-7	In vivo tests did not show mutagenic effects. In vitro tests did not show mutagenic effects
Ethylene glycol monobutyl ether	111-76-2	In vivo tests did not show mutagenic effects.

Isopropanol	67-63-0	In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects.
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Substances	CAS Number	Carcinogenic Effects
Light aliphatic solvent naphtha	64742-89-8	This substance is a potential carcinogen.
Toluene	108-88-3	No data of sufficient quality are available.
Acetic acid	64-19-7	Did not show carcinogenic effects in animal experiments
Ethylene glycol monobutyl ether	111-76-2	Not regarded as carcinogenic.
Isopropanol	67-63-0	Did not show carcinogenic effects in animal experiments

Substances	CAS Number	Reproductive toxicity
Light aliphatic solvent naphtha	64742-89-8	May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility
Toluene	108-88-3	Fetotoxic and teratogenic effects observed in experimental animals at concentrations that did not produce maternal toxicity.
Acetic acid	64-19-7	Did not show teratogenic effects in animal experiments. Animal testing did not show any effects on fertility.
Ethylene glycol monobutyl ether	111-76-2	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.
Isopropanol	67-63-0	No significant toxicity observed in animal studies at concentration requiring classification.

Substances	CAS Number	STOT - single exposure
Light aliphatic solvent naphtha	64742-89-8	May cause disorder and damage to the Central Nervous System (CNS)
Toluene	108-88-3	May cause headache, dizziness, and other central nervous system effects.
Acetic acid	64-19-7	May cause respiratory irritation.
Ethylene glycol monobutyl ether	111-76-2	No data of sufficient quality are available.
Isopropanol	67-63-0	May cause headache, dizziness, and other central nervous system effects.

Substances	CAS Number	STOT - repeated exposure
Light aliphatic solvent naphtha	64742-89-8	No significant toxicity observed in animal studies at concentration requiring classification.
Toluene	108-88-3	Causes damage to organs through prolonged or repeated exposure if inhaled: Central Nervous System (CNS)
Acetic acid	64-19-7	Not applicable due to corrosivity of the substance.
Ethylene glycol monobutyl ether	111-76-2	No data of sufficient quality are available.
Isopropanol	67-63-0	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)

Substances	CAS Number	Aspiration hazard
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.
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.
Acetic acid	64-19-7	Not applicable
Ethylene glycol monobutyl ether	111-76-2	No adverse health effects are expected from swallowing. Not applicable
Isopropanol	67-63-0	Not applicable

12. Ecological Information

12.1. Toxicity

Ecotoxicity effects

Toxic to aquatic life. Harmful 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
Light aliphatic solvent	64742-89-8	No information available	LL50 (96h) 8.2mg/L (Pimephales promelas)	No information available	NOELR (21d) 2.6 mg/L (Daphnia magna)

naphtha					
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)
Acetic acid	64-19-7	EC50 (72 h) =55.22 mg/L (Anabaena) (Effect concentrations in the aquatic environment are attributable to a change in pH value.)	LC50 (96 h) =75 mg/L (Lepomis macrochirus) LC50 (96 h) =251 mg/L (Gambusia affinis) (Effect concentrations in the aquatic environment are attributable to a change in pH value.)	NOAEC (16 h) =1150 mg/L (Pseudomonas putida)	EC50 (48 h) =65 mg/L (Daphnia magna) (Effect concentrations in the aquatic environment are attributable to a change in pH value.)
Ethylene glycol monobutyl ether	111-76-2	EC50 (72 h) =1840 mg/L (Pseudokirchneriella subcapitata)	LC50 (96 h) =1474 mg/L (Oncorhynchus mykiss) NOAEC (21 d) >100 mg/L (Danio rerio)	No information available	EC50 (48 h) =1800 mg/L (Daphnia magna) EC50 (21 d) =297 mg/L (Daphnia magna)
Isopropanol	67-63-0	EC50 (72h) > 1000 mg/L (Desmodesmus subspicatus) EC50 (7d) 1800 mg/L (Scenedesmus quadricauda)	LC50 (96h) 9640 mg/L (Pimephales promelas) LC50 (7d) 7060 mg/L (Poecilia reticulata)	TT (16h) 1050 mg/L (Pseudomonas putida)	EC50 (48h) 13,299 mg/L (Daphnia magna) EC50 (24h) > 10,000 mg/L (Daphnia magna)

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Light aliphatic solvent naphtha	64742-89-8	Readily biodegradable (77.05% @ 28d)
Toluene	108-88-3	Readily biodegradable
Acetic acid	64-19-7	Readily biodegradable (99% @ 7d)
Ethylene glycol monobutyl ether	111-76-2	Readily biodegradable (75-88% @ 28d)
Isopropanol	67-63-0	Readily biodegradable (53% @ 5d)

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Light aliphatic solvent naphtha	64742-89-8	Log Kow > 3
Toluene	108-88-3	2.73
Acetic acid	64-19-7	Log Kow =-0.17
Ethylene glycol monobutyl ether	111-76-2	LogPow 0.81
Isopropanol	67-63-0	0.05

12.4. Mobility in soil

Substances	CAS Number	Mobility
Light aliphatic solvent naphtha	64742-89-8	No information available
Toluene	108-88-3	No information available
Acetic acid	64-19-7	No information available
Ethylene glycol monobutyl ether	111-76-2	No information available
Isopropanol	67-63-0	KOC = 1.5

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 Toluene, Acetic acid)
Transport Hazard Class(es): 3 (8)
Packing Group: II
Environmental Hazards Not applicable
NAERG: NAERG 132

Canadian TDG

UN Number UN2924
UN proper shipping name: Flammable Liquid, Corrosive, N.O.S. (Contains Toluene, Acetic acid)
Transport Hazard Class(es): 3
Packing Group: II
Environmental Hazards Not applicable

IMDG/IMO

UN Number UN2924
UN proper shipping name: Flammable Liquid, Corrosive, N.O.S. (Contains Toluene, Acetic acid)
Transport Hazard Class(es): 3 (8)
Packing Group: II
Environmental Hazards Not applicable
EMS: EmS F-E, S-C

IATA/ICAO

UN Number UN2924
UN proper shipping name: Flammable Liquid, Corrosive, N.O.S. (Contains Toluene, Acetic acid)
Transport Hazard Class(es): 3 (8)
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
Light aliphatic solvent naphtha	64742-89-8	Not applicable
Toluene	108-88-3	Not applicable
Acetic acid	64-19-7	Not applicable
Ethylene glycol monobutyl ether	111-76-2	Not applicable
Isopropanol	67-63-0	Not applicable

EPA SARA Title III Extremely Hazardous Substances

Substances	CAS Number	EPA SARA Title III Extremely Hazardous Substances
Light aliphatic solvent naphtha	64742-89-8	Not applicable
Toluene	108-88-3	Not applicable
Acetic acid	64-19-7	Not applicable
Ethylene glycol monobutyl ether	111-76-2	Not applicable

Isopropanol	67-63-0	Not applicable
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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
Light aliphatic solvent naphtha	64742-89-8	Not applicable	Not applicable
Toluene	108-88-3	1.0%	>= 1.0 %
Acetic acid	64-19-7	Not applicable	Not applicable
Ethylene glycol monobutyl ether	111-76-2	1.0%	Not applicable
Isopropanol	67-63-0	1.0%	Not applicable

EPA CERCLA/Superfund Reportable Spill Quantity

Substances	CAS Number	CERCLA RQ
Light aliphatic solvent naphtha	64742-89-8	Not applicable
Toluene	108-88-3	1000 lb 454 kg 1 lb 0.454 kg
Acetic acid	64-19-7	5000 lb 2270 kg
Ethylene glycol monobutyl ether	111-76-2	Not applicable
Isopropanol	67-63-0	Not applicable

EPA RCRA Hazardous Waste Classification

Ignitability D001
Corrosivity D002

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 3, Flammability 3, Reactivity 0

HMIS Ratings: Health 3*, 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: 21-Mar-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/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