



SAFETY DATA SHEET

1. Identification

Product identifier: 323B FOAM & FABRIC ADHESIVE - 5 GAL

Other means of identification

SDS number: RE1000002667

Recommended restrictions

Product use: Adhesive

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name: Camie-Campbell, Inc.
Address: 1000 INTEGRAM DRIVE
PACIFIC, MO 63069
Telephone: 800-325-9572
Fax:

Emergency telephone number: 1-866-836-8855

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids Category 2

Health Hazards

Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2A
Toxic to reproduction Category 2
Specific Target Organ Toxicity -
Single Exposure Category 3¹
Specific Target Organ Toxicity -
Repeated Exposure Category 2
Aspiration Hazard Category 1

Target Organs

1. Narcotic effect.

Environmental Hazards

Acute hazards to the aquatic
environment Category 2
Chronic hazards to the aquatic
environment Category 2

Label Elements

Hazard Symbol:

SDS_US - RE1000002667



Signal Word:	Danger
Hazard Statement:	Highly flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. Suspected of damaging fertility or the unborn child. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects.
Precautionary Statements	
Prevention:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof [electrical/ventilating/lighting/#] equipment. Use non-sparking tools. Take action to prevent static discharges. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid release to the environment.
Response:	IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. If skin irritation occurs: Get medical advice/attention. IF SWALLOWED: Immediately call a POISON CENTER/doctor/# Do NOT induce vomiting. Call a POISON CENTER/doctor if you feel unwell. Specific treatment (see on this label). Take off contaminated clothing. In case of fire: Use# to extinguish. Collect spillage.
Storage:	Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed.
Disposal:	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Hazard(s) not otherwise classified (HNOC):	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

3. Composition/information on ingredients



Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Naphtha (petroleum), hydrotreated light	64742-49-0	50 - <100%
Hexane	110-54-3	25 - <50%
2-Propanone	67-64-1	20 - <50%
Cyclohexane	110-82-7	1 - <5%
Phenol, 4-nonyl-, branched	84852-15-3	0.01 - <1%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

- Ingestion:** Rinse mouth. Call a physician or poison control center immediately. Never give liquid to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
- Inhalation:** Move to fresh air.
- Skin Contact:** Take off immediately all contaminated clothing. Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Get medical attention.
- Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: No data available.

5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations.



Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

Methods and material for containment and cleaning up: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. In case of leakage, eliminate all ignition sources.

Notification Procedures: Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.

7. Handling and storage

Precautions for safe handling: Wash hands thoroughly after handling. Avoid contact with eyes. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Take precautionary measures against static discharges. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with skin.

Conditions for safe storage, including any incompatibilities: Store locked up. Store in a well-ventilated place. Store in a cool place.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Naphtha (petroleum), hydrotreated light	PEL	100 ppm 400 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (03 2016)
	REL	100 ppm 400 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	TWA	100 ppm 400 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Hexane	TWA	50 ppm 180 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	PEL	500 ppm 1,800 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)



	REL	50 ppm 180 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	50 ppm	US. ACGIH Threshold Limit Values (2008)
2-Propanone	STEL	1,000 ppm 2,400 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	PEL	1,000 ppm 2,400 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	250 ppm	US. ACGIH Threshold Limit Values (03 2015)
	TWA	750 ppm 1,800 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	500 ppm	US. ACGIH Threshold Limit Values (03 2015)
	REL	250 ppm 590 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
Cyclohexane	TWA	100 ppm	US. ACGIH Threshold Limit Values (2008)
	TWA	300 ppm 1,050 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	REL	300 ppm 1,050 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	300 ppm 1,050 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Talc (Mg3H2(SiO3)4) - Respirable fraction.	TWA	2 mg/m3	US. ACGIH Threshold Limit Values (2008)
Talc (Mg3H2(SiO3)4) - Respirable.	REL	2 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
Talc (Mg3H2(SiO3)4) - Respirable dust.	TWA	2 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Talc (Mg3H2(SiO3)4)	TWA	20 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
Talc (Mg3H2(SiO3)4) - Respirable.	TWA	2.4 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
	TWA	0.1 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
Benzene	REL	0.1 ppm	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	1 ppm	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	Ceiling	25 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	STEL	1 ppm	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	0.5 ppm	US. ACGIH Threshold Limit Values (2008)
	STEL	5 ppm	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	1 ppm	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (02 2006)
	STEL	2.5 ppm	US. ACGIH Threshold Limit Values (2008)
	STEL	5 ppm	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (02 2006)
	OSHA_ACT	0.5 ppm	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (02 2006)
	TWA	10 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	MAX. CONC	50 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
Heptane	TWA	400 ppm 1,600 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	REL	85 ppm 350 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	500 ppm 2,000 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	STEL	500 ppm 2,000 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	400 ppm	US. ACGIH Threshold Limit Values (02 2012)
	STEL	500 ppm	US. ACGIH Threshold Limit Values (02 2012)



	Ceil_Time	440 ppm	1,800 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
Phenol	TWA	5 ppm		US. ACGIH Threshold Limit Values (2008)
	REL	5 ppm	19 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	Ceil_Time	15.6 ppm	60 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	5 ppm	19 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	5 ppm	19 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Benzene, ethenyl-	TWA	20 ppm		US. ACGIH Threshold Limit Values (2008)
	STEL	40 ppm		US. ACGIH Threshold Limit Values (2008)
	REL	50 ppm	215 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	STEL	100 ppm	425 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	50 ppm	215 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	100 ppm	425 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	100 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	Ceiling	200 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	MAX. CONC	600 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	TWA	2 ppm		US. ACGIH Notice of Intended Changes (NIC) to Threshold Limit Values (03 2018)
Benzene, methyl-	STEL	150 ppm	560 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	REL	100 ppm	375 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	100 ppm	375 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	Ceiling	300 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	TWA	20 ppm		US. ACGIH Threshold Limit Values (2008)
	TWA	200 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	MAX. CONC	500 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	STEL	150 ppm	560 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
Benzene, ethyl-	STEL	125 ppm	545 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	REL	100 ppm	435 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	100 ppm	435 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	STEL	125 ppm	545 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	100 ppm	435 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	20 ppm		US. ACGIH Threshold Limit Values (12 2010)

Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
Hexane (2,5-Hexanedion, without hydrolysis: Sampling time: End of shift.)	0.5 mg/l (Urine)	ACGIH BEL (03 2018)
2-Propanone (acetone: Sampling time: End of shift.)	25 mg/l (Urine)	ACGIH BEL (03 2015)
Benzene (t,t-Muconic acid: Sampling time: End of shift.)	500 µg/g (Creatinine in urine)	ACGIH BEL (03 2013)
Benzene (S-Phenylmercapturic acid: Sampling time: End of shift.)	25 µg/g (Creatinine in urine)	ACGIH BEL (03 2013)
Phenol (Phenol with hydrolysis: Sampling time: End of shift.)	250 mg/g (Creatinine in urine)	ACGIH BEL (03 2013)
Benzene, ethenyl- (Mandelic acid plus phenylglyoxylic acid: Sampling time: End of shift.)	400 mg/g (Creatinine in urine)	ACGIH BEL (03 2013)
Benzene, ethenyl- (styrene: Sampling time: End of shift.)	40 µg/l (Urine)	ACGIH BEL (03 2015)



Benzene, methyl- (toluene: Sampling time: End of shift.)	0.03 mg/l (Urine)	ACGIH BEL (03 2013)
Benzene, methyl- (o-Cresol, with hydrolysis: Sampling time: End of shift.)	0.3 mg/g (Creatinine in urine)	ACGIH BEL (03 2013)
Benzene, methyl- (toluene: Sampling time: Prior to last shift of work week.)	0.02 mg/l (Blood)	ACGIH BEL (03 2013)
Benzene, ethyl- (Sum of mandelic acid and phenylglyoxylic acid: Sampling time: End of shift.)	0.15 g/g (Creatinine in urine)	ACGIH BEL (02 2014)

Appropriate Engineering Controls No data available.

Individual protection measures, such as personal protective equipment

General information: Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If exposure limits have not been established, maintain airborne levels to an acceptable level. Use explosion-proof ventilation equipment.

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin Protection

Hand Protection: No data available.

Other: Wear suitable protective clothing. Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

Hygiene measures: Observe good industrial hygiene practices. Avoid contact with eyes. When using do not smoke. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Wash contaminated clothing before reuse. Avoid contact with skin. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Appearance

Physical state: liquid
Form: liquid
Color: No data available.
Odor: No data available.
Odor threshold: No data available.
pH: No data available.
Melting point/freezing point: No data available.
Initial boiling point and boiling range: estimated > 63.67 °C
Flash Point: estimated > 17.8 °C
Evaporation rate: No data available.
Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits



Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Density:	No data available.
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Heat, sparks, flames.
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	No data available.

11. Toxicological information

Information on likely routes of exposure

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:	No data available.
Skin Contact:	No data available.



Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

Naphtha (petroleum),
hydrotreated light LD 50 (Rat): > 5,000 mg/kg

Hexane LD 50: > 2,000 mg/kg

2-Propanone LD 50 (Rat): 5,800 mg/kg

Cyclohexane LD 50 (Rat): > 5,000 mg/kg

Phenol, 4-nonyl-,
branched LD 50 (Rat): 1,246 mg/kg

Dermal

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

Naphtha (petroleum),
hydrotreated light LD 50 (Rabbit): > 3,750 mg/kg

Hexane LD 50 (Rabbit): > 2,000 mg/kg

2-Propanone LD 50 (Rabbit): > 7,426 mg/kg

Cyclohexane LD 50 (Rabbit): > 2,000 mg/kg

Phenol, 4-nonyl-,
branched LC 50: > 2,000 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

Naphtha (petroleum),
hydrotreated light LOAEL (Human): 2,400 mg/m³
LC 50 (Rat): > 7,630 mg/m³
LC 50: > 5 mg/l

Hexane LC 50 (Rat): > 31.86 mg/l
LC 50: > 5 mg/l

2-Propanone LC 50 (Rat): 50.1 mg/l
LC 50: > 5 mg/l

Cyclohexane LC 50 (Rat): > 32,880 mg/m³

Phenol, 4-nonyl-,
branched LC 50: > 5 mg/l
LC 50: > 20 mg/l



Repeated dose toxicity

Product: No data available.

Specified substance(s):

Naphtha (petroleum), hydrotreated light	LOAEL (Rat(Female, Male), Oral, 13 Weeks): 1,250 mg/kg Oral Read-across based on grouping of substances (category approach), Key study NOAEL (Rat(Female, Male), Dermal, 28 d): > 375 mg/kg Dermal Experimental result, Supporting study NOAEL (Rat(Female, Male), Inhalation): 10,000 mg/m ³ Inhalation Experimental result, Key study
Hexane	NOAEL (Mouse(Male), Inhalation, 13 Weeks): 500 ppm(m) Inhalation Experimental result, Key study LOAEL (Mouse(Male), Inhalation, 13 Weeks): 1,000 ppm(m) Inhalation Experimental result, Key study LOAEL (Rat(Male), Inhalation, 16 Weeks): 3,000 ppm(m) Inhalation Experimental result, Key study LOAEL (Mouse(Female), Inhalation, 13 Weeks): 500 ppm(m) Inhalation Experimental result, Key study
2-Propanone	NOAEL (Rat(Male), Oral, 13 Weeks): 10,000 ppm(m) Oral Experimental result, Key study
Cyclohexane	NOAEL (Rat(Female, Male), Inhalation, 13 - 18 Weeks): 7,000 ppm(m) Inhalation Experimental result, Key study NOAEL (Mouse(Female, Male), Inhalation, 13 - 18 Weeks): 500 ppm(m) Inhalation Experimental result, Key study
Phenol, 4-nonyl-, branched	NOAEL (Rat(Female, Male), Oral, 14 - 18 Weeks): 650 ppm(m) Oral Experimental result, Key study

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

2-Propanone	in vivo (Rabbit): Not irritant Experimental result, Supporting study
Cyclohexane	Review (Various): Irritating. in vivo (Rabbit): Not irritant Experimental result, Weight of Evidence study
Phenol, 4-nonyl-, branched	in vivo (Rabbit): Corrosive Experimental result, Weight of Evidence study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Naphtha (petroleum), hydrotreated light	Rabbit, 24 - 72 hrs: Not irritating
Hexane	Rabbit, 1 - 72 hrs: Not irritating
2-Propanone	Irritating. Rabbit, 24 hrs: Minimum grade of severe eye irritant
Phenol, 4-nonyl-, branched	Rabbit, 24 - 72 hrs: Corrosive

Respiratory or Skin Sensitization

Product: No data available.



Specified substance(s):

Naphtha (petroleum), hydrotreated light	Skin sensitization:, in vivo (Guinea pig): Non sensitising
2-Propanone	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Cyclohexane	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Phenol, 4-nonyl-, branched	Skin sensitization:, in vivo (Guinea pig): Non sensitising

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specified substance(s):

Hexane	Suspected of damaging fertility or the unborn child.
Phenol, 4-nonyl-, branched	Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s):

Hexane	Inhalation - vapor: Narcotic effect. - Category 3 with narcotic effects.
2-Propanone	Inhalation - vapor: Narcotic effect. - Category 3 with narcotic effects.
Cyclohexane	Inhalation - vapor: Narcotic effect. - Category 3 with narcotic effects.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Specified substance(s):

Hexane	Inhalation - vapor: Nervous System - Category 2
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Target Organs

Specific Target Organ Toxicity - Single Exposure: Narcotic effect.

Aspiration Hazard

Product: No data available.

Specified substance(s):

Naphtha (petroleum), hydrotreated light	May be fatal if swallowed and enters airways.
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Hexane May be fatal if swallowed and enters airways.
Cyclohexane May be fatal if swallowed and enters airways.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Naphtha (petroleum),
hydrotreated light LC 50 (96 h): 8.41 mg/l Experimental result, Key study

Hexane LC 50 (Fathead minnow (Pimephales promelas), 96 h): 2.101 - 2.981 mg/l
Mortality

2-Propanone LC 50 (Oncorhynchus mykiss, 96 h): 5,540 mg/l Experimental result, Key
study

Cyclohexane LC 50 (Pimephales promelas, 96 h): 4.53 mg/l Experimental result, Key
study

Phenol, 4-nonyl-,
branched LC 50 (Oncorhynchus mykiss, 96 h): 221 µg/l Experimental result, Key study

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Naphtha (petroleum),
hydrotreated light EC 50 (Daphnia magna, 48 h): 4.5 mg/l Experimental result, Key study

Hexane EC 50 (Daphnia magna, 48 h): 21.85 mg/l QSAR QSAR, Key study
LC 50 (Water flea (Daphnia magna), 24 h): > 50 mg/l Mortality

2-Propanone LC 50 (Daphnia pulex, 48 h): 8,800 mg/l Experimental result, Key study

Cyclohexane EC 50 (Daphnia magna, 48 h): 0.9 mg/l Experimental result, Key study

Phenol, 4-nonyl-,
branched EC 50 (Daphnia magna, 48 h): 84.4 µg/l Experimental result, Key study

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Naphtha (petroleum),
hydrotreated light EC 50 (Daphnia magna): 10 mg/l Other, Key study
NOAEL (Daphnia magna): 2.6 mg/l Other, Key study



Hexane	NOAEL (Oncorhynchus mykiss): 2.8 mg/l QSAR QSAR, Key study
Phenol, 4-nonyl-, branched	LOAEL (Oncorhynchus mykiss): 0.0103 mg/l Experimental result, Key study

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Naphtha (petroleum), hydrotreated light
EC 50 (Daphnia magna): 10 mg/l Experimental result, Key study
NOAEL (Daphnia magna): 2.6 mg/l Experimental result, Key study

Hexane
NOAEL (Daphnia magna): 4.888 mg/l QSAR QSAR, Key study

2-Propanone
LOAEL (Daphnia magna): 2,212 mg/l Experimental result, Key study
NOAEL (Daphnia magna): 2,212 mg/l Experimental result, Key study

Phenol, 4-nonyl-, branched
NOAEL (Daphnia magna): 0.039 mg/l Experimental result, Key study

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

Naphtha (petroleum), hydrotreated light
90.35 % (28 d) Detected in water. Experimental result, Supporting study

Hexane
81 % Detected in water. Read-across based on grouping of substances (category approach), Key study

2-Propanone
90.9 % (28 d) Detected in water. Experimental result, Key study

Cyclohexane
77 % (28 d) Detected in water. Experimental result, Key study

Phenol, 4-nonyl-, branched
100 % (63 d) Sediment Experimental result, Key study
46 % Sediment Experimental result, Key study

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):

Naphtha (petroleum), hydrotreated light
Bioconcentration Factor (BCF): 10 - 2,500 Aquatic sediment Estimated by calculation, Key study

Hexane
Pimephales promelas, Bioconcentration Factor (BCF): 501.19 Aquatic sediment QSAR, Key study

2-Propanone
Haddock, adult, Bioconcentration Factor (BCF): 0.69 Aquatic sediment Experimental result, Not specified



Cyclohexane	Cyprinus carpio, Bioconcentration Factor (BCF): 37 - 129 Aquatic sediment Experimental result, Supporting study
Phenol, 4-nonyl-, branched	Pimephales promelas, Bioconcentration Factor (BCF): 740 Aquatic sediment Experimental result, Key study Lepomis macrochirus, Bioconcentration Factor (BCF): 231 Aquatic sediment Experimental result, Key study

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Specified substance(s):

Naphtha (petroleum),
hydrotreated light
Log Kow: > 2.4 - < 5.7 23 °C Yes Experimental result, Key study
Log Kow: 2.2 - 5.2 23 °C Yes Experimental result, Key study
Log Kow: 2.2 - 6.1 23 °C Yes Experimental result, Key study

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Naphtha (petroleum), hydrotreated light	No data available.
Hexane	No data available.
2-Propanone	No data available.
Cyclohexane	No data available.
Phenol, 4-nonyl-, branched	No data available.

Other adverse effects: Toxic to aquatic life with long lasting effects.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated Packaging: No data available.

14. Transport information

DOT

UN Number:	UN 1993
UN Proper Shipping Name:	Flammable liquids, n.o.s.
Transport Hazard Class(es)	
Class:	3
Label(s):	–
Packing Group:	II
Marine Pollutant:	Yes
Environmental Hazards	No
Marine Pollutant	Yes
Special precautions for user:	Not regulated.

IMDG

UN Number:	UN 1993
UN Proper Shipping Name:	Flammable liquids, n.o.s.
Transport Hazard Class(es)	



Class: 3
 Label(s): -
 EmS No.:
 Packing Group: II
 Environmental Hazards: No
 Marine Pollutant: Yes
 Special precautions for user: Not regulated.

IATA

UN Number: UN 1993
 Proper Shipping Name: Flammable liquids, n.o.s.
 Transport Hazard Class(es):
 Class: 3
 Label(s): -
 Packing Group: II
 Environmental Hazards: No
 Marine Pollutant: Yes
 Special precautions for user: Not regulated.
 Cargo aircraft only: Allowed.

15. Regulatory information

US Federal Regulations

Restrictions on use: Not known.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
 US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

<u>Chemical Identity</u>	<u>OSHA hazard(s)</u>
Benzene	respiratory tract irritation Central nervous system Blood Skin Flammability Cancer Aspiration Eye

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Hexane	lbs. 5000
2-Propanone	lbs. 5000
Cyclohexane	lbs. 1000
Benzene	lbs. 10
Heptane	lbs. 100
Phenol	lbs. 1000
Benzene, ethenyl-	lbs. 1000
Benzene, methyl-	lbs. 1000
Benzene, ethyl-	lbs. 1000



Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

- Fire Hazard
- Immediate (Acute) Health Hazards
- Delayed (Chronic) Health Hazard
- Flammable liquids
- Skin Corrosion/Irritation
- Serious Eye Damage/Eye Irritation
- Toxic to reproduction
- Specific Target Organ Toxicity - Single Exposure
- Specific Target Organ Toxicity - Repeated Exposure
- Aspiration Hazard
- Static-accumulating flammable liquid

SARA 302 Extremely Hazardous Substance

<u>Chemical Identity</u>	<u>Reportable quantity</u>	<u>Threshold Planning Quantity</u>
Hexane		
2-Propanone		
Phenol	lbs. 1000	- - -

SARA 304 Emergency Release Notification

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Hexane	lbs. 5000
2-Propanone	lbs. 5000
Cyclohexane	lbs. 1000
Benzene	lbs. 10
Heptane	lbs. 100
Phenol	lbs. 1000
Benzene, ethenyl-	lbs. 1000
Benzene, methyl-	lbs. 1000
Benzene, ethyl-	lbs. 1000

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Phenol	lbs
Naphtha (petroleum), hydrotreated light	10000 lbs
Hexane	10000 lbs
2-Propanone	10000 lbs
Cyclohexane	10000 lbs
Talc (Mg3H2(SiO3)4)	10000 lbs
Benzene	10000 lbs
Heptane	10000 lbs
Phenol, 4-nonyl-, branched	10000 lbs
Benzene, ethenyl-	10000 lbs
Benzene, methyl-	10000 lbs
Benzene, ethyl-	10000 lbs

SARA 313 (TRI Reporting)

<u>Chemical Identity</u>	<u>Reporting threshold for other users</u>	<u>Reporting threshold for manufacturing and processing</u>
Hexane	lbs	lbs.
Cyclohexane	lbs	lbs.



**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
US State Regulations**

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Hexane	Male reproductive toxin. 12 2017
Benzene	Developmental toxin. 03 2008
Benzene	Carcinogenic. 05 2011
Benzene	Male reproductive toxin. 03 2008
Benzene, ethenyl-	Carcinogenic. 04 2016
Benzene, methyl-	Developmental toxin. 03 2008
Benzene, ethyl-	Carcinogenic. 05 2011

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

Naphtha (petroleum), hydrotreated light
Hexane
2-Propanone
Cyclohexane

US. Massachusetts RTK - Substance List

Chemical Identity

Benzene
Phenol
Benzene, ethenyl-

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Naphtha (petroleum), hydrotreated light
Hexane
2-Propanone
Cyclohexane

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

International regulations

Montreal protocol

Hexane
2-Propanone

Stockholm convention

Hexane
2-Propanone

Rotterdam convention

Hexane
2-Propanone

Kyoto protocol



Inventory Status:

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
EINECS, ELINCS or NLP:	Not in compliance with the inventory.
Japan (ENCS) List:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	Not in compliance with the inventory.
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	Not in compliance with the inventory.
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.
Mexico INSQ:	Not in compliance with the inventory.
Ontario Inventory:	Not in compliance with the inventory.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory

16. Other information, including date of preparation or last revision

Issue Date:	09/05/2019
Revision Information:	No data available.
Version #:	1.0
Further Information:	No data available.
Disclaimer:	This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.