



SAFETY DATA SHEET

1. Identification

Product identifier: Camie 556 Spray Adhesive

Other means of identification

SDS number: RE1000039705

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:
Fax:

Emergency telephone number: 1-866-836-8855

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable aerosol Category 1

Health Hazards

Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2A
Skin sensitizer Category 1
Specific Target Organ Toxicity - Single Exposure Category 3¹

Target Organs

1. Narcotic effect.

Environmental Hazards

Acute hazards to the aquatic environment Category 3
Chronic hazards to the aquatic environment Category 3

Label Elements

Hazard Symbol:





Signal Word:	Danger
Hazard Statement:	Extremely flammable aerosol. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. May cause drowsiness or dizziness. Harmful 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. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Use only outdoors or in a well-ventilated area. 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: Wash with plenty of water/... If skin irritation or rash occurs: Get medical advice/attention. Call a POISON CENTER/doctor if you feel unwell. Specific treatment (see on this label). Wash contaminated clothing before reuse.
Storage:	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place. Keep container tightly closed. Store locked up.
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):	None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
2-Propanone	67-64-1	20 - <50%
Propane	74-98-6	10 - <20%
Butane	106-97-8	10 - <20%
Heptane, branched, cyclic and linear	426260-76-6	5 - <10%
Heptane	142-82-5	5 - <10%
Naphtha (petroleum), hydrotreated light	64742-49-0	5 - <10%
Solvent naphtha (petroleum), light aliph.	64742-89-8	5 - <10%
Acetic acid, methyl ester	79-20-9	5 - <10%



Maleic Anhydride Modified Liquid Polyisoprene	841251-34-1	1 - <5%
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	1 - <5%
Methanol	67-56-1	0.1 - <1%

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

4. First-aid measures

- Ingestion:** Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
- Inhalation:** Move to fresh air.
- Skin Contact:** Get medical attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, 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. 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.

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.
- Notification Procedures:** Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so 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:** Avoid contact with eyes. Wash hands thoroughly after handling. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Avoid contact with skin. Avoid contact with eyes, skin, and clothing.
- Conditions for safe storage, including any incompatibilities:** Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Aerosol Level 3

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
2-Propanone	STEL	1,000 ppm 2,400 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	750 ppm 1,780 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	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)
	Ceiling	3,000 ppm	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	STEL	500 ppm	US. ACGIH Threshold Limit Values (03 2015)
Propane	TWA PEL	500 ppm 1,200 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	REL	250 ppm 590 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	REL	1,000 ppm 1,800 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)



	PEL	1,000 ppm	1,800 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA PEL	1,000 ppm	1,800 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	TWA	1,000 ppm	1,800 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	TWA	1,000 ppm	1,800 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Butane	REL	800 ppm	1,900 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	800 ppm	1,900 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	STEL	1,000 ppm		US. ACGIH Threshold Limit Values (03 2018)
	TWA	800 ppm	1,900 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	AN ESL		3,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		7,100 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	TWA PEL	800 ppm	1,900 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	ST ESL		66,000 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		28,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
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)
	TWA PEL	300 ppm	1,350 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (01 2015)
	STEL	400 ppm	1,800 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (01 2015)
	TWA	100 ppm	400 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	REL	100 ppm	400 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	ST ESL		3,500 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		350 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	TWA	100 ppm	400 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Solvent naphtha (petroleum), light aliph.	ST ESL		3,500 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		350 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	TWA	100 ppm	400 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	STEL	400 ppm	1,800 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (01 2015)
	REL	100 ppm	400 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	TWA PEL	300 ppm	1,350 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (01 2015)
	TWA	100 ppm	400 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	PEL	100 ppm	400 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (03 2016)



Heptane	TWA	400 ppm 1,600 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	500 ppm 2,000 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	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)
	TWA	400 ppm 1,600 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	ST ESL	10,000 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL	2,700 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL	2,400 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	Ceil_Time	440 ppm 1,800 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA PEL	400 ppm 1,600 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	STEL	500 ppm 2,000 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	AN ESL	660 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Acetic acid, methyl ester	REL	200 ppm 610 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	STEL	250 ppm 760 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	200 ppm 610 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	STEL	250 ppm	US. ACGIH Threshold Limit Values (2008)
	AN ESL	600 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	TWA	200 ppm 610 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	250 ppm 760 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	250 ppm 760 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	ST ESL	6,000 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	TWA	200 ppm	US. ACGIH Threshold Limit Values (2008)
	TWA PEL	200 ppm 610 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	STEL	250 ppm 760 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	TWA	200 ppm 610 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	AN ESL	200 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL	2,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Methanol	TWA	200 ppm 260 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)



	STEL	250 ppm	325 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	AN ESL		2,100 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		1,600 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		3,900 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		3,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	STEL	250 ppm	325 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	STEL	250 ppm		US. ACGIH Threshold Limit Values (2008)
	STEL	250 ppm	325 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	TWA	200 ppm	260 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	Ceiling	1,000 ppm		US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	TWA PEL	200 ppm	260 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	TWA	200 ppm		US. ACGIH Threshold Limit Values (2008)
	STEL	250 ppm	325 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	REL	200 ppm	260 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	200 ppm	260 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
2-Propanone (acetone: Sampling time: End of shift.)	25 mg/l (Urine)	ACGIH BEL (03 2015)
Methanol (methanol: Sampling time: End of shift.)	15 mg/l (Urine)	ACGIH BEL (03 2013)

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.

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. Wash contaminated clothing before reuse. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	Spray Aerosol
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:	No data available.
Flash Point:	Estimated -104.4 °C
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	Estimated 11.4 %(V)
Flammability limit - lower (%):	Estimated 2.2 %(V)
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:	Avoid heat or contamination.
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):

2-Propanone	LD 50 (Rat): 5,800 mg/kg
Heptane, branched, cyclic and linear	LD 50: > 2,000 mg/kg
Heptane	LD 50 (Rat): > 5,000 mg/kg
Naphtha (petroleum), hydrotreated light	LD 50 (Rat): > 5,000 mg/kg
Solvent naphtha (petroleum), light aliph.	LD 50 (Rat): > 5,000 mg/kg
Acetic acid, methyl ester	LD 50 (Rat): 6,482 mg/kg
Maleic Anhydride Modified Liquid Polyisoprene	LD 50: > 2,000 mg/kg
Benzene, 1-chloro-4-(trifluoromethyl)-	LD 50 (Rat): > 2,000 mg/kg



Methanol LD 50 (Rat): > 1,187 - 2,769 mg/kg

Dermal Product: ATEmix: 580,091.78 mg/kg

Inhalation Product: ATEmix: 145.41 mg/l

Repeated dose toxicity Product: No data available.

Specified substance(s):

2-Propanone NOAEL (Rat(Male), Oral, 13 Weeks): 10,000 ppm(m) Oral Experimental result, Key study

Propane NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study
LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study

Butane NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study
LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study

Heptane NOAEL (Rat(Male), Inhalation): 12,470 mg/m3 Inhalation Experimental result, Key study

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/m3 Inhalation Experimental result, Key study

Solvent naphtha (petroleum), light aliph. NOAEL (Mouse, Rat(Female, Male), Inhalation, 107 - 113 Weeks): 1,402 mg/m3 Inhalation Experimental result, Key study
NOAEL (Rat(Female, Male), Dermal, 5 - 28 d): 3,750 mg/kg Dermal Experimental result, Key study
NOAEL (Rat(Female, Male), Dermal, 28 d): > 375 mg/kg Dermal Experimental result, Supporting study

Acetic acid, methyl ester NOAEL (Rat(Female, Male), Inhalation, 28 d): 350 ppm(m) Inhalation Experimental result, Key study
LOAEL (Rat(Female, Male), Inhalation, 28 d): 2,000 ppm(m) Inhalation Experimental result, Key study

Benzene, 1-chloro-4-(trifluoromethyl)- NOAEL (Rat(Male), Oral, 90 - 92 d): 40 mg/kg Oral Experimental result, Key study
NOAEL (Rat(Male), Inhalation): 5.5 mg/m3 Inhalation Experimental result, Key study

Methanol LOAEL (Rat(Male), Inhalation, 1 - 6 Weeks): 13.3 mg/l Inhalation Experimental result, Supporting study

Skin Corrosion/Irritation Product: No data available.

Specified substance(s):

2-Propanone in vivo (Rabbit): Not irritant Experimental result, Supporting study

Heptane in vivo (Rabbit): Irritating Read-across based on grouping of substances (category approach), Key study

Acetic acid, methyl ester in vivo (Rabbit): Not irritant Experimental result, Key study



Benzene, 1-chloro-4-(trifluoromethyl)-	in vivo (Rabbit): Not irritant (unspecified classification) Experimental result, Key study
Methanol	in vivo (Rabbit): Not irritant Experimental result, Key study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

2-Propanone	Irritating. Rabbit, 24 hrs: Minimum grade of severe eye irritant
Heptane	Rabbit, 24 - 72 hrs: Not irritating
Naphtha (petroleum), hydrotreated light	Rabbit, 24 - 72 hrs: Not irritating
Solvent naphtha (petroleum), light aliph.	Rabbit: Not irritating
Acetic acid, methyl ester	Rabbit: Irritating

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

2-Propanone	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Heptane	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Naphtha (petroleum), hydrotreated light	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Solvent naphtha (petroleum), light aliph.	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Methanol	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.



Specific Target Organ Toxicity - Single Exposure

Product:	No data available.
Specified substance(s):	
2-Propanone	Inhalation - vapor: Narcotic effect. - Category 3 with narcotic effects.
Heptane	Narcotic effect. - Category 3 with narcotic effects.
Methanol	Causes damage to organs.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Target Organs

Specific Target Organ Toxicity - Single Exposure: Narcotic effect.

Aspiration Hazard

Product: No data available.

Specified substance(s):

Heptane, branched, cyclic and linear	May be fatal if swallowed and enters airways.
Heptane	May be fatal if swallowed and enters airways.
Naphtha (petroleum), hydrotreated light	May be fatal if swallowed and enters airways.
Solvent naphtha (petroleum), light aliph.	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):	
2-Propanone	LC 50 (Oncorhynchus mykiss, 96 h): 5,540 mg/l Experimental result, Key study
Propane	LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
Butane	LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
Heptane	LC 50 (Mozambique tilapia (Tilapia mossambica), 96 h): 375 mg/l Mortality
Naphtha (petroleum), hydrotreated light	LC 50 (96 h): 8.41 mg/l Experimental result, Key study
Solvent naphtha (petroleum), light aliph.	LL 50 (Pimephales promelas, 96 h): 8.2 mg/l Experimental result, Key study
Acetic acid, methyl ester	LC 50 (Fathead minnow (Pimephales promelas), 96 h): 295 - 348 mg/l Mortality LC 50 (Danio rerio, 48 h): 250 - 350 mg/l Experimental result, Key study
Benzene, 1-chloro-4-(trifluoromethyl)-	NOAEL (96 h): 2.2 mg/l Experimental result, Key study LC 50 (96 h): 3 mg/l Experimental result, Key study



Methanol EC 50 (Lepomis macrochirus, 96 h): 12,700 mg/l Experimental result, Key study

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

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

Butane LC 50 (Daphnia sp., 48 h): 69.43 mg/l QSAR QSAR, Key study

Heptane EC 50 (Daphnia magna, 48 h): 1.5 mg/l Experimental result, Key study

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

Solvent naphtha (petroleum), light aliph. EC 50 (Daphnia magna, 48 h): 4.5 mg/l Experimental result, Key study
NOAEL (Daphnia magna, 48 h): 0.5 mg/l Experimental result, Key study

Acetic acid, methyl ester EC 50 (Daphnia magna, 48 h): 1,026.7 mg/l Experimental result, Key study

Benzene, 1-chloro-4-(trifluoromethyl)- NOAEL (Daphnia magna, 48 h): 9.15 mg/l Experimental result, Key study
EC 50 (Daphnia magna, 48 h): 18.84 mg/l Experimental result, Key study

Methanol EC 50 (Daphnia magna, 96 h): 18,260 mg/l Experimental result, Key study

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Heptane NOAEL (Oncorhynchus mykiss): 1.284 mg/l QSAR QSAR, Key study

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

Solvent naphtha (petroleum), light aliph. NOAEL (Daphnia magna): 2.6 mg/l Other, Key study

Methanol EC 50 (Oryzias latipes): 9,164 mg/l Experimental result, Supporting study

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

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

Heptane, branched, cyclic and linear NOEC : < 1 mg/l estimation

Heptane NOAEL (Daphnia magna): 0.17 mg/l Read-across based on grouping of substances (category approach), Key study
EC 50 (Daphnia magna): 0.23 mg/l Read-across based on grouping of substances (category approach), Key study

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



Solvent naphtha
(petroleum), light aliph.

EC 50 (Daphnia magna): > 40 mg/l Experimental result, Key study

Methanol

NOAEL (Daphnia magna): 122 mg/l Experimental result, Supporting study

**Toxicity to Aquatic Plants
Product:**

No data available.

Persistence and Degradability

Biodegradation

Product:

No data available.

Specified substance(s):

2-Propanone

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

Propane

100 % (385.5 h) Detected in water. Experimental result, Key study
50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study

Butane

100 % (385.5 h) Detected in water. Experimental result, Key study
50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study

Heptane

70 % Detected in water. Experimental result, Key study

Naphtha (petroleum),
hydrotreated light

90.35 % (28 d) Detected in water. Experimental result, Supporting study

Solvent naphtha
(petroleum), light aliph.

89 % (28 d) Detected in water. Experimental result, Supporting study
94 % (25 d) Detected in water. Experimental result, Supporting study
74.76 % Detected in water. Experimental result, Supporting study
90.35 % (28 d) Detected in water. Experimental result, Supporting study
14.89 % Detected in water. Experimental result, Supporting study

Acetic acid, methyl ester

70 % Detected in water. Experimental result, Key study

Benzene, 1-chloro-4-
(trifluoromethyl)-

3 % (28 d) Detected in water. Experimental result, Key study

Methanol

97 % Detected in water. Experimental result, Key study

BOD/COD Ratio

Product:

No data available.

ioaccumulative potential

Bioconcentration Factor (BCF)

Product:

No data available.

Specified substance(s):

2-Propanone

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

Heptane

Bioconcentration Factor (BCF): 552 Aquatic sediment Estimated by
calculation, Key study

Naphtha (petroleum),
hydrotreated light

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



Solvent naphtha (petroleum), light aliph.	Bioconcentration Factor (BCF): 10 - 2,500 Aquatic sediment Estimated by calculation, Key study
Benzene, 1-chloro-4-(trifluoromethyl)-	Bioconcentration Factor (BCF): 9 Aquatic sediment Estimated by calculation, Key study
Methanol	Leuciscus idus, Bioconcentration Factor (BCF): < 10 Aquatic sediment Experimental result, Supporting 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

2-Propanone	No data available.
Propane	No data available.
Butane	No data available.
Heptane, branched, cyclic and linear	No data available.
Heptane	No data available.
Naphtha (petroleum), hydrotreated light	No data available.
Solvent naphtha (petroleum), light aliph.	No data available.
Acetic acid, methyl ester	No data available.
Maleic Anhydride Modified	No data available.
Liquid Polyisoprene	No data available.
Benzene, 1-chloro-4-(trifluoromethyl)-	No data available.
Methanol	No data available.

Known or predicted distribution to environmental compartments

2-Propanone	No data available.
Propane	No data available.
Butane	No data available.
Heptane, branched, cyclic and linear	No data available.
Heptane	No data available.
Naphtha (petroleum), hydrotreated light	No data available.
Solvent naphtha (petroleum), light aliph.	No data available.
Acetic acid, methyl ester	No data available.
Maleic Anhydride Modified	No data available.
Liquid Polyisoprene	No data available.
Benzene, 1-chloro-4-(trifluoromethyl)-	No data available.
Methanol	No data available.

Other adverse effects: Harmful 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 1950
UN Proper Shipping Name: Aerosols, flammable
Transport Hazard Class(es)
Class: 2.1
Label(s): –
Packing Group: II
Marine Pollutant: No

Environmental Hazards: No
Marine Pollutant: No

Special precautions for user: Not regulated.

IMDG

UN Number: UN 1950
UN Proper Shipping Name: Aerosols, flammable
Transport Hazard Class(es)
Class: 2
Label(s): –
EmS No.: –
Packing Group: –

Environmental Hazards: No
Marine Pollutant: No

Special precautions for user: Not regulated.

IATA

UN Number: UN 1950
Proper Shipping Name: Aerosols, flammable
Transport Hazard Class(es)
Class: 2.1
Label(s): –
Packing Group: –

Environmental Hazards: No
Marine Pollutant: No

Special precautions for user: Not regulated.



15. Regulatory information

US Federal Regulations

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>
2-Propanone	lbs. 5000
Propane	lbs. 100
Butane	lbs. 100
Heptane	lbs. 100
Acetic acid, methyl ester	lbs. 100
Methane, 1,1'-oxybis-	lbs. 100
Methanol	lbs. 5000
Benzene, methyl-	lbs. 1000
Benzene	lbs. 10
Benzene, (1-methylethyl)-	lbs. 5000
Benzene, ethyl-	lbs. 1000
1,2-Benzenedicarboxylic acid, 1,2-diethyl ester	lbs. 1000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

- Fire Hazard
- Immediate (Acute) Health Hazards
- Flammable aerosol
- Skin Corrosion/Irritation
- Serious Eye Damage/Eye Irritation
- Skin sensitizer
- Specific Target Organ Toxicity - Single Exposure

SARA 302 Extremely Hazardous Substance

<u>Chemical Identity</u>	<u>Reportable quantity</u>	<u>Threshold Planning Quantity</u>
2-Propanone		
Acetic acid, methyl ester		

SARA 304 Emergency Release Notification

<u>Chemical Identity</u>	<u>Reportable quantity</u>
2-Propanone	lbs. 5000
Propane	lbs. 100
Butane	lbs. 100
Heptane	lbs. 100
Acetic acid, methyl ester	lbs. 100
Methane, 1,1'-oxybis-	lbs. 100



Methanol	lbs. 5000
Benzene, methyl-	lbs. 1000
Benzene	lbs. 10
Benzene, (1-methylethyl)-	lbs. 5000
Benzene, ethyl-	lbs. 1000
1,2-Benzenedicarboxylic acid, 1,2-diethyl ester	lbs. 1000

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
2-Propanone	10000 lbs
Propane	10000 lbs
Butane	10000 lbs
Heptane, branched, cyclic and linear	10000 lbs
Heptane	10000 lbs
Naphtha (petroleum), hydrotreated light	10000 lbs
Solvent naphtha (petroleum), light aliph.	10000 lbs
Acetic acid, methyl ester	10000 lbs
Maleic Anhydride Modified	10000 lbs
Liquid Polyisoprene	
Benzene, 1-chloro-4-(trifluoromethyl)-	10000 lbs
Methanol	10000 lbs
Benzene, methyl-	10000 lbs
Benzene	10000 lbs
Benzene, (1-methylethyl)-	10000 lbs
Benzene, ethyl-	10000 lbs
2,6-Octadienal, 3,7-dimethyl-	10000 lbs
1,2-Benzenedicarboxylic acid, 1,2-diethyl ester	10000 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

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.

Methanol	Developmental toxin. 03 2012
Benzene, methyl-	Developmental toxin. 03 2008
Benzene	Developmental toxin. 03 2008
Benzene	Carcinogenic. 05 2011
Benzene	Male reproductive toxin. 03 2008
Benzene, (1-methylethyl)-	Carcinogenic. 05 2011
Benzene, ethyl-	Carcinogenic. 05 2011
1,6-Octadiene, 7-methyl-3-methylene-	Carcinogenic. 03 2015



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

Chemical Identity

2-Propanone
Propane
Butane
Naphtha (petroleum), hydrotreated light
Solvent naphtha (petroleum), light aliph.
Heptane
Acetic acid, methyl ester
Methane, 1,1'-oxybis-
Benzene, 1-chloro-4-(trifluoromethyl)-

US. Massachusetts RTK - Substance List

Chemical Identity

Benzene

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

2-Propanone
Propane
Butane
Naphtha (petroleum), hydrotreated light
Solvent naphtha (petroleum), light aliph.
Heptane
Acetic acid, methyl ester
Methane, 1,1'-oxybis-

US. Rhode Island RTK

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

International regulations

Montreal protocol

2-Propanone
Acetic acid, methyl ester

Stockholm convention

2-Propanone
Acetic acid, methyl ester

Rotterdam convention

2-Propanone
Acetic acid, methyl ester

Kyoto protocol



Inventory Status:

Australia AICS:	Not in compliance with the inventory.
Canada DSL Inventory List:	Not 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:	Not in compliance with the inventory.
New Zealand Inventory of Chemicals:	Not 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:	Not in compliance with the inventory.
US TSCA Inventory:	On or in compliance with the inventory

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

Issue Date:	07/30/2019
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.