



SAFETY DATA SHEET

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

Product identifier: AlbaChem® Dri-Web Pallet Adhesive Spray

Chemical Name: Aerosol Web Adhesive

Product Number: 1175

Product use: Web adhesive

Date Prepared: June 20, 2011

Revision Date: 06/24/2019

Manufacturer's name and address: Refer to supplier

Supplier name and address:

ALBATROSS USA INC./EXPERT WORLDWIDE

36-41 36th Street
Long Island City, New York
United States
11106
718-392-6272

5439 San Fernando Road West
Los Angeles, California
United States
90039
818-543-5850

Emergency Telephone #: Spill, leak, fire, exposure or accident – Call CHEMTREC – Day or Night

1-800-434-9300 or 1-703-527-3887 (USA & Canada) 01-800-681-9531 (Mexico)

This MSDS complies with 29CFR 19190.1200 (Hazard Communication Standard) and WHMIS regulations.

IMPORTANT: Read this MSDS before handling and disposing of this product. Pass this information on to employees, customers, and users of this product.

*This product does not comply with V.O.C. regulations in some locations. You should check with local air quality districts to determine if it may be used in your area.

SECTION 2 — HAZARDS IDENTIFICATION

Physical hazards	Flammable aerosols	Category 1
Health Hazards	Aspiration Hazard	Category 1
Environmental Hazards	Acute hazards to the aquatic environment	Category 2
OSHA defined hazards	Not classified	

Label elements

Hazard Symbol:



Signal word Danger

Hazard statement Extremely flammable aerosol. May be fatal if swallowed and enters airways. Toxic to aquatic life.

Precautionary statement

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. Avoid release to the environment.

Response IF SWALLOWED: Immediately call a POISON CENTER/doctor/... Do NOT induce vomiting.

Storage Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. 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 known

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

Mitres

Chemical Names	CAS Number	%
Naphtha (petroleum), hydrotreated light	64742-49-0	10 - <25%
Heptane	142-82-5	5 - <10%
2-Propanone	67-64-1	5 - <10%
Cyclohexane, methyl-	108-87-2	0.1 - <1%
Benzene, ethyl-	100-41-4	0 - <0.1%
Cyclohexane	110-82-7	0 - <0.1%
Hexane	110-54-3	0 - <0.1%
Benzene, methyl-	108-88-3	0 - <0.1%
Benzene	71-43-2	0 - <0.1%

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

SECTION 4 — FIRST AID MEASURES

Ingestion: Call a physician or poison control center immediately. Rinse mouth. 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: Wash skin thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention.

Eye contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/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.

SECTION 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 firefighting 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.

SECTION 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.

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.

SECTION 7 — HANDLING AND STORAGE

Precautions for safe 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.

Conditions for safe storage, including any incompatibilities: Store locked up. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Aerosol Level 2

SECTION 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/m ³	US. OSHA Table Z-1 Limits for Air Contaminants(29 CFR 1910.1000)(03 2016)
	TWA PEL	300 ppm	1,350 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (01 2015)
	STEL	400 ppm	1,800 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (01 2015)
	TWA	100 ppm	400 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	REL	100 ppm	400 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	ST ESL		3,500 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		350 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Heptane	TWA	100 ppm	400 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	400 ppm	1,600 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	500 ppm	2,000 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	REL	85 ppm	350 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2005)

	PEL	500 ppm	2,000 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	STEL	500 ppm	2,000 mg/m ³	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/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	ST ESL		10,000 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		2,700 µg/m ³	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/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA PEL	400 ppm	1,600 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	STEL	500 ppm	2,000 mg/m ³	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)
2-Propanone	STEL	1,000 ppm	2,400 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	750 ppm	1,780 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	PEL	1,000 ppm	2,400 mg/m ³	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/m ³	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)
	TWA PEL	500 ppm	1,200 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)

	REL	250 ppm	590 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
Cyclohexane, methyl-	PEL	500 ppm	2,000 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	ST ESL		16,100 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	TWA	400 ppm	1,600 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	400 ppm		US. ACGIH Threshold Limit Values (2008)
	AN ESL		1,610 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	TWA	400 ppm	1,600 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	TWA PEL	400 ppm	1,600 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	ST ESL		4,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	REL	400 ppm	1,600 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	AN ESL		400 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Benzene, ethyl-	TWA	100 ppm	435 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	STEL	125 ppm	545 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	ST ESL		26,000 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		570 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		6,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		130 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	REL	100 ppm	435 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	100 ppm	435 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

	STEL	30 ppm	130 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2013)
	STEL	125 ppm	545 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	100 ppm	435 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	STEL	125 ppm	545 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	20 ppm		US. ACGIH Threshold Limit Values (12 2010)
	TWA PEL	5 ppm	22 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2013)
Cyclohexane	TWA	100 ppm		US. ACGIH Threshold Limit Values (2008)
	ST ESL		3,400 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	TWA	300 ppm	1,050 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	TWA	300 ppm	1,050 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	REL	300 ppm	1,050 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	300 ppm	1,050 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA PEL	300 ppm	1,050 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	AN ESL		340 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		100 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		1,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Hexane	TWA PEL	50 ppm	180 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	TWA	50 ppm	180 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	TWA	50 ppm	180 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

	PEL	500 ppm	1,800 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	REL	50 ppm	180 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	50 ppm		US. ACGIH Threshold Limit Values (2008)
	AN ESL		200 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		6,200 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		57 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		1,700 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Benzene, methyl-	STEL	150 ppm	560 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA PEL	10 ppm	37 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)
	REL	100 ppm	375 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	100 ppm	375 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	150 ppm	560 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	Ceiling	300 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	TWA	20 ppm		US. ACGIH Threshold Limit Values (2008)
	Ceiling	500 ppm		US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	AN ESL		1,200 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	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)
	ST ESL		4,500 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	STEL	150 ppm	580 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)

	ST ESL		1,200 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	TWA	100 ppm	375 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	STEL	150 ppm	560 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	AN ESL		320 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
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 A LV	0.5 ppm		US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	AN ESL		1.4 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	TWA	0.5 ppm		US. ACGIH Threshold Limit Values (2008)
	STEL	25 ppm		US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 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	5 ppm		US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	TWA PEL	1 ppm		US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	ST ESL		170 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	TWA	10 ppm		US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	ST ESL		53 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	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)
AN ESL	4.5 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Ceiling	50 ppm	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)

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)
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)
Hexane (2,5-Hexanedion, without hydrolysis: Sampling time: End of shift.)	0.5 mg/l (Urine)	ACGIH BEL (03 2018)
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	0.02 mg/l (Blood)	ACGIH BEL (03 2013)
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)

Appropriate Engineering Controls No data available.

Individual protection measures, such as personal protective equipment

General information: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory and eye protection may be needed in special circumstances, such as poorly ventilated spaces, heating, evaporation of liquids from large surfaces, spraying of mists, mechanical generation of dusts, drying of solids, etc.

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

Skin Protection Hand Protection: No data available.

Other: Wear suitable protective clothing.

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

Hygiene measures: Observe good industrial hygiene practices. When using do not smoke.

SECTION 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:	-41 °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:	3,447.3786 - 5,860.5437 hPa (20 °C)
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.

SECTION 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.

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

2-Propanone	LD 50 (Rat): 5,800 mg/kg
Cyclohexane, methyl-	LD Lo (Rabbit): 4,000 - 4,500 mg/kg
Benzene, ethyl-	LD 50 (Rat): 5.46 g/kg
	LD 50 (Rat): 3,500 mg/kg
Cyclohexane	LD 50 (Rat): > 5,000 mg/kg
Hexane	LD 50: > 2,000 mg/kg
Benzene, methyl-	LD 50 (Rat): 5,580 mg/kg
Benzene	LD 50 (Rat): 5,970 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
Heptane	LD 50 (Rabbit): > 2,000 mg/kg
2-Propanone	LD 50 (Rabbit): > 7,426 mg/kg
Cyclohexane, methyl-	LD 50 (Rabbit): > 2,000 mg/kg
Benzene, ethyl-	ATE: > 2,000 mg/kg
Cyclohexane	LD 50 (Rabbit): > 2,000 mg/kg
Hexane	LD 50 (Rabbit): > 2,000 mg/kg
Benzene, methyl-	LD 50 (Rabbit): > 5,000 mg/kg
Benzene	LD 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
Heptane	LC 50 (Rat): > 29.29 mg/l
2-Propanone	LC 50 (Rat): 50.1 mg/l
Cyclohexane, methyl-	LD 10 (Mouse): 40 - 50 mg/l LC 50 (Rat): > 26.3 mg/l
Benzene, ethyl-	LC 50: 11 mg/l
Cyclohexane	LC 50 (Rat): > 32,880 mg/m3
Hexane	LC 50 (Rat): > 31.86 mg/l
Benzene, methyl-	LC 50 (Rat): 28.1 mg/l
Benzene	LC 50 (Rat): 43,767 mg/m3

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/m3 Inhalation Experimental result, Key study

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

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

Cyclohexane, methyl- LOAEL (Rat(Female, Male), Oral, 28 d): 1,000 mg/kg Oral Experimental result, Key study NOAEL (Rat(Female, Male), Oral, 28 d): 250 mg/kg Oral Experimental result, Key study NOAEL (Rat(Female, Male), Inhalation): 1,600 mg/m3 Inhalation Experimental result, Key study

Benzene, ethyl- NOAEL (Rabbit, Inhalation): 0.1 mg/l Inhalation Experimental result, Supporting study NOAEL (Rabbit(Female, Male), Inhalation, 186 - 214 d): 400 ppm(m) Inhalation Experimental result, Supporting study NOAEL (Mouse(Female, Male), Inhalation, 104 Weeks): 75 ppm(m) Inhalation Experimental result, Key study LOAEL (Rat(Female, Male), Inhalation, <= 6 Months): 400 ppm(m)

Inhalation Experimental result, Supporting study NOAEL (Rat(Female, Male), Oral, 28 d): 75 mg/kg 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,

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

Benzene, methyl- LOAEL (Rat(Female, Male), Oral, 13 Weeks): 1,250 mg/kg (Target Organ(s): Liver, Kidney) Oral Experimental result, Key study NOAEL (Rat(Female, Male), Inhalation): 625 ppm(m) Inhalation Experimental result, Key study NOAEL (Rat(Female, Male), Inhalation - vapor): 2,355 mg/l Inhalation Experimental result, Key study

Benzene NOAEL (Rat(Male), Oral, 120 d): 100 mg/kg Oral Experimental result, Key study NOAEL (Mouse(Female, Male), Inhalation, 7 - 91 d): 96 mg/m³ Inhalation Experimental result, Key study LOAEL (Rat(Female), Oral, 120 d): 25 mg/kg Oral Experimental result, Key study

Skin Corrosion/Irritation Product: No data available.

Specified substance(s):

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

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

Cyclohexane, methyl- in vivo (Rabbit): Not irritant Experimental result, Weight of Evidence study

Cyclohexane Review (Various): Irritating.

in vivo (Rabbit): Not irritant Experimental result, Weight of Evidence study

Benzene, methyl- in vivo (Rabbit): Irritating Experimental result, Key study

Benzene in vivo (Rabbit): Irritating Experimental result, Key study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Naphtha (petroleum), hydrotreated light Rabbit, 24 - 72 hrs: Not irritating

Heptane Rabbit, 24 - 72 hrs: Not irritating

2-Propanone Irritating. Rabbit, 24 hrs: Minimum grade of severe eye irritant

Cyclohexane, methyl- Rabbit, 0.5 - 168 hrs: Not irritating

Benzene, ethyl- Rabbit, 7 d: Slightly irritating

Hexane Rabbit, 1 - 72 hrs: Not irritating

Benzene, methyl- Rabbit, 24 - 72 hrs: Not irritating

Benzene Rabbit: Irritating

Respiratory or Skin Sensitization Product: No data available.

Specified substance(s):

Naphtha (petroleum), hydrotreated light Skin sensitization:, in vivo (Guinea pig): Non sensitising

Heptane Skin sensitization:, in vivo (Guinea pig): Non sensitising

2-Propanone Skin sensitization:, in vivo (Guinea pig): Non sensitising

Cyclohexane, methyl- Skin sensitization:, in vivo (Guinea pig): Non sensitising

Benzene, ethyl- Skin sensitization:, in vivo (Human): Non sensitising

Cyclohexane Skin sensitization:, in vivo (Guinea pig): Non sensitising

Benzene, methyl- Skin sensitization:, in vivo (Guinea pig): Non sensitising

Carcinogenicity Product: No data available.

Specified substance(s):

Cyclohexane, methyl- May cause cancer.

Benzene Cancer hazard - can cause cancer.

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.

Benzene, methyl- Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity Product: - Single Exposure No data available.

Specified substance(s):

Heptane Narcotic effect. - Category 3 with narcotic effects.

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

Cyclohexane, methyl- Inhalation - vapor: Narcotic effect. - Category 3 with narcotic effects.

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

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

Benzene, methyl- Inhalation - vapor: Narcotic effect. - Category 3 with narcotic effects.

Specific Target Organ Toxicity Product: - Repeated Exposure No data available.

Specified substance(s):

Cyclohexane, methyl- Category 1

Hexane Inhalation - vapor: Nervous System - Category 2

Benzene, methyl- Category 2

Benzene Causes damage to organs.

Aspiration Hazard Product: No data available.

Specified substance(s):

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

Heptane May be fatal if swallowed and enters airways.

Cyclohexane, methyl- May be fatal if swallowed and enters airways.

Cyclohexane May be fatal if swallowed and enters airways.

Benzene, methyl- May be fatal if swallowed and enters airways.

Benzene May be fatal if swallowed and enters airways.

Other effects: No data available.

SECTION 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

Heptane LC 50 (Mozambique tilapia (Tilapia mossambica), 96 h): 375 mg/l Mortality

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

Cyclohexane, methyl- LC 50 (Oryzias latipes, 96 h): 2.07 mg/l Experimental result, Key study

Benzene, ethyl- LC 50 (Fathead minnow (Pimephales promelas), 96 h): 38.9 - 62.83 mg/l Mortality

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

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

Benzene, methyl- LC 50 (Oncorhynchus kisutch, 96 h): 5.5 mg/l Experimental result, Key study

Benzene LC 50 (Oncorhynchus mykiss, 96 h): 5.3 mg/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

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

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

Cyclohexane, methyl- EC 50 (Daphnia magna, 48 h): 0.326 mg/l Experimental result, Key study

ED 0 (Daphnia magna, 48 h): 0.037 mg/l Experimental result, Key study

Benzene, ethyl- LC 50 (Water flea (Daphnia magna), 24 h): 57 - 100 mg/l Mortality

Cyclohexane EC 50 (Daphnia magna, 48 h): 0.9 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

Benzene, methyl- LC 50 (Water flea (Daphnia magna), 48 h): 54.6 - 174.7 mg/l Mortality

LC 50 (Ceriodaphnia dubia, 2 d): 3.78 mg/l Experimental result, Key study

Benzene EC 50 (Daphnia magna, 24 h): 10 mg/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

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

Hexane NOAEL (Oncorhynchus mykiss): 2.8 mg/l QSAR QSAR, Key study

Benzene, methyl- NOAEL (Oncorhynchus kisutch): 1.39 mg/l Experimental result, Key study

LOAEL (Oncorhynchus kisutch): 2.77 mg/l Experimental result, Key study

Benzene LOAEL (Pimephales promelas): 1.6 mg/l Experimental result, Key study

LC 50 (Oncorhynchus mykiss): 8.64 mg/l Experimental result, Supporting 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

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

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

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

Benzene, ethyl- NOAEL (Ceriodaphnia dubia): 1 mg/l Other, Key study

LOAEL (Ceriodaphnia dubia): 1.7 mg/l Other, Key study

LC 50 (Ceriodaphnia dubia): 3.6 mg/l Other, Key study

IC 50 (Ceriodaphnia dubia): 3.3 mg/l Other, Key study

LC 50 (Ceriodaphnia dubia): 3.2 mg/l Other, Key study

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

Benzene, methyl- LOAEL (Ceriodaphnia dubia): 2.76 mg/l Experimental result, Key study

NOAEL (Ceriodaphnia dubia): 0.74 mg/l Experimental result, Key study

Benzene NOAEL (Daphnia magna): 98 mg/l Not specified, Not specified

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

Heptane 70 % Detected in water. Experimental result, Key study

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

Cyclohexane, methyl- > 0 % (28 d) Detected in water. Experimental result, Weight of Evidence study

> 0 % (28 d) Detected in water. Experimental result, Weight of Evidence study

Benzene, ethyl- 60 % (24 h) Detected in water. Other, Supporting study

100 % Detected in water. Other, Supporting study

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

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

Benzene, methyl- 100 % (14 d) Detected in water. Experimental result, Weight of Evidence study

86 % Detected in water. Experimental result, Weight of Evidence study

Benzene 4 - 88 % (28 d) Detected in water. Experimental result, Supporting study

81 % Detected in water. 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

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

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

Cyclohexane, methyl- Cyprinus carpio, Bioconcentration Factor (BCF): > 95 - < 321 Aquatic sediment Experimental result, Key study

Benzene, ethyl- Oncorhynchus kisutch, Bioconcentration Factor (BCF): 1 Aquatic sediment Other, Key study

Cyclohexane Cyprinus carpio, Bioconcentration Factor (BCF): 37 - 129 Aquatic sediment Experimental result, supporting study

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

Benzene, methyl- Leuciscus idus, Bioconcentration Factor (BCF): 90 Aquatic sediment Experimental result, Key study

Benzene Northern anchovy (Engraulis mordax), Bioconcentration Factor (BCF): 505 (Static)

Engraulis mordax; Morone saxatilis, Bioconcentration Factor (BCF): 309 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

Benzene, ethyl- Log Kow: 3.13 - 3.14 No Other, Supporting study

Benzene Log Kow: 1.56 - 2.15 25 °C No Not specified, Not specified

Mobility in soil: No data available.**Known or predicted distribution to environmental compartments**

Naphtha (petroleum), hydrotreated light No data available.

Heptane No data available.

2-Propanone No data available.
 Cyclohexane, methyl- No data available.
 Benzene, ethyl- No data available.
 Cyclohexane No data available.
 Hexane No data available.
 Benzene, methyl- No data available.
 Benzene No data available.

Other adverse effects: Toxic to aquatic organisms.

SECTION 13— DISPOSAL CONSIDERATIONS

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

Contaminated Packaging: No data available.

SECTION 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.:	F-D, S-U
Packing Group:	–
Environmental Hazards	No
Marine Pollutant	Yes
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	Yes
Special precautions for user:	Not regulated.

SECTION 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)**

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

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity	Reportable quantity
Methane, 1,1'-oxybis-	lbs. 100
Heptane	lbs. 100
2-Propanone	lbs. 5000
Cyclohexane, methyl-	lbs. 100
Benzene, ethyl-	lbs. 1000
Cyclohexane	lbs. 1000
Hexane	lbs. 5000
Benzene, methyl-	lbs. 1000
Benzene	lbs. 10

Superfund Amendments and Reauthorization Act of 1986 (SARA)

- Hazard categories**
 Fire Hazard
 Immediate (Acute) Health Hazards
 Flammable aerosol
 Aspiration Hazard

SARA 302 Extremely Hazardous Substance

Chemical Identity	Reportable quantity	Threshold Planning Quantity
2-Propanone		

SARA 304 Emergency Release Notification

Chemical Identity	Reportable quantity
Methane, 1,1'-oxybis-	lbs. 100
Heptane	lbs. 100
2-Propanone	lbs. 5000
Cyclohexane, methyl-	lbs. 100
Benzene, ethyl-	lbs. 1000
Cyclohexane	lbs. 1000
Hexane	lbs. 5000
Benzene, methyl-	lbs. 1000
Benzene	lbs. 10

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
Naphtha (petroleum), hydrotreated light	10000 lbs
Heptane	10000 lbs
2-Propanone	10000 lbs
Cyclohexane, methyl-	10000 lbs
Benzene, ethyl-	10000 lbs

Cyclohexane	10000 lbs
Hexane	10000 lbs
Benzene, methyl-	10000 lbs
Benzene	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.

Benzene, ethyl- Carcinogenic. 05 2011

Hexane Male reproductive toxin. 12 2017

Benzene, methyl- Developmental toxin. 03 2008

Benzene Developmental toxin. 03 2008

Benzene Carcinogenic. 05 2011

Benzene Male reproductive toxin. 03 2008

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

Chemical Identity

Methane, 1,1'-oxybis- Naphtha (petroleum), hydrotreated light

Heptane 2-Propanone

US. Massachusetts RTK - Substance List

Chemical Identity

Benzene US. Pennsylvania RTK - Hazardous Substances

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Methane, 1,1'-oxybis- Naphtha (petroleum), hydrotreated light

Heptane 2-Propanone

US. Rhode Island RTK

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

International regulations

Montreal protocol 2-Propanone

Stockholm convention 2-Propanone

Rotterdam convention 2-Propanone

Kyoto protocol

Inventory Status:

Australia AICS: Not 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: Not in compliance with the inventory.

US TSCA Inventory: On or 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.

SECTION 16— OTHER INFORMATION

Issue Date: 06/24/2019

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.