



SAFETY DATA SHEET

1. Identification

Product identifier: CITRUS GEL DEGREASER

Other means of identification

SDS number: RE1000009107

Recommended restrictions

Product Use: Cleaner

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name: CPC
Address: 1000 INTEGRAM DRIVE
PACIFIC, MO 63069
Telephone: 1-800-327-1835
Fax:

Emergency telephone number: 1-866-836-8855

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable aerosol Category 1

Health Hazards

Serious Eye Damage/Eye Irritation Category 2A

Skin sensitizer Category 1

Toxic to reproduction Category 2

Environmental Hazards

Acute hazards to the aquatic environment Category 2

Label Elements

Hazard Symbol:



Signal Word:	Danger
Hazard Statement:	Extremely flammable aerosol. Causes serious eye irritation. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child. Toxic to aquatic life.
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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid release to the environment.
Response:	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. IF exposed or concerned: Get medical advice/attention. 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 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 (%)*
Butane	106-97-8	10 - <20%
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-	5989-27-5	10 - <20%
2-Propanol	67-63-0	10 - <20%
Propane	74-98-6	5 - <10%
Benzene, methyl-	108-88-3	0.1 - <1%
Ethanol, 2-butoxy-	111-76-2	0.1 - <1%
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	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:** If skin irritation occurs: Get medical advice/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. Dike far ahead of larger spill for later recovery and disposal.

Notification Procedures: Dike for later disposal. 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: Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer.

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. 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 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. Store locked up. Aerosol Level 1

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
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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)
2-Propanol	REL	400 ppm	980 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	STEL	400 ppm		US. ACGIH Threshold Limit Values (2008)
	STEL	500 ppm	1,225 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	500 ppm	1,225 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	TWA	400 ppm	980 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	PEL	400 ppm	980 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	400 ppm	980 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	500 ppm	1,225 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	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)
	STEL	500 ppm	1,225 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	200 ppm		US. ACGIH Threshold Limit Values (2008)
	TWA PEL	400 ppm	980 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	AN ESL		492 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		4,920 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Propane	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)



2-Pentanone, 4-hydroxy-4-methyl-			(1989)
	TWA	50 ppm	US. ACGIH Threshold Limit Values (2008)
	REL	50 ppm 240 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	50 ppm 240 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	50 ppm 240 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	50 ppm 240 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	TWA PEL	50 ppm 240 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	ST ESL	200 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL	960 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL	96 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Benzene, methyl-	AN ESL	20 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	STEL	150 ppm 560 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA PEL	10 ppm 37 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)
	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)
	STEL	150 ppm 560 mg/m3	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/m3	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/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	STEL	150 ppm 580 mg/m3	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/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	STEL	150 ppm 560 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
AN ESL	320 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)	
Ethanol, 2-butoxy-	TWA	20 ppm	US. ACGIH Threshold Limit Values (2008)



	TWA	25 ppm	120 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	REL	5 ppm	24 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	50 ppm	240 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA PEL	20 ppm	97 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	TWA	25 ppm	120 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	AN ESL		760 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		3,700 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		2,900 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		600 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Ammonium hydroxide ((NH4)(OH))	AN ESL		92 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		180 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	STEL	35 ppm		US. ACGIH Threshold Limit Values (2008)
	TWA	25 ppm		US. ACGIH Threshold Limit Values (2008)
	TWA PEL	25 ppm	18 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	STEL	35 ppm	27 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	STEL	35 ppm	27 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	35 ppm	27 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	REL	25 ppm	18 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	50 ppm	35 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-Propanol (acetone: Sampling time: End of shift at end of work week.)	40 mg/l (Urine)	ACGIH BEL (03 2013)
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)
Ethanol, 2-butoxy- (Butoxyacetic acid (BAA), with hydrolysis: Sampling time: End of shift.)	200 mg/g (Creatinine in 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 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: Avoid contact with eyes. Observe good industrial hygiene practices. When using do not smoke. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.

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: -104.44 °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:	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):

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- LD 50 (Rat): > 2,000 mg/kg

2-Propanol LD 50 (Rat): 5.84 g/kg

Benzene, methyl- LD 50 (Rat): 5,580 mg/kg

Ethanol, 2-butoxy- LD 50 (Rat): 1,746 mg/kg

2-Pentanone, 4-hydroxy-4-methyl- LD 50 (Rat): 3,002 mg/kg
LD 50 (Rat): 4,000 mg/kg

Dermal

Product: ATEmix: 66,682.66 mg/kg

Inhalation

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



Specified substance(s):

Butane	LC 50 (Mouse): 1,237 mg/l
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-	LC 50: > 20 mg/l LC 50: > 5 mg/l
2-Propanol	LC 50: > 5 mg/l LC 50: > 20 mg/l
Propane	LC 50 (Mouse): 1,237 mg/l
Benzene, methyl-	LC 50 (Rat): 28.1 mg/l LC 50: > 100 mg/l
Ethanol, 2-butoxy-	LC 50: < 5 mg/l LC 50: < 20 mg/l
2-Pentanone, 4-hydroxy-4-methyl-	LC 0 (Rat): \geq 7.6 mg/l

Repeated dose toxicity

Product: No data available.

Specified substance(s):

Butane	NOAEL (Rat(Female, Male), Inhalation, \geq 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study LOAEL (Rat(Female, Male), Inhalation, \geq 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-	NOAEL (Rat(Male), Oral, 13 Weeks): 600 mg/kg Oral Experimental result, Key study
2-Propanol	NOAEL (Rat, Inhalation, \geq 104 Weeks): 5,000 ppm(m) Inhalation Experimental result, Key study
Propane	NOAEL (Rat(Female, Male), Inhalation, \geq 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study LOAEL (Rat(Female, Male), Inhalation, \geq 28 d): 12,000 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
Ethanol, 2-butoxy-	NOAEL (Rabbit(Female, Male), Dermal, 90 d): > 150 mg/kg Dermal Experimental result, Key study NOAEL (Rat(Female), Oral, 90 d): < 82 mg/kg Oral Experimental result, Key study NOAEL (Rat(Female), Inhalation, 2 yr): < 31 ppm(m) Inhalation



2-Pentanone, 4-hydroxy-4-methyl-
Experimental result, Key study
NOAEL (Rat(Female, Male), Inhalation): 4,685 mg/m³ Inhalation
Experimental result, Key study
NOAEL (Mouse(Female, Male), Inhalation): 1,843 mg/m³ Inhalation Read-across from supporting substance (structural analogue or surrogate), Supporting study
NOAEL (Rat(Female, Male), Inhalation): >= 4,685 mg/m³ Inhalation
Experimental result, Key study
NOAEL (Rat(Female, Male), Inhalation): >= 4,106 mg/m³ Inhalation Read-across from supporting substance (structural analogue or surrogate), Supporting study
LOAEL (Rat(Female, Male), Oral, 13 Weeks): 1,000 mg/kg Oral Read-across from supporting substance (structural analogue or surrogate), Key study

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- in vivo (Rabbit): Not irritant Experimental result, Key study

2-Propanol in vivo (Rabbit): Not Classified Experimental result, Key study

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

Ethanol, 2-butoxy- in vivo (Rabbit): Irritating Experimental result, Key study

2-Pentanone, 4-hydroxy-4-methyl- in vivo (Rabbit): Not irritant Experimental result, Key study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- Rabbit, 24 - 72 hrs: Not irritating

2-Propanol Rabbit, 1 d: Irritating.

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

Ethanol, 2-butoxy- Rabbit, 24 - 72 hrs: Irritating



2-Pentanone, 4-hydroxy-4-methyl-	Rabbit, 24 - 72 hrs: Irritating
	Rabbit, 24 - 72 hrs: Irritating
	Rabbit, 24 - 72 hrs: Irritating
	Rabbit, 24 - 72 hrs: Slightly irritating
	Rabbit, 24 - 72 hrs: Irritating
	Rabbit, 24 - 72 hrs: Slightly irritating
	Rabbit, 24 - 72 hrs: Slightly irritating
	Rabbit, 24 - 72 hrs: Irritating
	Rabbit, 24 - 72 hrs: Irritating
	Rabbit, 24 - 72 hrs: Irritating
	Rabbit, 24 - 72 hrs: Slightly irritating

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

2-Propanol	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Benzene, methyl-	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Ethanol, 2-butoxy-	Skin sensitization:, in vivo (Guinea pig): Non sensitising
2-Pentanone, 4-hydroxy-4-methyl-	Skin sensitization:, in vivo (Guinea pig): Non sensitising
	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):

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

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s):

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



Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.
Specified substance(s):
Benzene, methyl- Category 2

Aspiration Hazard

Product: No data available.

Specified substance(s):
Benzene, methyl- 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):

Butane	LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-	EC 50 (Pimephales promelas, 96 h): 688 µg/l Experimental result, Key study
2-Propanol	LC 50 (Pimephales promelas, 96 h): 9,640 mg/l Experimental result, Key study
Propane	LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
Benzene, methyl-	LC 50 (Oncorhynchus kisutch, 96 h): 5.5 mg/l Experimental result, Key study
Ethanol, 2-butoxy-	LC 50 (Oncorhynchus mykiss, 96 h): 1,474 mg/l Experimental result, Key study
2-Pentanone, 4-hydroxy-4-methyl-	LC 50 (Goldfish (Carassius auratus), 24 h): > 5,000 mg/l Mortality LC 50 (Bluegill (Lepomis macrochirus), 96 h): 420 mg/l Mortality LC 50 (Inland silverside (Menidia beryllina), 96 h): 420 mg/l Mortality LC 50 (Carp (Leuciscus idus melanotus), 48 h): 12,220 mg/l Mortality LC 50 (Carp (Leuciscus idus melanotus), 48 h): 8,930 mg/l Mortality

Aquatic Invertebrates

Product: No data available.

Specified substance(s):



Butane	LC 50 (Daphnia sp., 48 h): 69.43 mg/l QSAR QSAR, Key study
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-	EC 50 (Daphnia magna, 48 h): 0.36 mg/l Experimental result, Key study NOAEL (Daphnia magna, 48 h): 0.074 mg/l Experimental result, Key study
2-Propanol	LC 50 (Daphnia magna, 24 h): > 10,000 mg/l Experimental result, Key study
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
Ethanol, 2-butoxy-	EC 50 (Daphnia magna, 48 h): 1,550 mg/l Experimental result, Key study
2-Pentanone, 4-hydroxy-4-methyl-	LC 50 (Water flea (Daphnia magna), 24 h): 9,000 mg/l Mortality EC 50 (Daphnia magna, 48 h): > 1,000 mg/l Experimental result, Key study LC 50 (Daphnia magna, 24 h): 9,000 mg/l Experimental result, Supporting study LC 0 (Daphnia magna, 24 h): 4,550 mg/l Experimental result, Supporting study EC 100 (Daphnia magna, 24 h): 24,691 mg/l Experimental result, Supporting study

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Benzene, methyl- NOAEL (Oncorhynchus kisutch): 1.39 mg/l Experimental result, Key study
LOAEL (Oncorhynchus kisutch): 2.77 mg/l Experimental result, Key study

Ethanol, 2-butoxy- NOAEL (Danio rerio): > 100 mg/l Experimental result, Key study

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- NOAEL (Freshwater invertebrates, species frequently include Daphnia magna or Daphnia pulex): 0.115 mg/l QSAR QSAR, Weight of Evidence 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

Ethanol, 2-butoxy- EC 50 (Daphnia magna): 297 mg/l Experimental result, Key study
EC 10 (Daphnia magna): 134 mg/l Experimental result, Key study

2-Pentanone, 4-hydroxy-4-methyl- EC 50 (Daphnia magna): > 100 mg/l Experimental result, Key study
LC 50 (Daphnia magna): > 100 mg/l Experimental result, Key study
LOAEL (Daphnia magna): > 100 mg/l Experimental result, Key study
LC 50 (Daphnia magna): > 100 mg/l Experimental result, Key study
NOAEL (Daphnia magna): 100 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):

Butane	100 % (385.5 h) Detected in water. Experimental result, Key study 50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-	80 % (28 d) Detected in water. Read-across from supporting substance (structural analogue or surrogate), Key study
2-Propanol	53 % (5 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
Benzene, methyl-	100 % (14 d) Detected in water. Experimental result, Weight of Evidence study 86 % Detected in water. Experimental result, Weight of Evidence study
Ethanol, 2-butoxy-	90.4 % Detected in water. Experimental result, Key study
2-Pentanone, 4-hydroxy-4-methyl-	98.55 % Detected in water. Experimental result, Key study 30.54 % Detected in water. Experimental result, Key study 3 % (5 d) Detected in water. Experimental result, Not specified 42.77 % Detected in water. Experimental result, Key study 98.51 % 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):

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-	Bioconcentration Factor (BCF): 864.8 Aquatic sediment QSAR, Key study
Benzene, methyl-	Leuciscus idus, Bioconcentration Factor (BCF): 90 Aquatic sediment Experimental result, Key study

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Specified substance(s):

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-	Log Kow: 4.34 - 4.46 25 °C No Experimental result, Supporting study
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Mobility in soil: No data available.



Known or predicted distribution to environmental compartments

Butane	No data available.
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-	No data available.
2-Propanol	No data available.
Propane	No data available.
Benzene, methyl-	No data available.
Ethanol, 2-butoxy-	No data available.
2-Pentanone, 4-hydroxy-4-methyl-	No data available.

Other adverse effects: Toxic to aquatic organisms.

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.:	F-D, S-U
Packing Group:	–
Environmental Hazards:	Yes
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: Yes
Marine Pollutant: No
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)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Butane	lbs. 100
2-Propanol	lbs. 100
Propane	lbs. 100
Benzene, methyl-	lbs. 1000
Sodium nitrite, Nitrous acid, sodium salt (1:1)	lbs. 100
Ammonium hydroxide ((NH ₄)(OH))	lbs. 1000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Fire Hazard
Immediate (Acute) Health Hazards
Delayed (Chronic) Health Hazard
Flammable aerosol
Serious Eye Damage/Eye Irritation
Skin sensitizer
Toxic to reproduction

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.



SARA 304 Emergency Release Notification

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Butane	lbs. 100
2-Propanol	lbs. 100
Propane	lbs. 100
Benzene, methyl-	lbs. 1000
Ethanol, 2-butoxy-	
Sodium nitrite, Nitrous acid, sodium salt (1:1)	lbs. 100
Ammonium hydroxide ((NH4)(OH))	lbs. 1000

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Butane	10000 lbs
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-	10000 lbs
2-Propanol	10000 lbs
Propane	10000 lbs
Benzene, methyl-	10000 lbs
Ethanol, 2-butoxy-	10000 lbs
2-Pentanone, 4-hydroxy-4-methyl-	10000 lbs
Ammonium hydroxide ((NH4)(OH))	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>
2-Propanol	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.

Benzene, methyl- Developmental toxin. 03 2008

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

Chemical Identity

Butane
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-
2-Propanol
Propane
Ethanol, 2-butoxy-

US. Massachusetts RTK - Substance List

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



US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Butane
2-Propanol
Propane

US. Rhode Island RTK

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

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable



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:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	On or 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:	On or 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:	08/02/2019
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.