



CITRUS CLEANER CONCENTRATE

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Revision Date: 03/26/2019

Version: 1.1

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: CITRUS CLEANER CONCENTRATE

Intended Use of the Product

Use of the Substance/Mixture: No use is specified.

Name, Address, and Telephone of the Responsible Party

Company

Helmitin Inc.
99 Shorncliffe Rd
Toronto, Ontario, M8Z 5K7
877.823.2624

11110 Airport Road
Olive Branch, MS 38654
Phone: 877.823.2624
www.helmitin.com

Emergency Telephone Number

Emergency Number : CANUTEC 613-996-6666 / CHEMTREC 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Flam. Liq. 2 H225
Skin Irrit. 2 H315
Eye Irrit. 2A H319
Skin Sens. 1 H317
STOT SE 3 H336
Asp. Tox. 1 H304

Full text of H-phrases: see section 16

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)

:



GHS02



GHS07



GHS08

Signal Word (GHS-US)

: Danger

Hazard Statements (GHS-US)

: H225 - Highly flammable liquid and vapor.
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.

Precautionary Statements (GHS-US)

: P210 - Keep away from extremely high or low temperatures, ignition sources, and incompatible materials. - No smoking.
P261 - Avoid breathing vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear respiratory protection, protective gloves, protective clothing, face protection,

CITRUS CLEANER CONCENTRATE

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

eye protection.

P301+P310 - IF SWALLOWED: Immediately call a poison center or doctor.

P302+P352 - IF ON SKIN: Wash with plenty of water.

P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 - Call a poison center or doctor if you feel unwell.

P331 - Do NOT induce vomiting.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P381 - Eliminate all ignition sources if safe to do so.

Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. Flammable vapors can accumulate in head space of closed systems.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product Identifier	% (w/w)
Acetone	(CAS No) 67-64-1	15 - 40
Heptane, branched, cyclic and linear	(CAS No) 426260-76-6	15 - 40
D-Limonene	(CAS No) 5989-27-5	15 - 40

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Gently wash with plenty of soap and water followed by rinsing with water for at least 15 minutes. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.

Inhalation: May cause drowsiness or dizziness.

Skin Contact: May cause an allergic skin reaction. Causes skin irritation. Symptoms may include: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Eye Contact: Causes serious eye irritation. Symptoms may include: Redness, pain, swelling, itching, burning, tearing, and blurred vision.

Ingestion: May be fatal if swallowed and enters airways.

Chronic Symptoms: None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, dry chemical, or sand.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

CITRUS CLEANER CONCENTRATE

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Extremely flammable vapor.

Explosion Hazard: May form flammable/explosive vapor-air mixture.

Reactivity: Reacts with (strong) oxidizers: (increased) risk of fire.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

Firefighting Instructions: Exercise caution when fighting any chemical fire.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Burning can produce carbon monoxide, carbon dioxide, chloride and hydrocarbons. Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant. Acute overexposure to the products of combustion may result in irritation of the respiratory tract.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, gas). Use special care to avoid static electric charges. Keep away from heat, sparks, open flames, hot surfaces. – No smoking.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Do not take up in combustible material such as: saw dust or cellulosic material.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill. Use only non-sparking tools.

Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable. Extremely flammable gas.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting equipment. Use only non-sparking tools.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep in fireproof place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: strong acids. Strong bases. Strong oxidizers.

Specific End Use(s)

No use is specified.

CITRUS CLEANER CONCENTRATE

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government

Acetone (67-64-1)		
Mexico	OEL TWA (mg/m ³)	2400 mg/m ³
Mexico	OEL TWA (ppm)	1000 ppm
Mexico	OEL STEL (mg/m ³)	3000 mg/m ³
Mexico	OEL STEL (ppm)	1260 ppm
USA ACGIH	ACGIH TWA (ppm)	250 ppm
USA ACGIH	ACGIH STEL (ppm)	500 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL (TWA) (mg/m ³)	2400 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	590 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	250 ppm
USA IDLH	US IDLH (ppm)	2500 ppm (10% LEL)
Alberta	OEL STEL (mg/m ³)	1800 mg/m ³
Alberta	OEL STEL (ppm)	750 ppm
Alberta	OEL TWA (mg/m ³)	1200 mg/m ³
Alberta	OEL TWA (ppm)	500 ppm
British Columbia	OEL STEL (ppm)	500 ppm
British Columbia	OEL TWA (ppm)	250 ppm
Manitoba	OEL STEL (ppm)	500 ppm
Manitoba	OEL TWA (ppm)	250 ppm
New Brunswick	OEL STEL (mg/m ³)	1782 mg/m ³
New Brunswick	OEL STEL (ppm)	750 ppm
New Brunswick	OEL TWA (mg/m ³)	1188 mg/m ³
New Brunswick	OEL TWA (ppm)	500 ppm
Newfoundland & Labrador	OEL STEL (ppm)	500 ppm
Newfoundland & Labrador	OEL TWA (ppm)	250 ppm
Nova Scotia	OEL STEL (ppm)	500 ppm
Nova Scotia	OEL TWA (ppm)	250 ppm
Nunavut	OEL STEL (mg/m ³)	2970 mg/m ³
Nunavut	OEL STEL (ppm)	1250 ppm
Nunavut	OEL TWA (mg/m ³)	2370 mg/m ³
Nunavut	OEL TWA (ppm)	1000 ppm
Northwest Territories	OEL STEL (mg/m ³)	2970 mg/m ³
Northwest Territories	OEL STEL (ppm)	1250 ppm
Northwest Territories	OEL TWA (mg/m ³)	2370 mg/m ³
Northwest Territories	OEL TWA (ppm)	1000 ppm
Ontario	OEL STEL (ppm)	750 ppm
Ontario	OEL TWA (ppm)	500 ppm
Prince Edward Island	OEL STEL (ppm)	500 ppm
Prince Edward Island	OEL TWA (ppm)	250 ppm
Québec	VECD (mg/m ³)	2380 mg/m ³
Québec	VECD (ppm)	1000 ppm
Québec	VEMP (mg/m ³)	1190 mg/m ³
Québec	VEMP (ppm)	500 ppm
Saskatchewan	OEL STEL (ppm)	750 ppm

CITRUS CLEANER CONCENTRATE

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Saskatchewan	OEL TWA (ppm)	500 ppm
Yukon	OEL STEL (mg/m ³)	3000 mg/m ³
Yukon	OEL STEL (ppm)	1250 ppm
Yukon	OEL TWA (mg/m ³)	2400 mg/m ³
Yukon	OEL TWA (ppm)	1000 ppm

Exposure Controls

Appropriate Engineering Controls: Gas detectors should be used when flammable gases/vapors may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves. Face shield. Insufficient ventilation: wear respiratory protection. Full protective flameproof clothing.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Clear to pale yellow
Odor	: Citrus like
Odor Threshold	: Not available
pH	: Not applicable
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: > 56 °C (132.8 °F)
Flash Point	: > -17 °C (1.4 °F)
Auto-ignition Temperature	: > 203 °C (397.4 °F)
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: 1.0%
Upper Flammable Limit	: 13.0%
Vapor Pressure	: <184 mmHg @20 °C
Relative Vapor Density at 20 °C	: Not available
Relative Density	: 0.77 g/mL (Concentrate)
Specific Gravity	: 0.77 @ 20 °C (Concentrate)
Solubility	: Insoluble in water
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available
Solids Content	: 0% (completely volatile)
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact.

CITRUS CLEANER CONCENTRATE

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Explosion Data – Sensitivity to Static Discharge : Yes, in certain circumstances product can ignite due to static discharge.
VOC Content (SCAQMD Rule 1168) : 760 g/L (6.3 lb/gal)
VHAP Content : 0.0 lbs/lb solids

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: may explode if heated.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight, extremely high or low temperatures, open flames, sources of ignition and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

Hazardous Decomposition Products: Carbon oxides (CO, CO₂). hydrocarbons.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Causes skin irritation.

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause drowsiness or dizziness.

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: High concentrations may cause central nervous system depression such as dizziness, vomiting, numbness, drowsiness, headache, and similar narcotic symptoms.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: Not considered a potential route of exposure.

Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

D-Limonene (5989-27-5)	
LD50 Oral Rat	4400 mg/kg
LD50 Dermal Rabbit	> 5 g/kg
Acetone (67-64-1)	
LD50 Oral Rat	5800 mg/kg
LD50 Dermal Rabbit	15688 mg/kg
LC50 Inhalation Rat	44 g/m ³
Acetone (67-64-1)	
OSHA Specifically Regulated Carcinogen List	In OSHA Specifically Regulated Carcinogen list.
D-Limonene (5989-27-5)	
IARC Group	3
National Toxicology Program (NTP) Status	Evidence of Carcinogenicity.

CITRUS CLEANER CONCENTRATE

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Harmful to aquatic life. Very toxic to aquatic life with long lasting effects.

D-Limonene (5989-27-5)	
LC50 Fish 1	0.619 - 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC 50 Fish 2	35 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
Butane (106-97-8)	
LC50 Inhalation Rat	30957 mg/m ³ (Exposure time: 4 h)

Acetone (67-64-1)	
LC50 Fish 1	4144.846 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	1679.66 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC 50 Fish 2	6210 (6210 - 8120) mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 2	12600 (12600 - 12700) mg/l (Exposure time: 48 h - Species: Daphnia magna)

Persistence and Degradability

Acetone (67-64-1)	
Persistence and Degradability	Readily biodegradable in water.

Bioaccumulative Potential

Acetone (67-64-1)	
BCF Fish 1	0.69
Log Pow	-0.24
Log Kow	-0.24

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions. Handle empty containers with care because residual vapors are flammable. Do not puncture or incinerate container.

Ecology – Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

In Accordance with DOT

Proper Shipping Name : FLAMMABLE LIQUID, N.O.S. (D-Limonene, Acetone)
Packing Group : II
Hazard Class : 3
Identification Number : UN1993
Label Codes : 3
ERG Number : 128



Accordance with TDG

Proper Shipping Name : FLAMMABLE LIQUID, N.O.S. (D-Limonene, Acetone)
Packing Group : II
Hazard Class : 3
Identification Number : UN1993
Label Codes : 3
Marine Pollutant (TDG) : Marine pollutant



CITRUS CLEANER CONCENTRATE

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard
D-Limonene (5989-27-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Acetone (67-64-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
Heptane, branched, cyclic and linear (426260-76-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

US State Regulations

Proposition 65 – To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

Acetone (67-64-1)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Canadian Regulations

D-Limonene (5989-27-5)
Listed on the Canadian DSL (Domestic Substances List)
Listed on the Canadian IDL (Ingredient Disclosure List)
IDL Concentration 1 %
Acetone (67-64-1)
Listed on the Canadian DSL (Domestic Substances List)
Listed on the Canadian IDL (Ingredient Disclosure List)
IDL Concentration 1 %
Heptane, branched, cyclic and linear (426260-76-6)
Listed on the Canadian DSL (Domestic Substances List)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date	: 03/26/2019
Other Information	: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

H225	Highly flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS 2015