



CITRIKLEEN® GR

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Date Prepared: February 25, 2015
MSDS No.: 1851

SECTION 1: IDENTIFICATION

Product name: CITRIKLEEN GR

Recommended use: Graffiti removal

Physical Description: Milky white liquid with mild citrus odor

Generic Ingredients: d-Limonene, water, surfactant, fatty acids

Manufacturer:

Penetone Corporation
700 Gotham Parkway
Carlstadt, NJ 07072
800-631-1652 or 201-567-3000

Business Contact:

Customer Service
800-631-1652 x2602 or 2272
Product Safety
800-631-1652 x2211 or 2257

Emergency Phone Numbers: **PENETONE 201-567-3000** **CHEMTREC 800-424-9300**

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

<p>Health: Skin irritation: 2 Eye irritation: 2B Skin sensitization: 1</p>	<p>Specific target organ toxicity - single exposure: 3 Aspiration hazard: 1 Physical: Flammable liquid: 3</p>
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DANGER!

Flammable Liquid and Vapor.
May Be Fatal If Swallowed and Enters Airways.
Causes Eye and Skin Irritation.
May Cause an Allergic Skin Reaction.
May Cause Drowsiness or Dizziness.



Precautionary Statements:	
<p><u>Prevention:</u> Avoid breathing fumes, vapors or mists if inhalable mists occur during use. Use only outdoors or in a well-ventilated area. Wear protective gloves, eye protection, and face protection. Wash hands and exposed skin thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Keep container tightly closed. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting, and mixing equipment. Use only non-sparking tools. Take precautionary measure against static discharge.</p> <p><u>Response:</u> <i>In case of fire:</i> Use dry chemical, carbon dioxide, water spray, water fog, or foam. Do not use solid water stream as this may spread the fire. <i>If in eyes:</i> Rinse cautiously with water for several minutes. Remove contact lenses, if present and</p>	<p>easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. <i>If on skin (or hair):</i> Take off immediately all contaminated clothing. Rinse skin with water or shower. A mild soap may be used. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. <i>If inhaled:</i> Remove person to fresh air and keep comfortable for breathing. Call a poison center, doctor, emergency room or 911 if you feel unwell. <i>If swallowed,</i> immediately call a poison center, doctor, emergency room, or 911. Do NOT induce vomiting.</p> <p><u>Storage:</u> Store locked up. Store in a well-ventilated place. Keep cool. Keep container tightly closed.</p> <p><u>Disposal:</u> Dispose of contents/container in accordance with local, regional, and national regulations (see Sections 13 and 15 of SDS for disposal and reporting requirements).</p>



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SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Concentration Wt% (1)
d-Limonene	5989-27-5	50-75
Water	5989-27-5	20-40
Ethoxylated nonylphenol	127087-87-0	1-10
Oleic acid	112-80-1	1-10
Stearic acid	57-11-4	1-10

(1) Exact percentages being withheld under trade secret provision of OSHA HCS 1910.1200(i)

SECTION 4: FIRST-AID MEASURES

General Description of Symptoms & First-Aid Measures

Most likely work-place exposure routes will be *skin contact* or *inhalation*.

For *skin contact*, typically no immediate effects will be observed. Slight reddening or minor irritation could develop some time after exposure if product is not quickly washed off. For sensitive individuals, a rash may appear.

Inhalation exposure may produce varied effects, particularly if exposure occurs above the recommended workplace exposure limits (see SECTION 8). Typical symptoms would include headaches, dizziness, and drowsiness. In extreme cases, unconsciousness and other central nervous effects may occur.

Eyes

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 or develops: Get medical advice or attention. Penetone recommends that after any eye exposure a physician be seen immediately.

Ingestion

If swallowed: Immediately call a poison center, doctor, physician or other competent medical authority. Rinse mouth. Product presents an aspiration hazard. **DO NOT INDUCE VOMITING.**

Inhalation

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center, doctor, physician or other competent medical authority if you feel unwell.

Skin

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. A mild soap may be used to wash skin. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice or attention.

Special Treatment / Other

None

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties

Classification: 3

Flash Point: 115°F PMCC

Autoignition Temperature: not determined

Lower Flammable Limit: not determined **Upper Flammable Limit:** not determined

Specific Hazards

Flammable liquid. Can form flammable mixtures at or above the flash point.



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Extinguishing Media

Suitable: SMALL FIRE: Use dry chemical, carbon dioxide (CO₂), water spray or regular foam. LARGE FIRE: water spray, water fog, or foam.

Unsuitable: Do not use solid water stream as this may spread fire.

Protection & Precautions for Firefighters

Protective Equipment & Clothing: Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters protective clothing will only provide limited protection.

Fire Fighting Guidance: Cool containers with flooding quantities of water until well after fire is out. Move containers from fire area if you can do it safely. Dike fire control water for later disposal; do not scatter material. Containers can expand and explode under fire conditions due to vapor buildup. Always stay away from containers engulfed in fire.

Hazardous Combustion Products: Smoke, fumes, and oxides of carbon.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Land Spill

Eliminate sources of ignition. Do not touch or walk through spilled material. Stop leak if you can do it safely. For large spills, dike and pump into properly labeled containers for reclamation or disposal. For small spill, soak up with absorbent material and place in properly labeled containers for disposal.

Water Spill

Product is an emulsion which may make cleanup difficult. Avoid agitation to minimize further emulsion formation. Remove product from water surface by skimming or with suitable absorbents. Put into properly labeled containers for reclamation or disposal. If allowed by local environmental regulatory agencies, you may use a suitable dispersant. Check with local environmental regulatory agencies for reporting requirements.

See SECTION 8 for EXPOSURE CONTROLS and PERSONAL PROTECTION.

SECTION 7: HANDLING & STORAGE

Handling

Do not handle near heat, sparks, or flame. Avoid contact with oxidizing agents. Use only with adequate ventilation/personal protection (SEE section 8). Avoid contact with eyes, skin and clothing. After handling, always wash hands thoroughly with soap and water. Avoid personal contact with any residue. Dispose of empty containers with care. Empty containers can contain flammable residue and explosive vapors. **Do not cut, weld, or reuse empty container.**

Storage

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Do not store near heat, sparks, open flame, or other ignition sources. Do not store near strong oxidizing agents. Do not store in direct sunlight. Avoid storing above 120°F (49°C).

SECTION 8: EXPOSURE CONTROLS and PERSONAL PROTECTION

Engineering Controls

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

Personal Protection

Inhalation A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must



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be followed whenever workplace conditions warrant respirator use. Use of an organic vapor mask or respirator is recommended.

Skin Wear chemical resistant gloves such as: rubber, nitrile, neoprene, or latex when skin contact is possible. Protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn depending on how the product is used. PPE should be cleaned thoroughly after each use.

Eyes Penetone recommends always wearing safety glasses as a minimum in any workplace. Conditions may warrant the use of chemical goggles and possibly a face shield. Consult your standard operating procedure or safety professional for advice. Use protective eye and face devices that comply with ANSI Z87.1-1987.

Additional Remarks

Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the hazards and/or potential hazards that may be encountered during use.

Occupational Exposure Limits

<u>Component Name</u>	<u>Source</u>	<u>Value</u>	<u>Type</u>	<u>Notation</u>
d-Limonene (1)	ACGIH	20 ppm	TWA	dsen; A4
	NIOSH	100 ppm	TWA	
	OSHA Z1	100 ppm	TWA	

(1) No OEL has been established for d-limonene. Value given is for turpentine which has same molecular weight and similar structure.

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Appearance: milk white liquid
Odor: mild citrus
Odor Threshold: not determined
pH: 4-5
Melting Point / Freezing: about 32°F
Boiling Point / Boiling Point Range: about 212°F
Flash Point: 115°F PMCC
Evaporation Rate: less than 0.05 (acetone = 1)
Flammability: not applicable
Lower Flammable Limit: not determined
Upper Flammable Limit: not determined
Explosive Properties: not applicable
Vapor Pressure: equal to water
Relative Vapor Density: not determined
Relative Density: 0.91
Solubility (Water): emulsion (stable for 1-12 hours)
Partition Coefficient (K_{ow}): not determined
Auto-ignition temperature: not determined
Decomposition temperature: not determined
Viscosity: 800-1500 centipoise at room temperature

SECTION 10: STABILITY & REACTIVITY

Reactivity

Product is stable and only reactive under extreme conditions (very high heat/pressure) or in the presence of specific



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incompatible materials (see below).

Chemical Stability

Product is stable.

Hazardous Reactions

Hazardous polymerization will not occur.

Conditions to Avoid

Flammable liquid. Do not store near sources of heat, sparks, open flame, or other ignition sources.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Carbon monoxide and dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Product Summary

Product is irritating to the skin and eyes and may cause a skin rash in sensitive people. Vapor/aerosol concentrations above recommended exposure levels are irritating to the eyes and respiratory tract, and may cause headaches, dizziness, drowsiness, unconsciousness and other central nervous system effects.

Acute Toxicity:

Dermal: LD50 > 4,000 mg/kg rabbit (estimated using additivity formula)

Inhalation: no data available

Oral: LD50 > 3,000 mg/kg rat (estimated using additivity formula)

Skin Corrosion/Irritation

d-Limonene causes moderate (reversible) skin irritation on guinea pigs and low (reversible) irritation on rabbits. Product as a whole may cause moderate skin irritation.

Serious Eye Damage/Irritation

d-Limonene causes mild (reversible) eye irritation on rabbits. Product as a whole may cause mild eye irritation

Sensitization - Eye or Skin

d-Limonene may cause skin sensitization.

Germ Cell Mutagenicity

Not expected to be a germ cell mutagen. Based upon component informaton.

Carcinogenicity

Various studies have shown that d-limonene when fed at very high levels to laboratory animals have resulted in effects on the kidneys, liver, ureter, and bladder. d-Limonene is listed by IARC as Group 3: not classifiable as to its carcinogenicity to humans and is listed by ACGIH as Group 4: not classifiable as a human carcinogen. d-Limonene is listed as an equivocal tumorigenic agent by RTECS criteria.

Reproductive Toxicity

No data available.

The surfactant used in this product has produced effects in the fetus only at levels that were toxic to the parent animals.

Specific Target Organ Effects - Single Exposure

No data available.



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Specific Target Organ Effects - Repeated or Prolonged Exposure

No data available.

Repeated dose toxicity: d-limonene, mouse (male/female): NOEL - 1,650 mg/kg; LOEL - 3,300 mg/kg

Aspiration Hazard

Based upon available data and comparison to similar materials, if swallowed, may pose a lung aspiration hazard during vomiting. Lung aspiration may result in chemical pneumonitis, pulmonary edema, and damage to lung tissue or death.

SECTION 12: ECOLOGICAL INFORMATION

Product Summary

Product because of high d-limonene content should be considered as very toxic to aquatic life. (Acute aquatic toxicity category 1 by European Union classification).

Ecotoxicity

Acute toxicity for aquatic vertebrates estimated to be about 1 mg/l; invertebrates estimated to be about 1 mg/l.; bacteria (sludge) estimated to be about 5 mg/l. All estimates based on additivity formula.

Persistence and Degradability

d-Limonene is readily degradable. Nonylphenol ethoxylates are not readily degradable.

Bioaccumulative Potential

d-Limonene because of its rapid degradation is estimated to have a low BCF (log Pow < 3). Nonylphenol ethoxylates, because of their slower degradation, are estimated to have a moderate BCF (log Pow of 3-5)

Mobility in soil

No data available for the product.

Other Adverse Effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS

Product is a D001 Ignitable Hazardous Waste under RCRA definitions. Dispose of contents/container in accordance with all applicable federal, state, and local regulations.

Note: Contaminated product, soil, water, container residues and spill cleanup materials may be hazardous wastes. Appropriate hazardous waste designation is the responsibility of the user.

SECTION 14: TRANSPORT INFORMATION

ID No.: UN1993
Proper Shipping Name: FLAMMABLE LIQUID, N.O.S., (contains d-limonene)
Hazard Class: 3
Packing Group: III
Marine Pollutant: Yes
Label: FLAMMABLE
RQ: No
Special Precautions: None



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SECTION 15: REGULATORY INFORMATION

TSCA

The ingredients in this product are listed on the TSCA inventory.

RCRA HAZARD CLASS

D001 - Ignitable hazardous waste

SARA 311/312 REPORTABLE HAZARD CATEGORIES: Immediate (Acute) Health Fire

REPORTING REQUIREMENTS (all quantities in pounds)

Component	CAS / 313 Code	Section 302 (EHS) TPQ	Section 304 EHS RQ	CERCLA RQ	Section 313	CAA 112(r) TQ	CWA / OPA
no components subject to reporting							

NEW JERSEY RIGHT-TO-KNOW INFORMATION

This product contains d-limonene (CAS# 5989-27-5), ethoxylated nonylphenol (CAS# 127087-87-0), oleic acid (CAS 112-80-1), and stearic acid (CAS 57-11-4).

CALIFORNIA PROPOSITION 65 INFORMATION

This product does not contain any chemicals recognized by the state of California to cause cancer and/or birth defects or reproductive harm.

SCAQMD INFORMATION

Is there a photochemically reactive material present? Yes
What is the % by volume of photochemically reactive material? About 60
What is the VOC content? 540 g/l
What is the vapor pressure of VOC's? Less than 1 mm Hg @ 20°C

SECTION 16: OTHER INFORMATION

REVISION SUMMARY

New GHS format

SUPERSEDES ISSUE DATE

June 28, 2007

HAZARD RATING SYSTEMS:

	<u>HMIS</u>	<u>NFPA</u>
HEALTH	1	1
FLAMMABILITY	2	2
REACTIVITY	0	0
	B	

KEY
4 = Severe
3 = Serious
2 = Moderate
1 = Slight
0 = Minimal

FOR ADDITIONAL PRODUCT INFORMATION, CONTACT YOUR SALES ENGINEER
FOR ADDITIONAL HEALTH/SAFETY INFORMATION, CALL 201-567-3000

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