



MATERIAL SAFETY DATA SHEET

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CITRIKLEEN® HD

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SECTION 1 PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

PRODUCT NAME: CITRIKLEEN HD
GENERAL USE: Cleaning, degreasing, carbon removal
PRODUCT DESCRIPTION: Solvent emulsion
GENERIC INGREDIENTS: Water, d'limonene, surfactants, coupling agents, alkanolamines

EMERGENCY TELEPHONE NUMBERS: **PENETONE 201-567-3000**
CHEMTREC 800-424-9300

SECTION 2 HAZARDOUS INGREDIENT SECTION

This product is hazardous as defined in 29 CFR 1910.1200.

OSHA HAZARD: FLAMMABLE, CORROSIVE

OSHA HAZARDOUS INGREDIENTS

	CAS#	EXPOSURE LIMITS 8 hrs. TWA (ppm)		Supplier
		OSHA PEL	ACGIH TLV	
D'limonene	5989-27-5	not established	not established	---
Monoethanolamine	141-43-5	3	3	---
Diethanolamine	111-42-2	3	3	---

SECTION 3 HEALTH INFORMATION & PROTECTION

EMERGENCY OVERVIEW:

Clear amber liquid with citrus-wintergreen odor.
Flammable. Can be corrosive to eyes, skin, and respiratory tract.

POTENTIAL HEALTH EFFECTS:

EYE CONTACT:

May cause irritation or burns to eyes on prolonged contact. High vapor concentrations may be irritating.

SKIN CONTACT:

Frequent or prolonged contact may irritate or dry the skin, cause dermatitis or cause burns. Skin contact may aggravate an existing dermatitis condition.

INHALATION:

High vapor/aerosol concentrations are irritating or may cause burns to the respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects.

INGESTION:

Small amounts of this liquid may be drawn into the lungs by either swallowing or vomiting. This may cause severe and delayed health effects such as inflammation of the lungs and infection of the bronchi. Ingestion may cause irritation of or burns to the digestive tract.

CHRONIC:

Inflammation of mucous membranes and respiratory tract may occur upon prolonged breathing of mist. Ingestion of large amounts of d'limonene has caused kidney and liver damage in male rats but not in female rats or mice of both species. Ingestion of large amounts of monoethanolamine has caused kidney and liver damage in laboratory animals. An increased incidence of liver tumors in both sexes of mice and an increased incidence of kidney tumors in male mice dermally exposed for their lifetime to diethanolamine was observed. The significance of these findings and their relevance to humans are not clear as diethanolamine was not genotoxic (neither mutagenic nor clastogenic), and did not induce tumors in rats or transgenic mice similarly tested.

FIRST AID MEASURES:**EYE CONTACT:**

Flush eyes with large amounts of water. See physician immediately.

SKIN CONTACT:

Flush skin with large amounts of water. Remove contaminated clothing and launder before reuse. If skin irritation develops or persists, consult physician.

INHALATION:

Remove person to fresh air. Administer oxygen or artificial respiration as needed. Call a physician immediately.

INGESTION:

If swallowed, give plenty of milk or water. DO NOT INDUCE VOMITING. Use a stomach pump. Call a physician immediately.

WORKPLACE EXPOSURE CONTROLS:**PERSONAL PROTECTION:**

Safety glasses are recommended for all workplace conditions. Solvent resistant gloves should be used. Other protective gear, including splash proof goggles or face shield, rubber boots, apron, gauntlets, or rain gear should be worn depending on how the product is used. DO NOT MIST THIS PRODUCT. Use coarse spray only.

VENTILATION:

None needed under normal use conditions. For enclosed areas, or where large amounts of the product are being used, the use of fans or other mechanical ventilation is recommended. An organic vapor mask should be used if the TLV is exceeded and a particle mask if the product is sprayed.

SECTION 4 FIRE & EXPLOSION HAZARDS

FLASH POINT: 125°F PMCC, 155°F COC

FLAMMABLE LIMITS: not determined

AUTOIGNITION TEMPERATURE: not determined

GENERAL HAZARD:

Flammable liquid. Can form flammable mixtures at or above the flash point.
Containers can rupture and explode under fire conditions due to pressure and vapor buildup.

FIRE FIGHTING:

Either allow fire to burn out under controlled conditions or extinguish with water, foam, or dry chemical.
Cool exposed containers with water spray.

HAZARDOUS COMBUSTION PRODUCTS:

Smoke, fumes, and oxides of carbon and nitrogen.

SECTION 5 SPILL CONTROL MEASURES

LAND SPILL:

Eliminate sources of ignition. For small spills, use absorbent material such as towels or absorbent powders. Put all material into proper waste disposal container with lid tightly covered. **Solvent soaked materials may spontaneously combust.** For larger spills, dike spill, recover free liquid, and use absorbent material to dry area. Rinse area with water. Put all material into appropriate waste containers.

WATER SPILL:

Remove product from water surface by skimming or with suitable absorbents. This product contains surfactants which will cause it to disperse in water. Localized high concentrations of this product may cause fish kills, but no persistent or long term effects will result. Check with local environmental regulatory agencies for reporting requirements.

SECTION 6 HANDLING & STORAGE

STORAGE TEMPERATURE, °F: ambient. DO NOT STORE ABOVE 120 Deg. F. KEEP FROM FREEZING.

GENERAL: Keep away from heat sources, open flames, and other ignition sources. Do not store near strong oxidants.

SECTION 7 TYPICAL PHYSICAL & CHEMICAL PROPERTIES

BOILING POINT, °F:

About 212

EVAPORATION RATE, Acetone = 1:

equal to water

SOLUBILITY IN WATER:

emulsifies

SPECIFIC GRAVITY at 75°F:

0.97

ODOR AND APPEARANCE:

clear amber liquid with citrus wintergreen odor

VAPOR PRESSURE, mm Hg at 20°C:

equal to water

VAPOR DENSITY (Air = 1):

equal to water

WT% ORGANIC VOLATILES:

about 50

pH:

11.2

SECTION 8 REACTIVITY DATA

GENERAL:

This product is stable and hazardous polymerization will not occur.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Strong oxidizing agents.

SECTION 9 REGULATORY INFORMATION

DEPARTMENT OF TRANSPORTATION (DOT):

PROPER SHIPPING NAME:

FLAMMABLE LIQUID, CORROSIVE, N.O.S.
(contains d'limonene and ethanolamine)

HAZARD CLASS: 3, (8)

IDENTIFICATION NUMBER: UN 2924

PACKING GROUP: III

LABEL: FLAMMABLE, CORROSIVE

FLASH POINT: 125°F TCC

pH: 11.2

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

CERCLA:

This product contains the following CERCLA reportable material.

Diethanolamine CAS# 111-42-2 RQ = 100 lb

Releases exceeding the RQ must be reported to the National Response Center, 800-424-8802, and may be subject to state and local reporting.

RCRA HAZARD CLASS:

D001 Ignitable hazardous waste
D002 Corrosive hazardous waste

SARA TITLE III:

311/312 HAZARD CATEGORIES:

Acute health, Chronic health, Fire

313 REPORTABLE INGREDIENTS:

Diethylene glycol monobutyl ether CAS# 112-34-5 <10 wt%
Diethanolamine CAS# 111-42-2 <2 wt%

NEW JERSEY RIGHT-TO-KNOW INFORMATION:

This product contains water (CAS# 7732-18-5), d'limonene (CAS# 5989-27-5), monoethanolammonium fatty acid soap (CAS# 68440-25-5), diethylene glycol monobutyl ether (CAS# 112-34-5), monoethanolamine (CAS# 141-43-5), nonylphenol ethoxylate (CAS# 9016-45-9), and diethanolamine (CAS# 111-42-2)

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 30
What is the VOC content? 520 g/l
What is the vapor pressure of VOC's? 0.18 mm Hg @ 20°C

SECTION 10 NOTES

HAZARD RATING SYSTEMS:

	HMIS	NFPA	KEY
HEALTH	1	1	4 = Severe
FLAMMABILITY	2	2	3 = Serious
REACTIVITY	0	0	2 = Moderate
			1 = Slight
			0 = Minimal

REVISION SUMMARY:

Change in Section 9

SUPERSEDES ISSUE DATE:

June 13, 2005

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

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