



MATERIAL SAFETY DATA SHEET
 Penetone® Corporation, 700 Gotham Parkway, Carlstadt, NJ 07072
 CAGE 56883

PENAIR® HD-1 RTU PUMP SPRAY
 a MIL-PRF-87937D Type I dilution

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 Date Prepared: April 21, 2004
 MSDS No.: 186485MIL-4040

SECTION 1 PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

PRODUCT NAME: PENAIR HD-1 RTU PUMP SPRAY
 GENERAL USE: Cleaning, degreasing, carbon removal
 PRODUCT DESCRIPTION: Solvent emulsion
 GENERIC INGREDIENTS: Water, d'limonene, surfactants, coupling agents

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

SECTION 2 HAZARDOUS INGREDIENT SECTION

This product is hazardous as defined in 29 CFR1910.1200.

OSHA HAZARD: COMBUSTIBLE

OSHA HAZARDOUS INGREDIENTS

	%	CAS#	EXPOSURE LIMITS 8 hrs. TWA (ppm)		Supplier
			OSHA PEL	ACGIH TLV	
D'limonene	6.0 - 7.5	5989-27-5	not established	not established	---

SECTION 3 HEALTH INFORMATION & PROTECTION

EMERGENCY OVERVIEW:

Slightly cloudy amber liquid with citrus odor.
Combustible. Can be irritating to eyes, skin, and respiratory tract.

POTENTIAL HEALTH EFFECTS:

EYE CONTACT:

May cause irritation to eyes on prolonged contact.

SKIN CONTACT:

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

INHALATION:

High vapor/aerosol concentrations are irritating 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 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.

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 water or milk. DO NOT INDUCE VOMITING. Call a physician immediately.

WORKPLACE EXPOSURE CONTROLS:

PERSONAL PROTECTION:

Safety glasses are recommended for all workplace conditions. Solvent resistant gloves should be used.

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.

SECTION 4 FIRE & EXPLOSION HAZARDS

FLASH POINT: 125°F PMCC, None-to-boiling COC

FLAMMABLE LIMITS: not determined

AUTOIGNITION TEMPERATURE: not determined

GENERAL HAZARD:

Combustible 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.

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, contain spill, recover free liquid, and use absorbent material to dry area. 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:

0.99

ODOR AND APPEARANCE:

slightly cloudy amber liquid with citrus odor

VAPOR PRESSURE, mm Hg at 20°C:

equal to water

VAPOR DENSITY (Air = 1):

equal to water

WT% ORGANIC VOLATILES:

about 10

pH:

8-9

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:

NONHAZARDOUS (NONREGULATED) MATERIAL

HAZARD CLASS: none

IDENTIFICATION NUMBER: none

PACKING GROUP: none

LABEL: not required

FLASH POINT: 125°F TCC

pH: 8-9

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

CERCLA:

This product contains no reportable CERCLA materials. We recommend you contact local authorities to determine if there may be other local reporting requirements.

RCRA HAZARD CLASS:

D001 Ignitable 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 <5 WT%

NEW JERSEY RIGHT-TO-KNOW INFORMATION:

This product contains water (CAS# 7732-18-5), d'limonene (CAS# 5989-27-5), potassium fatty acid soap (CAS# 61790-44-1), diethylene glycol monobutyl ether (CAS# 112-34-5), and nonylphenol ethoxylate (CAS# 9016-45-9).

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 5

What is the VOC content? 100 g/l

What is the vapor pressure of VOC's? 0.013 mm Hg @ 20°C

SECTION 10 NOTES

HAZARD RATING SYSTEMS:

	HMIS	NFPA
HEALTH	1	1
FLAMMABILITY	2	2
REACTIVITY	0	0

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

REVISION SUMMARY:

Change in Section 9

SUPERSEDES ISSUE DATE:

January 29, 2004

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

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