



**MATERIAL SAFETY DATA SHEET**  
Penetone® Corporation, 74 Hudson Ave., Tenafly, NJ 07670

LUMABRITE™ HD

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Date Prepared: January 5, 1998  
MSDS No.: 6090-801A

**SECTION 1 PRODUCT IDENTIFICATION & EMERGENCY INFORMATION**

PRODUCT NAME: LUMABRITE HD  
GENERAL USE: Cleaner, degreaser, metal brightener  
PRODUCT DESCRIPTION: Liquid acid cleaner  
GENERIC INGREDIENTS: Water, phosphoric acid, ammonium bifluoride, surfactant

**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: CORROSIVE

**OSHA HAZARDOUS INGREDIENTS**

	CAS#	EXPOSURE LIMITS 8 hrs. TWA (mg/m <sup>3</sup> )		Supplier
		OSHA PEL	ACGIH TLV	
Phosphoric acid	7664-38-2	1	1	---
Ammonium bifluoride	1341-49-7	2.5	2.5	---

**SECTION 3 HEALTH INFORMATION & PROTECTION**

**EMERGENCY OVERVIEW:**

**Clear water-white liquid with acidic odor.  
Corrosive to skin and eyes.**

**POTENTIAL HEALTH EFFECTS:**

**EYE CONTACT:**

Will cause burns on contact. Mist may be irritating.

**SKIN CONTACT:**

Will cause burns on contact. May cause fluoride type burns which may not be immediately evident.

**INHALATION:**

Inhalation of spray mist may cause irritation or burns to the respiratory tract.

**INGESTION:**

Ingestion will cause burns to the mouth, esophagus, and stomach.

**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. Consult a 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:**

Splash proof goggles are recommended for all workplace conditions. Rubber gloves should be used. Other protective gear, including splash proof goggles or face shield, rubber boots, aprons, gauntlets, or rain gear should be worn depending on how the product is used.

**VENTILATION:**

None needed under normal use conditions. If the product is being sprayed, a dust mask or particle respirator is recommended. DO NOT MIST THIS PRODUCT. Use coarse spray only.

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**SECTION 4 FIRE & EXPLOSION HAZARDS**

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**FLASH POINT:** None to boiling point (TCC, COC)

**FLAMMABLE LIMITS:** Not applicable

**AUTOIGNITION TEMPERATURE:** Not determined

**GENERAL HAZARD:**

This is a water based product and presents no unusual hazards in a fire.

**FIRE FIGHTING:**

Cool containers with water.

**HAZARDOUS COMBUSTION PRODUCTS:**

Hydrofluoric acid vapors may be given off in a fire if taken to dryness.

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**SECTION 5 SPILL CONTROL MEASURES**

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**LAND SPILL:**

For small spills, use absorbent material such as towels or absorbent powders. Put all material into proper waste disposal container with lid tightly covered. 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:**

Product is water based and water dilutable. Surfactants used in this product are biodegradable. Localized high concentration of product may cause fish kills, but no persistent or long term effects will result. Phosphoric acid and ammonium bifluoride are listed in the Clean Water Act. Check with local environmental regulatory agencies for reporting requirements.

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**SECTION 6 HANDLING & STORAGE**

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

**GENERAL:** Do not store near strong bases.

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**SECTION 7 TYPICAL PHYSICAL & CHEMICAL PROPERTIES**

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**BOILING POINT, °F:**

about 212

**EVAPORATION RATE, Acetone = 1:**

equal to water

**SOLUBILITY IN WATER:**

soluble

**SPECIFIC GRAVITY at 75°F:**

1.12

**ODOR AND APPEARANCE:**

Clear water-white liquid with acidic odor

**VAPOR PRESSURE, mm Hg at 20°C:**

equal to water

**VAPOR DENSITY (Air = 1):**

equal to water

**WT% ORGANIC VOLATILES:**

none

**pH:**

1.0

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**SECTION 8 REACTIVITY DATA**

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**GENERAL:**

This product is stable and hazardous polymerization will not occur.

**INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:**

Strong bases and strong oxidizing agents. This product will etch soft metals such as aluminum.

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**SECTION 9 REGULATORY INFORMATION**

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**DEPARTMENT OF TRANSPORTATION (DOT):****PROPER SHIPPING NAME:**

CORROSIVE LIQUIDS, TOXIC, N.O.S.

(contains phosphoric acid and ammonium hydrogendifluoride)

**HAZARD CLASS:** 8

**IDENTIFICATION NUMBER:** UN 2922

**PACKING GROUP:** PG II

**LABELS:** CORROSIVE, POISON

**FLASH POINT:** none-to-boil

**pH:** 1.0

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

**CERCLA:**

This product contains the following CERCLA reportable material:

Ammonium bifluoride CAS# 1341-49-7 RQ = 100 lbs

Phosphoric acid CAS# 7664-38-2 RQ = 5000 lbs

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:**

D002 Corrosive hazardous waste

**SARA TITLE III:**

311/312 HAZARD CATEGORIES:

Acute health

313 REPORTABLE INGREDIENTS:

Phosphoric acid CAS# 7664-38-2 13-17 wt%

Ammonium bifluoride CAS# 1341-49-7 5-10 wt %

**CLEAN WATER ACT:**

Phosphoric acid and ammonium bifluoride are listed in the Clean Water Act as hazardous substances.

**NEW JERSEY RIGHT-TO-KNOW INFORMATION:**

This product contains water (CAS# 7732-18-5), phosphoric acid (CAS# 7664-38-2), ammonium bifluoride (CAS#1341-49-7), 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? No

What is the % by volume of photochemically reactive material? 0

What is the VOC content? 0

What is the vapor pressure of VOCs? 0

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**SECTION 10 NOTES**

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**HAZARD RATING SYSTEMS:**

	HMIS	NFPA
HEALTH	4	4
FLAMMABILITY	0	0
REACTIVITY	0	0

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

**REVISION SUMMARY:**

July 5, 1991

**SUPERSEDES ISSUE DATE:**

New format

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

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