

RAMSOL HD

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Date Prepared: November 13, 2024
MSDS No.: 9146

SECTION 1: IDENTIFICATION

Product name: RAMSOL HD

Recommended use: Degreaser and oil-soluble hydrogen sulfide scavenger

Physical Description: Clear colorless liquid with strong solvent odor

Generic Ingredients: Aromatic petroleum hydrocarbons, surfactants, and glycol ether

Manufacturer:

Penetone Corporation

375 Murray Hill Pkwy.

East Rutherford, NJ 07073

800-631-1652 or 201-567-3000

Business Contact:

Customer Service

800-631-1652 x2272

Product Safety

800-631-1652 x2257

Emergency Phone Numbers: **PENETONE 201-567-3000** **CHEMTREC 800-424-9300**
CANUTEC (613)-996-6666

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Health:

Skin irritation: 2

Eye irritation: 2A

Carcinogenicity: 2

Specific target organ toxicity - single exposure: 3

Specific target organ toxicity - repeat exposure: 2

Reproductive toxicity: 2

Aspiration hazard: 1

Physical:

Flammable liquid: 3

Aquatic environmental hazard - acute: 3

Aquatic environmental hazard - long term: 3

DANGER!

Flammable Liquid and Vapor.

May Be Fatal if Swallowed and Enters Airways.

Causes Skin Irritation and Serious Eye Irritation.

May Cause Respiratory Irritation, Drowsiness or Dizziness.

Suspected of Causing Cancer and of Damaging Fertility or the Unborn Child.

May Cause Damage to Organs Through Prolonged or Repeated Exposure.



Precautionary Statements:

Prevention:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Avoid breathing fumes or vapors. Do not breath 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.

Response:

In case of fire: Use dry chemical, carbon dioxide, water spray, water fog, or foam. Do not use solid water stream as this may spread the fire.

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: Get medical advice/attention.

If on skin (or hair): Take off immediately all contaminated clothing. Wash 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.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center, doctor, emergency room or 911 if you feel unwell.

(Precautionary statements continued on next page)



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If swallowed: Do NOT induce vomiting. Immediately call a poison center, doctor, emergency room, or 911.

If exposed or concerned: Get medical advice/attention. Get medical advice/attention if you feel unwell.

Storage:
Store locked up. Store in a well-ventilated place. Keep cool. Keep container tightly closed.

Disposal:
Dispose of contents/container in accordance with local, regional, and national regulations (see Sections 13 and 15 of SDS for disposal and reporting requirements).

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Concentration Wt% (1)
Solvent naphtha (petroleum) light aromatic	64742-95-6	50-70
Xylenes	1330-20-7	10-30
tetra-N-butyl methylene diamine	20280-10-8	3-15
poly(oxy-1,2-ethanediyl),alpha-undecyl-omega-hydroxy-	34398-01-1	1-10
alcohols, (C12-15 ln. saturated), ethoxylate	68131-39-5	1-10
Calcium dodecylbenzene sulfonate	26264-06-2	0.5-1.5

(1) Exact percentages being withheld under trade secret provision of OHSA HCS 1910.1200(I)

Hazardous Constituents Contained in Product Required for Disclosure

Pseudocumene (1,2,4-trimethylbenzene)	95-63-6	<19
Ethylbenzene	100-41-4	1-5
Cumene	98-82-8	<0.9

This product contains additional materials that are non-hazardous under OSHA, WHMIS or GHS criteria or in concentrations less than 1%

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. Reddening or irritation could develop some time after exposure if product is not quickly washed off.

Inhalation exposure may produce varied effects depending on whether vapor or mist/spray is inhaled (see SECTION 8 for recommended workplace exposure limits). For vapor, typical symptoms would include headaches, dizziness, and drowsiness. In extreme cases, unconsciousness and other central nervous effects may occur. For mist/spray, typical symptoms could include coughing, sneezing, and a tingling or burning sensation in the nose, throat, and lungs.

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: Get medical advice/attention. Penetone recommends that after any eye exposure and initial treatment a physician be seen immediately.

Ingestion

If swallowed: Do NOT induce vomiting. Immediately call a poison center, doctor, emergency room, or 911.

Inhalation

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center, doctor, emergency room or 911 if you feel unwell.

Skin

If on skin: Take off immediately all contaminated clothing. Wash 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.

Special Treatment / Other



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None

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties

Classification: 3

Flash Point: 106°F (41°C) PMCC, 120°F (49°C) COC

Autoignition Temperature: about 820°F (438°C)

Lower Flammable Limit: about 1% **Upper Flammable Limit:** about 6.5%

Specific Hazards

Flammable liquid. Can form flammable mixtures at or above the flash point. Although the product is flammable, it is water dilutable and will self extinguish with addition of water.

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, nitrogen, and sulfur

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 forms emulsion with water which may make cleanup difficult. Avoid agitation to minimize 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

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.

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



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residue and explosive vapors. **Do not cut, weld, or reuse empty container.**

Storage

Store locked up. Store in a well-ventilated place. Keep cool. Keep container tightly closed. 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 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

Component Name	Source	Value	Type	Notation
Solvent naphtha (petroleum) light aromatic (1)	ACGIH	100 mg/m ³	TWA	Appendix H 15 min
	NIOSH	350 mg/m ³	TWA	
		1800 mg/m ³	C	
	OSHA Z1	500 ppm	PEL	
		2000 mg/m ³	PEL	
Xylenes	Supplier	19 ppm	TWA	total hydrocarbons A4, BEI
	ACGIH	100 ppm	TWA	
		150 ppm	STEL	
	NIOSH	100 ppm	TWA	
		150 ppm	STEL	
Pseudocumene (1,2,4-trimethylbenzene) Ethylbenzene	OSHA Z1	100 ppm	PEL	A3, BEI
		435 mg/m ³	PEL	
	ACGIH	25 ppm	TWA	
	ACGIH	20 ppm	TWA	
	NIOSH	100 ppm	TWA	
Cumene		125 ppm	STEL	
	OSHA Z1	100 ppm	PEL	
		435 mg/m ³	PEL	
	ACGIH	50 ppm	TWA	
	NIOSH	50 ppm	TWA	
	OSHA Z1	50 ppm	PEL	
		245 mg/m ³		

(1) Other than supplier, values quoted are for petroleum distillates (naphtha) (rubber solvent)

Biological Exposure Indices (source - ACGIH)

Component Name	Determinant	Sampling Time	Limit	Notation
Xylenes	Methylhippuric acids	End of shift	1.5 g/g creatinine	---



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Ethylbenzene	in urine Sum of mandelic acid & phenylglyoxylic acid in urine	End of shift at end of workweek	0.15 g/g creatinine	Ns
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SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Appearance: clear colorless liquid
Odor: strong solvent odor
Odor Threshold: not determined
pH: not applicable
Melting Point / Freezing: about -30°F (-34°C)
Boiling Point / Boiling Point Range: about 285°F (initial) (140°C)
Flash Point: 106°F (41°C) PMCC, 120°F (49°C) COC
Evaporation Rate: not determined
Flammability: not applicable
Lower Flammable Limit: about 1%
Upper Flammable Limit: about 6.5%
Explosive Properties: not applicable
Vapor Pressure: about 5 mm Hg @ 20°C
Relative Vapor Density: about 4
Relative Density: 0.95
Solubility (Water): forms emulsion
Partition Coefficient (K_{ow}): not determined
Auto-ignition temperature: about 820°F (438°C)
Decomposition temperature: not determined
Viscosity: not determined

SECTION 10: STABILITY & REACTIVITY

Reactivity
Not reactive.

Chemical Stability
Stable.

Hazardous Reactions
None known.

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

Incompatible Materials
Strong oxidizing agents. Sulfuric and nitric acids.

Hazardous Decomposition Products
Smoke, fumes, and oxides of carbon, nitrogen, and sulfur when taken to dryness.

SECTION 11: TOXICOLOGICAL INFORMATION

Product Summary
Product is irritating to the skin and eyes. Prolonged or repeated skin contact may defat the skin resulting in possible irritation and dermatitis. Vapor/aerosol concentrations above recommended exposure levels are irritating to the



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eyes and respiratory tract, and may cause headaches, dizziness, drowsiness, unconsciousness and other central nervous system effects. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

Acute Toxicity:

Dermal: Rabbits, LD50 > 2.0 g/kg (estimated using additivity formula).

Inhalation: No data available.

Oral: Rats, LD50 >2,000 mg/kg (estimated using additivity formula)

Skin Corrosion/Irritation

No data available. Based upon components and comparison to similar products, product should be considered irritating to skin. Prolonged or repeated skin contact may defat the skin resulting in possible irritation and dermatitis.

Serious Eye Damage/Irritation

No data available. Based upon components and comparison to similar products, product may cause serious eye irritation.

Sensitization - Respiratory or Skin

No data available. Not expected to be a skin and respiratory sensitizer based upon component information.

Germ Cell Mutagenicity

No data available. Not expected to be a mutagenic agent based upon component information.

Carcinogenicity

No data available.

Product contains xylene (mixed isomers). Xylene is listed by ACGIH as group A4 - not classifiable as a human carcinogen and by IARC as group 3 - not classifiable as to its carcinogenicity to humans.

Product contains ethylbenzene. Ethylbenzene is listed by ACGIH as group A3 - confirmed animal carcinogen and by IARC as 2B - possibly carcinogenic to humans.

Product contains approximately cumene. Cumene is listed by IARC as group 2B - possibly carcinogenic to humans; and by NTP as reasonably anticipated to be a human carcinogen.

Reproductive Toxicity

No data available.

Ethylbenzene: Studies in lab animals indicate limited evidence of renal malformations, resorptions, and developmental delays following high levels of maternal exposure. The relevance of these findings to humans is not clear at this time.

Specific Target Organ Effects - Single Exposure

No data available. Based upon component information, product is expected to cause respiratory irritation and drowsiness and dizziness and other CNS depression effects. Gross overexposure may result in liver and kidney impairment.

Specific Target Organ Effects - Repeated or Prolonged Exposure

No data available.

Based upon component information, inhalation of high levels of product may affect liver, kidney, and nervous system, and may impair color vision and hearing.

In animal studies, repeated inhalation of ethylbenzene has caused hearing loss.

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.



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SECTION 12: ECOLOGICAL INFORMATION

Product Summary

Product can be considered toxic to all organisms with LC50/EC50's in range of 1-10 mg/l (acute aquatic toxicity category 2 by European Union classification).

Ecotoxicity

Fish: LC50 5-10 mg/l (estimated using additivity formula)
Crustacea: EC50 1-5 mg/l (estimated using additivity formula)
Algae: EC50 1-5 mg/l (estimated using additivity formula)

Persistence and Degradability

No data available. Based upon component information and comparison to similar products, product should be considered biodegradable.

Bioaccumulative Potential

Product not expected to bioaccumulate due to its degradability.

Mobility in soil

Product is a complex mixture. Components will partition into water and soil phases depending on inherent solubility of component in water.

Other Adverse Effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS

Product is a D001 Ignitable Hazardous Waste and D002 Corrosive Hazardous Waste under RCRA (US) 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.:	UN3295
Proper Shipping Name:	HYDROCARBONS, LIQUID, N.O.S.
Hazard Class:	3
Packing Group:	III
Label:	FLAMMABLE
Marine Pollutant:	No
RQ:	100 lbs for xylene (CAS 1330-20-7) or about 650 lbs or 90 gallons of product 1,000 lbs for ethylbenzene (CAS 100-41-4) or about 20,000 lb or 2,700 gallons of product
Special Precautions:	none
Application:	DOT (US), TDG (Canada), IMDG

SECTION 15: REGULATORY INFORMATION

TSCA (US) and DSL (Canada)

The ingredients in this product are listed on the TSCA and DSL inventories.

RCRA (US) HAZARD CLASS



SAFETY DATA SHEET

Penetone® Corporation, 375 Murray Hill Pkwy., East Rutherford, NJ 07073

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D001 - Ignitable hazardous waste, D002 - Corrosive hazardous waste

SARA 311/312 (US) 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 (1)	Section 313	CAA 112(r) TQ	CWA / OPA
Xylenes	1330-20-7			100	313		
product RQ for component				650 90 gal			
Ethylbenzene	100-41-4			1,000	313		
product RQ for component				20,000 2,700 gal			
Cumene				5,000 (2)	313		
1,2,4-Trimethylbenzene	95-63-6			(3)	313		
(1) Releases exceeding the RQ just be reported to the National Response Center, 800-424-8802 and may be subject to state and local reporting. (2) Reporting quantity for product much greater than 100,000 gallons (3) CERCLA hazardous substance with no assigned RQ							

NEW JERSEY RIGHT-TO-KNOW INFORMATION

This product contains solvent naphtha (petroleum) light aromatic (CAS 64742-95-6), xylenes (CAS 1330-20-7), tetra-N-butyl methylene diamine (CAS 20280-10-8), alcohols, C11-C15, ethoxylated (CAS 34398-01-1), and calcium dodecylbenzene sulfonate (CAS 26264-06-2)

CALIFORNIA PROPOSITION 65 INFORMATION



This product can expose you to chemicals including cumene and ethylbenzene which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

SCAQMD INFORMATION

Is there a photochemically reactive material present? Yes
What is the % by volume of photochemically reactive material? About 77
What is the VOC content? 680 g/l
What is the vapor pressure of VOC's? 1-5 mm Hg @ 20°C

SECTION 16: OTHER INFORMATION

REVISION SUMMARY

Changes in Header and Section 1

SUPERSEDES ISSUE DATE

March 7, 2024

HAZARD RATING SYSTEMS:

	HMIS	NFPA
HEALTH	2	2
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

THE INFORMATION PRESENTED HEREIN HAS BEEN COMPILED FROM SOURCES CONSIDERED TO BE DEPENDABLE AND ACCURATE TO THE BEST OF PENETONE'S KNOWLEDGE. THE INFORMATION RELATES TO THIS SPECIFIC MATERIAL. IT MAY NOT BE VALID FOR THIS MATERIAL IF USED IN COMBINATION



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