



ENVIROSOL

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 Date Prepared: September 25, 2019
 SDS No.: 9028

SECTION 1: IDENTIFICATION

Product name: ENVIROSOL

Recommended use: Heavy duty solvent cleaner & degreaser

Physical Description: Clear water white liquid with citrus odor

Generic Ingredients: Hydrocarbons, glycol ether, and surfactant

Manufacturer:

Penetone Corporation
 125 Kingsland Ave.
 Clifton, NJ 07014
 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.



<p>Precautionary Statements:</p>	
<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%
Stoddard solvent	8052-41-3	40-60
d-Limonene	5989-27-5	10-30
Diethylene glycol monobutyl ether	112-34-5	10-30
Linear alcohol ethoxylate	68439-46-3	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 TCC, 140°F COC

Autoignition Temperature: not determined

Lower Flammable Limit: 0.6% **Upper Flammable Limit:** 7%

Specific Hazards

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

Extinguishing Media



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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: Mist/spray can burn at temperatures below flash point. 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 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

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



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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 an3d 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>
Stoddard solvent	ACGIH	100 ppm	TWA	
	NIOSH	350 mg/m ³		
		1800 mg/m ³	C	15 min
	OSHA Z1	500 ppm	TWA	
		2900 mg/m ³	TWA	
d-Limonene (1)	Supplier	66 ppm	TWA	vapor, total HC's
	ACGIH	400 mg/m ³	TWA	vapor, total HC's
		20 ppm	TWA	dsen; A4
	NIOSH	100 ppm	TWA	
		OSHA Z1	100 ppm	PEL
Diethylene glycol monobutyl ether	ACGIH	10 ppm	TWA	IFV

(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:** clear water-white liquid
- Odor:** mild citrus
- Odor Threshold:** not determined
- pH:** not applicable
- Melting Point / Freezing:** less than 0°F (-18°C)
- Boiling Point / Boiling Point Range:** about 400°F (204°C)
- Flash Point:** 115°F (46°C) TCC
- Evaporation Rate:** 0.1 (n-butyl acetate = 1)
- Flammability:** not applicable
- Lower Flammable Limit:** 0.6%
- Upper Flammable Limit:** 0.7%
- Explosive Properties:** not applicable
- Vapor Pressure:** less than 5 mm Hg at room temperature
- Relative Vapor Density:** about 4.8
- Relative Density:** 0.83
- Solubility (Water):** forms emulsion (rapidly separates, less than one hour)
- Partition Coefficient (log K_{ow}):** not determined
- Auto-ignition temperature:** not determined
- Decomposition temperature:** not determined



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Viscosity: less than 5 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 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 as a whole has not been tested. Based on supplier information, the product as a whole would be considered of low toxicity for all for all routes of entry. Product is expected to be only slightly irritating to skin and possibly mildly irritating to eyes. Product will defat the skin, and prolonged/repeated contact could lead to dermatitis. Product may produce skin rash in sensitive people. If ingested, the product does present an aspiration hazard. Because of product's low room temperature vapor pressure, irritation of the respiratory tract is expected to be low. However, mists, particularly as a respirable aerosol, may cause moderate irritation to the respiratory tract. Ingestion of high levels of the some of the components has caused kidney/liver effects in male rats. These results are not considered relevant to humans.

Acute Toxicity:

Dermal: LD50 > 2,000 mg/kg rabbit (estimated using additivity formula)

Inhalation: no data available

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

Skin Corrosion/Irritation

Based upon component data, product is expected to show only mild skin irritation. Product may defat and dry the skin leading to discomfort and dermatitis.

Serious Eye Damage/Irritation

Based upon component data, product is expected to show only mild eye irritation.

Sensitization - Respiratory or Skin

D-limonene may cause skin sensitization.

Germ Cell Mutagenicity

Based upon component data, product is expected not to cause germ cell mutagenicity.

Carcinogenicity

Various studies have shown that d-limonene when fed at very high levels to laboratory animals have resulted in



SAFETY DATA SHEET

Penetone® Corporation, 125 Kingsland Ave., Clifton, NJ 07014

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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.

Stoddard solvent contains chemicals at low levels (<0.5%) that have been listed as potentially carcinogenic. Specifically, exposure to high concentrations of two specific chemicals caused cancer in laboratory animal studies, but the relevance of these finding to humans is uncertain.

Reproductive Toxicity

No data available.

Diethylene glycol butyl ether: Did not interfere with reproduction of lab animals. Body weights of newborn animals were decreased. Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

Specific Target Organ Effects - Single Exposure

No data available.

Specific Target Organ Effects - Repeated or Prolonged Exposure

No data available.

Repeated dose toxicity studies of d-limonene on male and female mice had a NOEL of 1,650 mg/kg and a LOEL of 3,300 mg/kg.

Stoddard solvent: Ingestion of high levels of the some of the components has caused kidney/liver effects in male rats. These results are not considered relevant to humans.

For the linear alcohol ethoxylate surfactant used in this product, repeat dose 90 day oral sub-chronic NOAEL in male/female rats was >500 mg/kg/d and >400 mg/kg/d, while a 90 day dermal sub-chronic NOAEL was >125 mg/kg/d for male/female rats.

Diethylene glycol butyl ether has had effects on the kidney, liver, and blood of lab animals at high feeding levels over extended periods of time.

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 forms an emulsion with water and will easily dispers. The product is expected to be toxic to aquatic organisms. The product is volatile and will evaporate to air, where it is expected to rapidly oxidize by photochemical reactions. It is not expected to partition to sediments and wastewater solids. The product is inherently biodegradable. (Acute aquatic toxicity category 2 by European Union classification).

Ecotoxicity

Acute toxicity for aquatic vertebrates and invertebrates estimated to be 1-10 mg/l (additivity formula).

Persistence and Degradability

Product is inherently biodegradable and not expected to persist.

Bioaccumulative Potential

Not expected to bioaccumulate



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Mobility in soil

Product expected to have low mobility

Other Adverse Effects

none

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
Label: FLAMMABLE
Marine Pollutant: No
RQ: No
Special Precautions: None

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
Diethylene glycol butyl ether	N230 Glycol ethers			(1)	313		
(1) CERCLA hazardous substance with no assigned RQ							

NEW JERSEY RIGHT-TO-KNOW INFORMATION

This product contains stoddard solvent (CAS 8052-41-3), d-limonene (CAS# 5989-27-5), diethylene glycol butyl ether (CAS# 112-34-5), and linear alcohol ethoxylate (CAS68439-46-3).

CALIFORNIA PROPOSITION 65 INFORMATION

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



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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? 800 g/l
What is the vapor pressure of VOC's? Less than 5 mm Hg @ 20°C

SECTION 16: OTHER INFORMATION

REVISION SUMMARY

Change in Section1

SUPERSEDES ISSUE DATE

March 17, 2017

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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