



# SAFETY DATA SHEET

Penetone® Corporation, 700 Gotham Parkway, Carlstadt, NJ 07072

## PENSOLV™ L945

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Date Prepared: May 4, 2015  
MSDS No.: 4764

### SECTION 1: IDENTIFICATION

**Product name:** PENSOLV L945

**Recommended use:** Cleaner, degreaser

**Physical Description:** Clear water white liquid with mild odor

**Generic Ingredients:** Hydrocarbon solvent and d-limonene

**Manufacturer:**

Penetone Corporation  
700 Gotham Parkway  
Carlstadt, NJ 07072  
800-631-1652 or 201-567-3000

**Business Contact:**

Customer Service  
800-631-1652 x2607 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><b>Health:</b> Aspiration hazard: 1 Skin sensitization: 1 Eye irritation: 2 Skin irritation: 2B</p>	<p>Specific target organ toxicity - single exposure: 3</p> <p><b>Physical:</b> Flammable liquid: 4</p>
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**DANGER!**

May Be Fatal If Swallowed and Enters Airways.  
May Cause Drowsiness or Dizziness.  
May Cause Allergic Skin Reaction.  
Combustible Liquid.



<b>Precautionary Statements:</b>	
<p><u>Prevention:</u> Keep away from flames and hot surfaces.--No smoking. 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. Avoid breathing fumes, vapors or mists if inhalable mists occur during use. Use only outdoors or in a well-ventilated area.</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 easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. <i>If on skin:</i> Wash with plenty of water. A mild soap may be used. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.</p>	<p><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% (1)
Aliphatic petroleum naphthas	64742-47-8 & 64742-14-9	80-90
d-limonene	5989-27-5	10-20

(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 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. If contact lenses present, remove them if easy to do. Continue rinsing for several minutes. If eye irritation persists: Get medical advice or attention. Penetone recommends that after any eye exposure and initial treatment a physician be seen immediately.

**Ingestion**

If swallowed: Immediately call a poison center, doctor, physician or other competent medical authority. 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): Wash with plenty of water or a mild soap. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice or attention.

**Special Treatment / Other**

None

**SECTION 5: FIRE FIGHTING MEASURES**

**Flammable Properties**

**Classification:** 4

**Flash Point:** 145°F TCC

**Autoignition Temperature:** about 400°F (204°C)

**Lower Flammable Limit:** about 0.6% **Upper Flammable Limit:** about 6%

**Specific Hazards**

Combustible liquid. Can form combustible mixtures at or above the flash point.

**Extinguishing Media**

**Suitable:** SMALL FIRE: Use dry chemical, carbon dioxide (CO<sub>2</sub>), 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.



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**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.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

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**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 is a hydrocarbon, lighter than water and not soluble in water. Product will float. 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.**

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**SECTION 7: HANDLING & STORAGE**

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**Handling**

Do not handle near heat, sparks, or flame. Material can accumulate static charges which may cause an electrical spark. When the material is handled in bulk, an electrical spark could ignite any flammable vapors from liquids or residues that may be present. Use proper bonding and/or ground procedures. 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. Open slowly in order to control possible pressure release. 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).

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**SECTION 8: EXPOSURE CONTROLS and PERSONAL PROTECTION**

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**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.



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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**

<u>Component Name</u>	<u>Source</u>	<u>Value</u>	<u>Type</u>	<u>Notation</u>
Aliphatic petroleum naphtha	ACGIH	1200 mg/m <sup>3</sup>	TWA	Appendix H
	NIOSH	350 mg/m <sup>3</sup>	TWA	
		1800 mg/m <sup>3</sup>	C	
	OSHA Z1	500 ppm	TWA	
d-Limonene (1)	ACGIH	20 ppm	TWA	dsen; A4
	NIOSH	100 ppm	TWA	
	OSHA Z1	100 ppm	PEL	

(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 hydrocarbon  
**Odor Threshold:** not determined  
**pH:** not applicable  
**Melting Point / Freezing:** not determined, pour point about -34°C  
**Boiling Point / Boiling Point Range:** Initial 315°F  
**Flash Point:** 145°F TCC  
**Evaporation Rate:** <0.01 (butyl acetate =1)  
**Flammability:** not applicable  
**Lower Flammable Limit:** 0.6%  
**Upper Flammable Limit:** 6.0%  
**Explosive Properties:** not applicable  
**Vapor Pressure:** about 0.05 mm Hg @ 20°C (68°F)  
**Relative Vapor Density (Air = 1):** greater than 4  
**Relative Density:** 0.78  
**Solubility (Water):** insoluble  
**Partition Coefficient (K<sub>ow</sub>):** not determined  
**Auto-ignition temperature:** not determined  
**Decomposition temperature:** not determined  
**Viscosity:** less than 5 centipoise at room temperature



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## SECTION 10: STABILITY & REACTIVITY

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### Reactivity

Not reactive.

### Chemical Stability

Stable under normal conditions.

### Hazardous Reactions

No hazardous reactions or under normal storage conditions. Hazardous polymerization will not occur.

### Conditions to Avoid

Product is a combustible 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.

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## SECTION 11: TOXICOLOGICAL INFORMATION

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### Product Summary

Product is essentially non-toxic. May cause mild, short lasting discomfort to the eye. Prolonged or repeated exposure may dry the skin leading to discomfort and dermatitis. Vapor/aerosol concentrations above recommended exposure levels are irritating to the eyes and respiratory tract, and may cause headaches, dizziness, drowsiness, unconsciousness and other central nervous system effects. Ingestion of high levels of d-limonene 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:** not data available

**Oral:** LC50 > 5,000 mg/kg rat (estimated using additivity formula)

### Skin Corrosion/Irritation

Mildly irritating to skin with prolonged exposure. Prolonged exposure may dry the skin leading to discomfort and dermatitis. Not considered irritating based on test data for structurally similar materials.

### Serious Eye Damage/Irritation

May cause mild, short-lasting discomfort. Not considered irritating based on test data for structurally similar materials.

### Sensitization - Respiratory or Skin

d-Limonene may cause skin sensitization.

### Germ Cell Mutagenicity

Not expected to be a germ cell mutagen. Based on test data for structurally similar materials.

### Carcinogenicity

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



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**Reproductive Toxicity**

No data available.

**Specific Target Organ Effects - Single Exposure**

No data available.

**Specific Target Organ Effects - Repeated or Prolonged Exposure**

No data available.

Ingestion of high levels of d-limonene has caused kidney/liver effects in male rats. These results are not considered relevant to humans. 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.

**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**

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**Product Summary**

Product is a blend of hydrocarbon solvents and as such, will float on water and cause a sheen. The product is expected to be toxic to aquatic organisms and should be considered a marine pollutant. (Acute aquatic toxicity category 2 by European Union classification.) 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.

**Ecotoxicity**

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

**Persistence and Degradability**

Expected to be readily biodegradable. Transformation due to hydrolysis and photolysis not expected to be significant. Expected to degrade rapidly in air.

**Bioaccumulative Potential**

Not expected to bioaccumulate

**Mobility in soil**

Product expected to have low mobility

**Other Adverse Effects**

None known

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**SECTION 13: DISPOSAL CONSIDERATIONS**

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Product is a nonhazardous 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.



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**SECTION 14: TRANSPORT INFORMATION**

**ID No.:** None  
**Proper Shipping Name:** Nonhazardous (nonregulated) material  
**Hazard Class:** None  
**Packing Group:** None  
**Label:** None  
**Marine Pollutant:** No  
**RQ:** None  
**Special Precautions:** None

**SECTION 15: REGULATORY INFORMATION**

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

**RCRA HAZARD CLASS**  
Product is a nonhazardous 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
Product as a whole				(1)			(2)
(1) This material is not subject to any special reporting under the requirements of CERCLA. CERCLA petroleum exclusion applies for this product. Contact local authorities to determine if other reporting requirements apply. (2) This product is classified as an oil under Section 311 of the CWA (40 CFR 110) and the OPA of 1990. Discharge or spills which produce a visible sheen on either surface water, or in waterways/sewers which lead to surface water, must be reported to the National Response Center at 800-424-8802.							

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

This product contains aliphatic petroleum naphthas (CAS# 64742-47-8 and 64742-14-9) and d-limonene (CAS# 5989-27-5).

**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 15  
 What is the VOC content? 780g/l  
 What is the vapor pressure of VOC's? Less than 1.0 mm Hg @ 20°C (68°F)



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## SECTION 16: OTHER INFORMATION

### REVISION SUMMARY

New GHS format

### SUPERSEDES ISSUE DATE

July 2, 2007

### 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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