



# Safety Data Sheet

## 3750 PPM PENTANE IN AIR

### Section 1: Product and Company Identification

**Purity Cylinder Gases, Inc.**

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Product Code: 3750 PPM PENTANE IN AIR

Part Number: SP 3750 PE/A

**Synonyms:**

**Recommended Use:**

**Usage Restrictions:**

### Section 2: Hazards Identification



**Danger**

**Hazard Classification:**

Aspiration Hazard (Category 1)  
Gases Under Pressure

**Hazard Statements:**

Contains gas under pressure; may explode if heated  
May be fatal if swallowed and enters airways

**Precautionary Statements**

**Response:**

Do NOT induce vomiting.  
If swallowed: Rinse mouth. Do NOT induce vomiting.  
Immediately call a poison center or doctor.

**Storage:**

Protect from sunlight.  
Store in well-ventilated place.  
Store locked up.

**Disposal:**

Dispose of contents and/or container in accordance with applicable regulations.

## Section 3: Composition/Information on Ingredients

	CAS #	Concentration
1-Pentene	109-67-1	3750 PPM
Air	Not applicable	Balance

	Chemical Substance	Chemical Family	Trade Names
1-Pentene	1-PENTENE	Hydrocarbons, Aliphatic, Unsaturated	ALPHA-N-AMYLENE; PROPYLETHYLENE; PENTENE; AMYLENE; UN 1108; C5H10
Air	AIR, COMPRESSED	Inorganic gases	AIR; UN 1002 Nitrogen CAS: 7727-37-9 Oxygen CAS: 7782-44-7

## Section 4: First Aid Measures

	Skin Contact	Eye Contact	Ingestion	Inhalation	Note to Physicians
1-Pentene	If it is safe to do so, remove victim to an uncontaminated area, and place them in a comfortable position to wait for medical attention. Immediately remove contaminated clothes and shoes. Cleanse the affected skin areas thoroughly with soap under running water for 15 minutes. Seek medical treatment.	Rinse the affected eye thoroughly for 10 minutes under running water. Seek immediate medical treatment.	Seek medical treatment. Do not induce vomiting if the victim.	If it is safe to do so, remove victim to fresh air, and place them in a comfortable position to wait for medical attention. Administer oxygen or artificial respiration if breathing is difficult. Seek immediate medical treatment.	For inhalation, consider oxygen. For ingestion, consider gastric lavage.
Air	Wash exposed skin with soap and water.	Flush eyes with plenty of water.	If a large amount is swallowed, get medical attention.	If adverse effects occur, remove to uncontaminated area. Get medical attention.	

## Section 5: Fire Fighting Measures

	Suitable Extinguishing Media	Products of Combustion	Protection of Firefighters
1-Pentene	Alcohol resistant foam, carbon dioxide, regular dry chemical, water Large fires: Use alcohol-resistant foam or flood with fine water spray.	Carbon monoxide, carbon dioxide	<ul style="list-style-type: none"> <li>Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.</li> <li>Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.</li> </ul>
Air	Use extinguishing agents appropriate for surrounding fire.		<ul style="list-style-type: none"> <li>No respirator is required under normal conditions of use.</li> </ul>

## Section 6: Accidental Release Measures

	Personal Precautions	Environmental Precautions	Methods for Containment
1-Pentene	Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas.	Avoid heat, flames, sparks and other sources of ignition.	Stop leak if possible without personal risk. Reduce vapors with water spray. Remove sources of ignition.
Air			Stop leak if possible without personal risk.

	Methods for Cleanup	Other Information
1-Pentene	Small spills: Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Large spills: Dike for later disposal.	None
Air		

## Section 7: Handling and Storage

	Handling	Storage
1-Pentene	Keep container tightly closed in a locked area. Protect from sunlight. Protect from ignition sources. Secure cylinders upright to keep them from falling or being knocked over. Store only where temperature will not exceed 125F (52C).	Always handle in a well ventilated area. Use only in closed systems. Open valve slowly. Close cylinder valve after each use; keep closed even when empty. Avoid contact with skin and eyes. Keep away from heat and ignition sources.
Air	Store and handle in accordance with all current regulations and standards. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101.	

## Section 8: Exposure Controls/Personal Protection

	Exposure Guidelines
1-Pentene	1-PENTENE: No occupational exposure limits established.
Air	AIR, COMPRESSED: No occupational exposure limits established.

### Engineering Controls

Handle only in fully enclosed systems.

	Eye Protection	Skin Protection	Respiratory Protection
1-Pentene	Wear splash resistant safety goggles with a face shield. Provide an emergency eye wash fountain and shower in work area.	Wear appropriate chemical resistant clothing.	Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.
Air	Eye protection not required under normal conditions.	Protective clothing is not required under normal conditions.	No respirator is required under normal conditions of use.

### General Hygiene considerations

- Avoid breathing vapor or mist
- Avoid contact with eyes and skin
- Wash thoroughly after handling and before eating or drinking

## Section 9: Physical and Chemical Properties

	Physical State	Appearance	Color	Change in Appearance	Physical Form	Odor	Taste
1-Pentene	Liquid	Colorless	Colorless	N/A	Liquid	Unpleasant odor	N/A
Air	Gas	Clear	Colorless		Gas	Not available	

	Flash Point	Flammability	Partition Coefficient	Autoignition Temperature	Upper Explosive Limits	Lower Explosive Limits
1-Pentene	-18 F (-28 C) (CC)	IA		527 F (275 C)	0.087	0.015
Air						

	Boiling Point	Freezing Point	Vapor Pressure	Vapor Density	Specific Gravity	Water Solubility	pH	Odor Threshold	Evaporation Rate	Viscosity
1-Pentene	86 F (30 C)	-265 F (-165 C)	495 mmHg @ 18 C	2.4 (Air=1)	0.6405	Insoluble	Not available	0.19 ppm	Not available	Not available
Air	-317 F (-194 C)	Not available	760 mmHg @ -194 C	1	Not applicable	Slightly soluble	Not applicable	Not available	Not applicable	0.01853 cP @ 26.85 C

	Molecular Weight	Molecular Formula	Density	Weight per Gallon	Volatility by Volume	Volatility	Solvent Solubility
1-Pentene	70.13	C-H3-(C-H2)2-C-H-C-H2	Not available	Not available	Not available	Not available	Soluble: Alcohol, ether, benzene
Air			1.29 g/L @ 0 C			Not applicable	Slightly Soluble

## Section 10: Stability and Reactivity

	Stability	Conditions to Avoid	Incompatible Materials
1-Pentene	Stable at normal temperatures and pressure. May form explosive peroxides. Avoid contact with air, light or storage and use above room temperature.	Stable at normal temperatures and pressure. May form explosive peroxides. Avoid contact with air, light or storage and use above room temperature.	Oxidizing materials, halogens, acids
Air	Stable at normal temperatures and pressure.	Stable at normal temperatures and pressure.	None known

	Hazardous Decomposition Products	Possibility of Hazardous Reactions
1-Pentene	Oxides of carbon. May form explosive, shock- and heat-sensitive organic peroxides when exposed to air.	Will not polymerize.
Air	No hazard expected.	Will not polymerize.

## Section 11: Toxicology Information

### Acute Effects

	Oral LD50	Dermal LD50	Inhalation
1-Pentene	Inhalation LC50 Rat 175000 mg/m3 4 h	Not established	Irritation, nausea, vomiting, symptoms of drunkenness, suffocation, convulsions, coma
Air	Not available	Not available	

	Eye Irritation	Skin Irritation	Sensitization
1-Pentene	Irritation	Irritation	Aspiration hazard, Category 1; H304: May be fatal if swallowed and enters airways.
Air	No information is available	No information is available	No significant target effects reported.

### Chronic Effects

	Carcinogenicity	Mutagenicity	Reproductive Effects	Developmental Effects
1-Pentene	Not listed.	Not established	Not established	No data
Air	Not available	Not available	No data	No data

## Section 12: Ecological Information

### Fate and Transport

	Eco toxicity	Persistence / Degradability	Bioaccumulation / Accumulation	Mobility in Environment
1-Pentene	Fish toxicity: Not available Invertebrate toxicity: Not available Algal toxicity: Not available Phyto toxicity: Not available Other toxicity: Not available	Not available	Not available	Not available
Air	Fish toxicity: Not available	Not available	Not available	Not available

## Section 13: Disposal Considerations

1-Pentene	Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001. Dispose in accordance with all applicable regulations.
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Air	Dispose in accordance with all applicable regulations.
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## Section 14: Transportation Information

### U.S. DOT 49 CFR 172.101

#### DOT Information For This Mixture

Shipping Name	Compressed gas, n.o.s. (Air, 1-Pentene)
UN Number	UN1956
Hazard Class	2.2
Hazard Information	Non-Flammable Gas

#### Individual Component Information

	Proper Shipping Name	ID Number	Hazard Class or Division	Packing Group	Labeling Requirements	Passenger Aircraft or Railcar Quantity Limitations	Cargo Aircraft Only Quantity Limitations	Additional Shipping Description
1-Pentene	1-Pentene	UN1108	3	I	3	1 kg or L	30 L	N/A
Air	Air, compressed	UN1002	2.2	Not available	2.2	Not available	Not available	Not available

#### Canadian Transportation of Dangerous Goods

	Shipping Name	UN Number	Class	Packing Group / Risk Group
1-Pentene	1-PENTENE (n-amylene)	UN1108	3	I
Air	Air, compressed	UN1002	2.2	Not available

## Section 15: Regulatory Information

#### U.S. Regulations

	CERCLA Sections	SARA 355.30	SARA 355.40
1-Pentene	Not regulated.	Not regulated.	Not regulated.
Air	Not regulated.	Not regulated.	Not regulated.

#### SARA 370.21

	Acute	Chronic	Fire	Reactive	Sudden Release
1-Pentene	Yes	No	Yes	No	No
Air	No	No	No	No	Yes

#### SARA 372.65

1-Pentene	Not regulated.
Air	Not regulated.

#### OSHA Process Safety

1-Pentene	Not regulated.
Air	Not regulated.

#### State Regulations

	CA Proposition 65
1-Pentene	Not regulated.
Air	Not regulated.

#### Canadian Regulations

	WHMIS Classification
1-Pentene	B
Air	A

### National Inventory Status

	US Inventory (TSCA)	TSCA 12b Export Notification	Canada Inventory (DSL/NDSL)
<b>1-Pentene</b>	Listed on inventory.	Not listed.	Not determined.
<b>Air</b>	Not listed on inventory.	Not listed.	Not determined.

## Section 16: Other Information

	NFPA Rating
<b>1-Pentene</b>	HEALTH=2 FIRE=4 REACTIVITY=0
<b>Air</b>	HEALTH=0 FIRE=0 REACTIVITY=0

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard