



**SIGMA-ALDRICH**

## Material Safety Data Sheet

Date Printed: 08/01/2000  
Date Updated: 10/27/1999  
Version 1.0

### Section 1 - Product and Company Information

<b>Product Name</b>	2-PENTANOL, 98%		
<b>Product Number</b>	P8017		
<b>Brand</b>	Aldrich Chemical		
<b>Company</b>	Sigma-Aldrich		
<b>Street Address</b>	3050 Spruce Street		
<b>City, State, Zip, Country</b>	St. Louis, MO, 63103, US		
<b>Technical Phone:</b>	314 771 5765	<b>Emergency Phone:</b>	414 273 3850 Ext.5996
<b>Fax</b>	800 325 5052		

### Section 2 - Composition/Information on Ingredient

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>
(+/-)-2-PENTANOL	6032-29-7	No
<b>Formula</b>	C5H12O	
<b>Synonyms</b>	sec-Amyl alcohol, Isoamyl alcohol, secondary (OSHA), Methyl propyl carbinol, Pentanol-2, sec-Pentyl alcohol	

### Section 3 - Hazards Identification

#### Emergency Overview

Flammable. Irritant.  
Irritating to eyes, respiratory system, and skin.

For additional information on toxicity, please refer to Section 11.

### Section 4 - First Aid Measures

#### Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

#### Inhalation Exposure

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

#### Dermal Exposure

In case of contact, immediately wash skin with soap and copious amounts of water.

#### Eye Exposure

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

### Section 5 - Fire Fighting Measures

#### Explosion Hazards

Vapor may travel considerable distance to source of ignition and flash back.

**Flash Point:** 93.2 °F 34 °C

**Explosion Limits:** Lower: 1.2 % Upper: 9 %  
**Autoignition Temp:** 343 °C **Flammability:** N/A

**Extinguishing Media**

**Suitable**

Carbon dioxide. Dry chemical powder. Appropriate foam.

**Unsuitable**

Water may be effective for cooling, but may not effect extinguishment.

**Firefighting**

**Protective Equipment**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Specific Hazard(s)**

Flammable liquid. Vapor may travel considerable distance to source of ignition and flash back.

**Exposure Hazard(s)**

**Material**

Irritant.

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**Section 6 - Accidental Release Measures**

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**Procedure to be Followed in Case of Leak or Spill**

Evacuate area. Shut off all sources of ignition. Use nonsparking tools.

**Procedure(s) of Personal Precaution(s)**

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

**Methods for Cleaning Up**

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

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**Section 7 - Handling and Storage**

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**Handling**

**User Exposure**

Do not breathe vapor. Do not get in eyes, on skin, on clothing.

**Storage**

**Suitable**

Keep tightly closed. Keep away from heat, sparks, and open flame. Store in a cool dry place.

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**Section 8 - Exposure Controls / PPE**

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**Engineering Controls**

Safety shower and eye bath. Mechanical exhaust required.

**Personal Protective Equipment**

**Respiratory**

NIOSH/MSHA-approved respirator.

**Hand**

Compatible chemical-resistant gloves.

**Eye**

Chemical safety goggles.

**General Hygiene Measures**

Wash thoroughly after handling. Wash contaminated clothing before reuse.

**Exposure Limits, RTECS**

<u>Country</u>	<u>Source</u>	<u>Type</u>	<u>Value</u>
USA	OSHA.	PEL	8H TWA 100 PPM (360 MG/M3)
USA	NIOSH	TWA STEL	100 PPM 125 PPM

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**Section 9 - Physical/Chemical Properties**

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**Appearance**

**Color**  
Colorless

**Form**  
Clear liquid

**Molecular Weight:** 88.15 AMU

**Property                      Value**

pH                                      N/A  
BP/BP Range                      118 - 121 °C  
MP/MP Range                      N/A  
Freezing Point                      N/A  
Vapor Pressure                      N/A  
Vapor Density                      3 g/l  
Saturated Vapor Conc.              N/A  
SG/Density                          0.809 g/cm<sup>3</sup>  
Bulk Density                          N/A  
Odor Threshold                      N/A  
Volatile%                              N/A  
VOC Content                          N/A  
Water Content                          N/A  
Solvent Content                          N/A  
Evaporation Rate                      N/A  
Viscosity                                N/A  
Partition Coefficient                  N/A  
Decomposition Temp.                  N/A  
Flash Point °F                      93.2 °F  
Flash Point °C                      34 °C  
Explosion Limits                      Lower: 1.2 %  
    Upper: 9 %  
Autoignition Temp                      343 °C  
Refractive Index                      1.407  
Solubility                                N/A

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**Section 10 - Stability and Reactivity**

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**Stability****Materials to Avoid**

Strong oxidizing agents.

**Hazardous Decomposition Products****Hazardous Decomposition Products**

Carbon monoxide, Carbon dioxide.

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## Section 11 - Toxicological Information

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### Route of Exposure

#### Skin Contact

Causes skin irritation.

#### Multiple Routes

May be harmful by inhalation, ingestion, or skin absorption. Vapor or mist is irritating to the eyes, mucous membranes, and upper respiratory tract.

### Signs and Symptoms of Exposure

Prolonged exposure can cause: Nausea, headache, and vomiting. Narcotic effect.

RTECS Number: SA4900000

### Toxicity Data

Oral - Rabbit: 2,821 mg/kg (LD50)

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Corneal damage.

Cardiac:Pulse rate.

Lungs, Thorax, or Respiration:Dyspnea.

### Irritation Data

Skin - Rabbit: 20 mg 24H

Remarks: Moderate irritation effect

Eyes - Rabbit: 20 mg 24H

Remarks: Moderate irritation effect

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## Section 12 - Ecological Information

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## Section 13 - Disposal Considerations

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### Appropriate Method of Disposal of Substance or Preparation

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.

Observe all federal, state, and local environmental regulations.

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## Section 14 - Transport Information

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### DOT

Proper Shipping Name: Amyl alcohols

UN#: 1105

Class: 3

Packing Group: Packing Group III

PIH: Not PIH

### IATA

Proper Shipping Name: Amyl alcohols

IATA Number: 1105

Hazard Class: 3

Packing Group: III

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## Section 15 - Regulatory Information

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### US Classification and Label Text

#### Indication of Danger

Flammable. Irritant.

#### Risk Statements

Irritating to eyes, respiratory system, and skin.

**Safety Statements**

Keep away from sources of ignition - no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection.

**United States Regulatory Information**

SARA 313 Listed: No

TSCA Inventory Item: Yes

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**Section 16 - Other Information**

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**Warranty**