



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

Product Name 2-PENTANOL, 98%
Product Number P8017
Brand Aldrich Chemical

Company Sigma-Aldrich
Street Address 3050 Spruce Street
City, State, Zip, Country St. Louis, MO, 63103, US
Technical Phone: 314 771 5765
Fax 800 325 5052

Emergency Phone: 414 273 3850 Ext.5996

Section 2 - Composition/Information on Ingredient

Substance Name
(+/-)-2-PENTANOL

CAS #
6032-29-7

SARA 313
No

Formula
Synonyms

C5H12O
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.

Section 6 - Accidental Release Measures

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.

Section 7 - Handling and Storage

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.

Section 8 - Exposure Controls / PPE

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

Section 9 - Physical/Chemical Properties

Appearance

Color
Colorless

Form
Clear liquid

Molecular Weight: 88.15 AMU

<u>Property</u>	<u>Value</u>
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/cm3
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

Section 10 - Stability and Reactivity

Stability**Materials to Avoid**

Strong oxidizing agents.

Hazardous Decomposition Products**Hazardous Decomposition Products**

Carbon monoxide, Carbon dioxide.

Section 11 - Toxicological Information

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

Section 12 - Ecological Information

Section 13 - Disposal Considerations

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.

Section 14 - Transport Information

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

Section 15 - Regulatory Information

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

Section 16 - Other Information

Warranty