



SIGMA-ALDRICH

Material Safety Data Sheet

Date Printed: 04/05/2007
Date Updated: 02/01/2006
Version 1.30

Section 1 - Product and Company Information

Product Name: Diphenylphosphine, 98%
Product Number: 252964
Brand: Aldrich Chemical

Company: Sigma-Aldrich
Street Address: 3050 Spruce Street
City, State, Zip, Country: SAINT LOUIS, MO 63103 US
Technical Phone: 800-325-5832
Fax: 800-325-5052

Emergency Phone: 314-776-6555

Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313	EC no	Annex I Index Number
DIPHENYLPHOSPHINE	829-85-6	No	212-591-4	

Formula: C₁₂H₁₁P
Synonyms:

Section 3 - Hazards Identification

Emergency Overview
Pyrophoric (USA) Highly Flammable (EU). Corrosive.
Spontaneously flammable in air. Causes burns.

HMIS Rating
Health: 0 Flammability: 4 Reactivity: 4

NFPA Rating
Health: 0 Flammability: 4 Reactivity: 4

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

Section 4 - First Aid Measures

Immediate Treatment - Work Site
In case of contact, immediately flush eyes or skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes.

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.

Section 5 - Fire Fighting Measures

Conditions of Flammability
Catches fire if exposed to air.

Flash Point: 230 °F 110 °C

Autoignition Temp: N/A

Extinguishing Media
Suitable
Dry chemical powder.

Firefighting
Protective Equipment
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s)
Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure to be Followed in Case of Leak or Spill
Evacuate area.

Procedure(s) of Personal Precaution(s)
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up
Cover with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling
User Exposure
Avoid contact and inhalation. Avoid prolonged or repeated exposure.

Storage
Suitable
Keep tightly closed. Handle and store under argon.
Unsuitable
Do not expose to air and fire.

Special Requirements
Light sensitive. Air sensitive.

Section 8 - Exposure Controls / PPE

Engineering Controls
Safety shower and eye bath. Use only in a chemical fume hood. Use nonsparking tools.

Personal Protective Equipment
Other
Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing. Faceshield (8-inch minimum).

General Hygiene Measures

Wash thoroughly after handling. Discard contaminated clothing and shoes.

Section 9 - Physical/Chemical Properties

Appearance			
Physical State	Color		
Clear liquid	Faintly yellow		
Molecular Weight:	186.2 AMU		
Property	Value	At Temperature or Pressure	
pH	N/A		
BP/BP Range	280 °C	760 mmHg	
MP/MP Range	N/A		
Freezing Point	N/A		
Vapor Pressure	2 mmHg	110 °C	
Vapor Density	N/A		
Saturated Vapor Conc.	N/A		
SG/Density	1.07 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	230 °F	Method: closed cup	
Flash Point °C	110 °C	Method: closed cup	
Explosion Limits	N/A		
Flammability	N/A		
Autoignition Temp	N/A		
Refractive Index	1.625		
Solubility	N/A		

N/A = not available

Section 10 - Stability and Reactivity

Stability

Conditions of Instability

May decompose on exposure to air. May decompose on exposure to light.

Materials to Avoid

Strong oxidizing agents.

Hazardous Decomposition Products

Hazardous Decomposition Products

Carbon monoxide, Carbon dioxide, Thermal decomposition may produce toxic fumes of phosphorus oxides and/or phosphine.

Hazardous Polymerization

Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information

Route of Exposure

Skin Contact

May cause skin irritation.

Skin Absorption

May be harmful if absorbed through the skin.

Eye Contact

May cause eye irritation.

Inhalation

May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion

May be harmful if swallowed.

RTECS Number: N/A

Section 12 - Ecological Information

No data available.

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: Pyrophoric liquids, organic, n.o.s.

UN#: 2845

Class: 4.2

Packing Group: Packing Group I

Hazard Label: Spontaneously combustible

PIH: Not PIH

IATA

Proper Shipping Name: Pyrophoric liquid, organic, n.o.s.

IATA UN Number: 2845

Hazard Class: 4.2

Packing Group: I

Not Allowed - Aircraft: Not permitted for air transport.

Section 15 - Regulatory Information

EU Additional Classification

Symbol of Danger: F Xi

Indication of Danger

Highly Flammable, Irritant.

Risk Statements R: 17 36/37/38

Spontaneously flammable in air. Irritating to eyes, respiratory system and skin.

Safety Statements S: 26 36

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

US Classification and Label Text**Indication of Danger**

Pyrophoric (USA) Highly Flammable (EU), Corrosive.

Risk Statements

Spontaneously flammable in air. Causes burns.

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. Take off immediately all contaminated clothing. Wear suitable protective clothing, gloves, and eye/face protection.

United States Regulatory Information

SARA Listed: No

Canada Regulatory Information**WHMIS Classification**

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: No

Section 16 - Other Information

Disclaimer

For R&D use only. Not for drug, household or other uses.

Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2007 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

