SIGMA-ALDRICH

Material Safety Data Sheet

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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 **Emergency Phone:** 314-776-6555
Fax: 800-325-5052

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).

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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.

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