



SIGMA-ALDRICH

## Material Safety Data Sheet

Date Printed: 10/27/2004  
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Version 1.20

### Section 1 - Product and Company Information

**Product Name** Diphenylacetaldehyde, 97%  
**Product Number** D204250  
**Brand** Aldrich Chemical

**Company** Sigma-Aldrich  
**Street Address** 3050 Spruce Street  
**City, State, Zip, Country** SAINT 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

| <u>Substance Name</u> | <u>CAS #</u> | <u>SARA 313</u> | <u>EC no</u> | <u>Annex I Index Number</u> |
|-----------------------|--------------|-----------------|--------------|-----------------------------|
| DIPHENYLACETALDEHYDE  | 947-91-1     | No              | 213-433-7    |                             |

**Formula** C<sub>14</sub>H<sub>12</sub>O  
**Synonyms** Benzeneacetaldehyde, alpha-phenyl- (9CI), Diphenylacetaldehyde, 2,2-Diphenylacetaldehyde, Diphenylketen, alpha-Phenylbenzeneacetaldehyde

### Section 3 - Hazards Identification

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

**Flash Point:** 235 °F 113 °C

**Autoignition Temp:** N/A

### Extinguishing Media

**Suitable**  
Water spray, Carbon dioxide, dry chemical powder, or appropriate foam.

### Firefighting

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

### Section 6 - Accidental Release Measures

#### 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

Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

#### Storage

##### Suitable

Keep tightly closed. 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

Government approved respirator.

##### Hand

Compatible chemical-resistant gloves.

##### Eye

Chemical safety goggles.

#### General Hygiene Measures

Wash thoroughly after handling. Wash contaminated clothing before reuse.

### Section 9 - Physical/Chemical Properties

#### Appearance

| Color                 | Form         |
|-----------------------|--------------|
| Slightly yellow-green | Clear liquid |

**Molecular Weight:** 196.25 AMU

| <u>Property</u> | <u>Value</u> | <u>At Temperature or Pressure</u> |
|-----------------|--------------|-----------------------------------|
| pH              | N/A          |                                   |
| BP/BP Range     | 191 - 193 °C | 27 mmHg                           |
| MP/MP Range     | N/A          |                                   |
| Freezing Point  | N/A          |                                   |
| Vapor Pressure  | N/A          |                                   |

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Vapor Density N/A  
Saturated Vapor Conc. N/A  
SG/Density 1.096 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 235 °F  
Flash Point °C 113 °C  
Explosion Limits N/A

Method: closed cup  
Method: closed cup

Flammability N/A  
Autolignition Temp N/A  
Refractive Index 1.589  
Solubility N/A

N/A = not available

## Section 10 - Stability and Reactivity

### Stability

**Materials to Avoid**  
Strong oxidizing agents, Strong bases.

**Hazardous Decomposition Products**  
**Hazardous Decomposition Products**  
Carbon monoxide, Carbon dioxide.

## Section 11 - Toxicological Information

### Route of Exposure

#### Skin Contact

May cause skin irritation.

#### Eye Contact

May cause eye irritation.

#### Multiple Routes

May be harmful by inhalation, ingestion, or skin absorption.

### Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: AB2827500

### Toxicity Data

Intravenous - Mouse: 56 MG/KG (LD50)

## Section 12 - Ecological Information

No data available.

## Section 13 - Disposal Considerations

### Appropriate Method of Disposal of Substance or Preparation

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

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## Section 14 - Transport Information

### DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

### IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

## Section 15 - Regulatory Information

### EU Additional Classification

Safety Statements S: 23 24/25

Do not breathe vapor. Avoid contact with skin and eyes.

### 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 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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