# **SIGMA-ALDRICH**

# **Material Safety Data Sheet**

Version 3.0 Revision Date 08/21/2009 Print Date 07/26/2010

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Dibutyl butylphosphonate

Product Number : 512427 Brand : Aldrich

Company : Sigma-Aldrich

3050 Spruce Street

SAINT LOUIS MO 63103

USA

Telephone : +18003255832 Fax : +18003255052 Emergency Phone # : (314) 776-6555

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : C<sub>12</sub>H<sub>27</sub>O<sub>3</sub>P Molecular Weight : 250.31 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
Dibutyl butylpho	sphonate		
78-46-6	201-119-2	-	-

## 3. HAZARDS IDENTIFICATION

## **Emergency Overview**

## **OSHA Hazards**

No known OSHA hazards

# **HMIS Classification**

Health Hazard: 0 Flammability: 1 Physical hazards: 0

**NFPA** Rating

Health Hazard: 0 Fire: 1 Reactivity Hazard: 0

## **Potential Health Effects**

InhalationSkinMay be harmful if inhaled. May cause respiratory tract irritation.May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation. Ingestion May be harmful if swallowed.

## 4. FIRST AID MEASURES

#### If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration

## In case of skin contact

Wash off with soap and plenty of water.

## In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

## 5. FIRE-FIGHTING MEASURES

## Flammable properties

Flash point 113 °C (235 °F) - closed cup

Ignition temperature no data available

## Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### 6. ACCIDENTAL RELEASE MEASURES

## Personal precautions

Avoid breathing vapors, mist or gas.

## **Environmental precautions**

Do not let product enter drains.

#### Methods for cleaning up

Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

#### Handling

Normal measures for preventive fire protection.

#### Storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

## Personal protective equipment

## Respiratory protection

Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Hand protection

For prolonged or repeated contact use protective gloves.

#### Eye protection

Safety glasses

## Hygiene measures

General industrial hygiene practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## **Appearance**

Form clear, liquid Colour colourless

Safety data

pH no data available

Melting point no data available

Boiling point 283 °C (541 °F) - lit.

Flash point 113 °C (235 °F) - closed cup

Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available

Density 0.946 g/mL at 25 °C (77 °F)

Water solubility no data available

## 10. STABILITY AND REACTIVITY

## Storage stability

Stable under recommended storage conditions.

#### Materials to avoid

Strong oxidizing agents

#### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Oxides of phosphorus

## 11. TOXICOLOGICAL INFORMATION

#### **Acute toxicity**

LD50 Intravenous - mouse - 56 mg/kg

#### Irritation and corrosion

no data available

#### **Sensitisation**

no data available

## Chronic exposure

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as

a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as

a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as

a carcinogen or potential carcinogen by OSHA.

## Signs and Symptoms of Exposure

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

## **Potential Health Effects**

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.Skin May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation. **Ingestion** May be harmful if swallowed.

Additional Information RTECS: SZ7000000

## 12. ECOLOGICAL INFORMATION

# Elimination information (persistence and degradability)

no data available

## **Ecotoxicity effects**

no data available

# Further information on ecology

no data available

## 13. DISPOSAL CONSIDERATIONS

#### **Product**

Observe all federal, state, and local environmental regulations.

# Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

## DOT (US)

Not dangerous goods

#### IMDG

Not dangerous goods

#### **IATA**

Not dangerous goods

## 15. REGULATORY INFORMATION

## **OSHA Hazards**

No known OSHA hazards

## **DSL Status**

This product contains the following components listed on the Canadian NDSL list. All other components are on the Canadian DSL list.

CAS-No. 78-46-6

Dibutyl butylphosphonate

## **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

No SARA Hazards

## **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

## Pennsylvania Right To Know Components

CAS-No.

**Revision Date** 

Dibutyl butylphosphonate 78-46-6

**New Jersey Right To Know Components** 

CAS-No.

**Revision Date** 

Dibutyl butylphosphonate

78-46-6

# California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

## **16. OTHER INFORMATION**

## **Further information**

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