# **Material Safety Data Sheet**

Version 4.0 Revision Date 07/20/2010 Print Date 03/20/2011

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : (S,R,R)-(+)-(3,5-Dioxa-4-phosphacyclohepta[2,1-a:3,4-a']dinaphthalen-

4-yl)bis(1-phenylethyl)amine

Product Number : 665363 Brand : Aldrich

Company : Sigma-Aldrich

3050 Spruce Street

SAINT LOUIS MO 63103

USA

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

## 2. HAZARDS IDENTIFICATION

## **Emergency Overview**

#### **OSHA Hazards**

No known OSHA hazards

#### **HMIS Classification**

Health hazard: 0 Flammability: 0 Physical hazards: 0

**NFPA Rating** 

Health hazard: 0 Fire: 0 Reactivity Hazard: 0

#### **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.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : (+)-N,N-Bis[(1R)-1-phenylethyl]-dinaphtho[2,1-d:1',2'-f][1,3,2]dioxaphosphepin-4-

amine, (11bS)

CAS-No.	EC-No.	Index-No.	Concentration
(S,R,R)-(+)-(3,5-Dioxa-4-phosphacyclohepta[2,1-a;3,4-a']dinaphthalen-4-yl)bis(1-phenylethyl)amine			
415918-91-1	-	-	-

## 4. FIRST AID MEASURES

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#### 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

## 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 dust formation. Avoid breathing vapors, mist or gas.

#### **Environmental precautions**

Do not let product enter drains.

## Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 7. HANDLING AND STORAGE

#### Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

#### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Handle and store under inert gas.

#### 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 from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

### Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

## Skin and body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## Hygiene measures

General industrial hygiene practice.

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#### 9. PHYSICAL AND CHEMICAL PROPERTIES

### **Appearance**

Form solid Colour white

## Safety data

pH no data available

Melting point 102 - 103 °C (216 - 217 °F)

Boiling point no data available
Flash point no data available
Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available
Water solubility no data available

## 10. STABILITY AND REACTIVITY

#### Chemical stability

Stable under recommended storage conditions.

#### Conditions to avoid

no data available

#### Materials to avoid

Strong oxidizing agents

#### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

## 11. TOXICOLOGICAL INFORMATION

#### **Acute toxicity**

no data available

## Skin corrosion/irritation

no data available

#### Serious eye damage/eye irritation

no data available

#### Respiratory or skin sensitization

no data available

## Germ cell mutagenicity

no data available

#### Carcinogenicity

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.

#### Reproductive toxicity

no data available

## Specific target organ toxicity - single exposure (GHS)

no data available

## Specific target organ toxicity - repeated exposure (GHS)

no data available

## **Aspiration hazard**

no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

#### Additional Information

#### 12. ECOLOGICAL INFORMATION

## **Toxicity**

no data available

## Persistence and degradability

no data available

## Bioaccumulative potential

no data available

## Mobility in soil

no data available

### PBT and vPvB assessment

no data available

#### Other adverse effects

no data available

#### 13. DISPOSAL CONSIDERATIONS

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

## 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 that are not on the Canadian DSL nor NDSL lists.

CAS-No.

(S,R,R)-(+)-(3,5-Dioxa-4-phosphacyclohepta[2,1-a;3,4-a']dinaphthalen- 415918-91-1

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4-yl)bis(1-phenylethyl)amine

## **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

(S,R,R)-(+)-(3,5-Dioxa-4-phosphacyclohepta[2,1-a;3,4-a']dinaphthalen-4-yl)bis(1-phenylethyl)amine

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## **New Jersey Right To Know Components**

CAS-No.

Revision Date

(S,R,R)-(+)-(3,5-Dioxa-4-phosphacyclohepta[2,1-a;3,4-a']dinaphthalen-4-yl)bis(1-phenylethyl)amine

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o. Revision Date

## California Prop. 65 Components

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

#### 16. OTHER INFORMATION

#### **Further information**

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