# **Material Safety Data Sheet**

Version 4.5 Revision Date 04/19/2013 Print Date 03/25/2014

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name Bisphenol A

**Product Number** 239658 Brand Aldrich

Supplier Sigma-Aldrich

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USA

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both supplier and

manufacturer)

Preparation Information Sigma-Aldrich Corporation

Product Safety - Americas Region

1-800-521-8956

#### 2. HAZARDS IDENTIFICATION

### **Emergency Overview**

### **OSHA Hazards**

Target Organ Effect, Skin sensitiser, Irritant, Reproductive hazard

#### **Target Organs**

Liver, Bone marrow

#### **GHS Classification**

Acute toxicity, Oral (Category 5) Acute toxicity, Dermal (Category 5)

Skin irritation (Category 3)

Serious eye damage (Category 1) Skin sensitisation (Category 1) Reproductive toxicity (Category 2) Acute aquatic toxicity (Category 2)

# GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H303 + H313 May be harmful if swallowed or in contact with skin.

H316 Causes mild skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage.

H361 Suspected of damaging fertility or the unborn child.

H401 Toxic to aquatic life.

Precautionary statement(s)

P280 Wear protective gloves/ eye protection/ face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

**HMIS Classification** 

Health hazard: 2
Chronic Health Hazard: \*
Flammability: 0
Physical hazards: 0

**NFPA Rating** 

Health hazard: 2 Fire: 0 Reactivity Hazard: 0

#### **Potential Health Effects**

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

**Eyes** Causes eye irritation.

**Ingestion** May be harmful if swallowed.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : 2,2-Bis(4-hydroxyphenyl)propane

4,4'-Isopropylidenediphenol

Formula :  $C_{15}H_{16}O_2$ Molecular Weight : 228.29 g/mol

Component		Concentration
Bisphenol A		
CAS-No.	80-05-7	-
EC-No.	201-245-8	
Index-No.	604-030-00-0	

# 4. FIRST AID MEASURES

### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

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

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

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

#### 5. FIREFIGHTING MEASURES

#### Suitable extinguishing media

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

# Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

# **Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides

#### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

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#### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

#### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 7. HANDLING AND STORAGE

#### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

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.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

# Personal protective equipment

# Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. 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.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### Eye protection

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

# Skin and body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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#### 9. PHYSICAL AND CHEMICAL PROPERTIES

# **Appearance**

Form crystalline
Colour beige

# Safety data

pH no data available

Melting Melting point/range: 158 - 159 °C (316 - 318 °F) - lit.

point/freezing point

Boiling point 220 °C (428 °F) at 5 hPa (4 mmHg) - lit.

Flash point no data available Ignition temperature no data available Auto-ignition no data available

temperature

Lower explosion limit no data available
Upper explosion limit no data available
Vapour pressure no data available
Density no data available
Water solubility no data available
Partition coefficient: log Pow: 3.32

n-octanol/water

Relative vapour

density

no data available

Odour no data available
Odour Threshold no data available
Evapouration rate no data available

## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

# Possibility of hazardous reactions

no data available

#### Conditions to avoid

no data available

# Materials to avoid

Strong bases, Strong oxidizing agents

#### **Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - no data available

#### 11. TOXICOLOGICAL INFORMATION

#### **Acute toxicity**

#### Oral LD50

LD50 Oral - rat - 5,000 mg/kg

LD50 Oral - rat - male and female - > 2,000 - 5,000 mg/kg

# Inhalation LC50 Dermal LD50

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LD50 Dermal - rabbit - 3,000 mg/kg

# Other information on acute toxicity

no data available

#### Skin corrosion/irritation

Skin - rabbit - Mild skin irritation - 24 h

#### Serious eye damage/eye irritation

Eyes - rabbit - Severe eye irritation - 24 h

### Respiratory or skin sensitisation

May cause allergic skin reaction.

### Germ cell mutagenicity

no data available

### Carcinogenicity

This product is or contains a component that is probably not carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

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

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

#### **Teratogenicity**

Suspected human reproductive toxicant

# Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

# Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

# Aspiration hazard

no data available

# Potential health effects

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

**Ingestion** May be harmful if swallowed.

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

**Eyes** Causes eye irritation.

# Signs and Symptoms of Exposure

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

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# Synergistic effects

no data available

#### **Additional Information**

RTECS: SL6300000

#### 12. ECOLOGICAL INFORMATION

**Toxicity** 

Toxicity to fish flow-through test LC50 - Cyprinodon variegatus (sheepshead minnow) - 11 mg/l - 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic

static test EC50 - Daphnia magna (Water flea) - 10.2 mg/l - 48 h

and other aquinvertebrates

Toxicity to algae static test EC50 - Pseudokirchneriella subcapitata (green algae) - 2.73 - 3.1 mg/l - 96 h

Persistence and degradability

Biodegradability aerobic

Result: 89 % - Readily biodegradable.

**Bioaccumulative potential** 

Bioaccumulation Cyprinus carpio (Carp) - 42 d

Bioconcentration factor (BCF): 20 - 67

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Toxic to aquatic life.

no data available

### 13. DISPOSAL CONSIDERATIONS

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

# 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**

Target Organ Effect, Skin sensitiser, Irritant, Reproductive hazard

# **SARA 302 Components**

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

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# **SARA 313 Components**

Bisphenol A CAS-No. Revision Date 80-05-7 2007-07-01

#### SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

### **Massachusetts Right To Know Components**

Bisphenol A CAS-No. Revision Date 80-05-7 2007-07-01

Pennsylvania Right To Know Components

Bisphenol A CAS-No. Revision Date 80-05-7 2007-07-01

**New Jersey Right To Know Components** 

Bisphenol A CAS-No. Revision Date 80-05-7 2007-07-01

### 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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