SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Bisphenol A
Product Number : 133027
Brand : Aldrich
Index-No. : 604-030-00-0
CAS-No. : 80-05-7

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

- Serious eye damage (Category 1), H318
- Skin sensitization (Category 1), H317
- Reproductive toxicity (Category 1B), H360
- Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
- Short-term (acute) aquatic hazard (Category 1), H400
- Long-term (chronic) aquatic hazard (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements
SECTION 3: Composition/information on ingredients

3.1 Substances

| Synonyms               | 2,2-Bis(4-hydroxyphenyl)propane |
|                       | 4,4′-Isopropylidenediphenol     |

| Formula              | C_{15}H_{16}O_{2}               |
| Molecular weight     | 228.29 g/mol                    |
| CAS-No.              | 80-05-7                         |
| EC-No.               | 201-245-8                       |
| Index-No.            | 604-030-00-0                    |

| Component | Classification | Concentration |

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada
SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice
Show this material safety data sheet to the doctor in attendance.

If inhaled
After inhalation: fresh air. Call in physician.

In case of skin contact
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. Consult a physician.

In case of eye contact
After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

If swallowed
After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media
For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture
Carbon oxides
Combustible.
Vapors are heavier than air and may spread along floors.
Forms explosive mixtures with air on intense heating.
Development of hazardous combustion gases or vapours possible in the event of fire.

For the full text of the H-Statements mentioned in this Section, see Section 16.
5.3 **Advice for firefighters**
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 **Further information**
Prevent fire extinguishing water from contaminating surface water or the ground water system.

**SECTION 6: Accidental release measures**

6.1 **Personal precautions, protective equipment and emergency procedures**
Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

6.2 **Environmental precautions**
Do not let product enter drains.

6.3 **Methods and materials for containment and cleaning up**
Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 **Reference to other sections**
For disposal see section 13.

**SECTION 7: Handling and storage**

7.1 **Precautions for safe handling**

Advice on safe handling
Work under hood. Do not inhale substance/mixture.

Hygiene measures
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
For precautions see section 2.2.

7.2 **Conditions for safe storage, including any incompatibilities**

Storage conditions
Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Storage class
Storage class (TRGS 510): 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects

7.3 **Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated
SECTION 8: Exposure controls/personal protection

8.1 Control parameters

**Ingredients with workplace control parameters**
Contains no substances with occupational exposure limit values.

8.2 Exposure controls

**Appropriate engineering controls**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

**Skin protection**
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

- Full contact
  - Material: Nitrile rubber
  - Minimum layer thickness: 0.11 mm
  - Break through time: 480 min
  - Material tested: KCL 741 Dermatril® L

- Splash contact
  - Material: Nitrile rubber
  - Minimum layer thickness: 0.11 mm
  - Break through time: 480 min
  - Material tested: KCL 741 Dermatril® L

**Body Protection**
protective clothing

**Respiratory protection**
Recommended Filter type: Filter type P3
The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. required when dusts are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.
## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| a) Appearance | Form: crystalline  
|               | Color: beige  
| b) Odor       | odorless  
| c) Odor Threshold | Not applicable  
| d) pH         | No data available  
| e) Melting point/freezing point | Melting point/range: 158 - 159 °C (316 - 318 °F) - lit.  
| f) Initial boiling point and boiling range | 220 °C 428 °F at 5 hPa - lit.  
| g) Flash point | 227 °C (441 °F) at ca.1,013 hPa - closed cup  
| h) Evaporation rate | No data available  
| i) Flammability (solid, gas) | No data available  
| j) Upper/lower flammability or explosive limits | No data available  
| k) Vapor pressure | < 0.01 hPa at 25 °C (77 °F) - OECD Test Guideline 104  
| l) Vapor density | No data available  
| m) Density | No data available  
|               | Relative density: 1.225 °C  
| n) Water solubility | 0.298 g/l at 25 °C (77 °F) - OECD Test Guideline 105 - soluble  
| o) Partition coefficient: n-octanol/water | log Pow: 3.4 at 21.5 °C (70.7 °F) - OECD Test Guideline 107 - Bioaccumulation is not expected.  
| p) Autoignition temperature | 510 °C (950 °F) at 1,013 hPa  
| q) Decomposition temperature | > 260 °C (> 500 °F) -  
| r) Viscosity | No data available  
| s) Explosive properties | No data available  
| t) Oxidizing properties | none  

### 9.2 Other safety information

Dissociation constant $\geq 11.3$
SECTION 10: Stability and reactivity

10.1 Reactivity
Forms explosive mixtures with air on intense heating. 
A range from approx. 15 Kelvin below the flash point is to be rated as critical. 
The following applies in general to flammable organic substances and mixtures: in 
correspondingly fine distribution, when whirled up a dust explosion potential may generally 
be assumed.

10.2 Chemical stability
The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions
Violent reactions possible with: 
Strong oxidizing agents 
Bases 
Acid anhydrides 
acid halides

10.4 Conditions to avoid
Strong heating.

10.5 Incompatible materials
No data available

10.6 Hazardous decomposition products
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - Rat - male and female - > 2,000 - 5,000 mg/kg
OECD Test Guideline 401
Inhalation: Irritating to respiratory system. 
LD50 Dermal - Rabbit - 3,000 mg/kg
Remarks: (ECHA)

Skin corrosion/irritation
Skin - Rabbit 
Result: No skin irritation - 4 h
OECD Test Guideline 404

Serious eye damage/eye irritation
Eyes - Rabbit 
Result: Causes serious eye damage.
OECD Test Guideline 405
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Respiratory or skin sensitization
In vitro study 
Result: positive 
Remarks: (External MSDS)
Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

**Germ cell mutagenicity**
Test Type: Ames test  
Test system: Escherichia coli/Salmonella typhimurium  
Metabolic activation: with and without metabolic activation  
Result: negative  
Remarks: (ECHA)  
Test Type: Mutagenicity (mammal cell test): chromosome aberration.  
Test system: Chinese hamster ovary cells  
Metabolic activation: with and without metabolic activation  
Result: negative  
Remarks: (ECHA)  
Test Type: In vitro mammalian cell gene mutation test  
Test system: Mouse lymphoma test  
Metabolic activation: with and without metabolic activation  
Result: negative  
Remarks: (ECHA)

Test Type: In vivo micronucleus test  
Species: Mouse  
Cell type: Bone marrow  
Application Route: Gavage  
Result: negative  
Remarks: (ECHA)

**Carcinogenicity**
IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP: No ingredient 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 on OSHA’s list of regulated carcinogens.

**Reproductive toxicity**
May damage fertility.

**Specific target organ toxicity - single exposure**
Inhalation - May cause respiratory irritation. - Respiratory system  
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

11.2 Additional Information
RTECS: SL6300000  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Systemic effects:
Headache
Dizziness
Drowsiness
agitation
CNS disorders
Unconsciousness
respiratory arrest

Damage to:

Kidney

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

Stomach - Irregularities - Based on Human Evidence
Stomach - Irregularities - Based on Human Evidence

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish
static test LC50 - Pimephales promelas (fathead minnow) - 4.7 mg/l - 96 h
(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates
static test EC50 - Daphnia magna (Water flea) - 10.2 mg/l - 48 h
Remarks: (ECHA)

Toxicity to algae
static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 2.73 - 3.1 mg/l - 96 h
(US-EPA)

Toxicity to bacteria
EC50 - activated sludge - 58.4 mg/l - 3 h
Remarks: (External MSDS)

Toxicity to fish (Chronic toxicity)
flow-through test NOEC - Pimephales promelas (fathead minnow) - 0.016 mg/l - 431 d
(US-EPA)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)
semi-static test NOEC - Daphnia magna (Water flea) - >= 3.146 mg/l - 21 d
(OECD Test Guideline 211)

12.2 Persistence and degradability

Biodegradability
aerobic - Exposure time 28 d
Result: 89 % - Readily biodegradable.
(OECD Test Guideline 301F)
Chemical Oxygen Demand (COD)  36 mg/g
Remarks: (IUCLID)

12.3 **Bioaccumulative potential**
No data available

12.4 **Mobility in soil**
No data available

12.5 **Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 **Endocrine disrupting properties**
No data available

12.7 **Other adverse effects**
Additional ecological information
Discharge into the environment must be avoided.

**SECTION 13: Disposal considerations**

13.1 **Waste treatment methods**

**Product**
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

**SECTION 14: Transport information**

**DOT (US)**
Not dangerous goods

**IMDG**
UN number: 3077  Class: 9  Packing group: III  EMS-No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (4,4'-isopropylidenediphenol)
Marine pollutant: yes
Marine pollutant: no

**IATA**
UN number: 3077  Class: 9  Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (4,4'-isopropylidenediphenol)

**Further information**
EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids. Packages smaller than or equal to 5 kg / L, not dangerous goods of Class 9
SECTION 15: Regulatory information

**SARA 302 Components**
This material does not contain any components with a section 302 EHS TPQ.

**SARA 313 Components**
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.

**Massachusetts Right To Know Components**
No components are subject to the Massachusetts Right to Know Act.

**California Prop. 65 Components**
, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.4,4'-isopropylidenediphenol

CAS-No. 80-05-7  Revision Date 2020-12-18

SECTION 16: Other information

**Further information**
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 Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

Copyright 2020 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only.

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact misbranding@sial.com.

Version: 6.11  Revision Date: 08/02/2023  Print Date: 12/02/2023