

SAFETY DATA SHEET

Preparation Date: 09/23/2019

Revision date 09/23/2019

Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: B1218
Product Name: BISPHENOL A

Other means of identification

Synonyms: 2,2-(4,4'-Dihydroxydiphenyl)propane
 2,2-Bis(4-hydroxyphenyl)propane
 2,2-Bis(p-hydroxyphenyl)propane
 2,2-Bis-4'-hydroxyfenylpropan (Czech)
 2,2-Di(4-hydroxyphenyl)propane
 2,2-Di(4-phenylol)propane
 4,4'-Bisphenol A
 4,4'-Dihydroxy-2,2-diphenylpropane
 4,4'-Dihydroxydiphenyl-2,2-propane
 4,4'-Dihydroxydiphenyldimethylmethane
 4,4'-Dihydroxydiphenylpropane
 4,4'-Isopropylidendiphenol
 4,4'-Isopropylidendiphenol dust
 4,4'-Isopropylidenebisphenol
 Bis(4-hydroxyphenyl) dimethylmethane
 Bis(4-hydroxyphenyl)propane
 Bisphenol
 Dimethyl bis(p-hydroxyphenyl)methane
 Dimethylmethylene-p,p'-diphenol
 Diphenylolpropane
 Phenol, 4,4'-dimethylmethylenedi-
 Propane, 2,2-bis(p-hydroxyphenyl)-
 beta-Di-p-hydroxyphenylpropane
 p,p'-Dihydroxydiphenyldimethylmethane
 p,p'-Dihydroxydiphenylpropane
 p,p'-Isopropylidenebisphenol
 p,p'-Isopropylidenediphenol
 80-05-7
CAS #: 80-05-7
RTECS # SL6300000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 14422 South San Pedro St.
 Gardena, CA 90248
 (310) 516-8000

Order Online At: <https://www.spectrumchemical.com>
Emergency telephone number Chemtrec 1-800-424-9300

Contact Person: Tom Tyner (USA - West Coast)
Contact Person: Ibad Tirmiz (USA - East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 4
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Combustible dust	-

Label elements

Danger

Hazard statements

Harmful if swallowed
Causes serious eye damage
May cause an allergic skin reaction
Suspected of damaging fertility or the unborn child
May cause respiratory irritation
May form combustible dust concentrations in air



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Causes mild skin irritation
May be harmful in contact with skin
Toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Keep away from all ignition sources including heat, sparks, and flame
Keep container closed and grounded
Prevent dust accumulations to minimize explosion hazard
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product

Avoid breathing dust
Contaminated work clothing must not be allowed out of the workplace
Wear protective gloves/protective clothing/eye protection/face protection
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF exposed or concerned: Get medical attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

IF ON SKIN: Wash with plenty of water

If skin irritation or rash occurs: Get medical attention

Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell

Rinse mouth

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents and container to an approved waste disposal plant in accordance with local, regional, national and international regulations as applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Bisphenol A	80-05-7	100

4. FIRST AID MEASURES

First aid measures

- General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. First aider needs to protect himself. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
- Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.
- Eye Contact:** Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.
- Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
- Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

- Symptoms**
- Mild skin irritation
 - Causes serious eye damage
 - May cause an allergic skin reaction
 - Irritating to respiratory system
 - Dyspnea (Shortness of breath and difficulty breathing)
 - Ingestion may cause nausea, vomiting, and diarrhea
 - May cause loss of appetite
 - Headache
 - Somnolence

Ataxia
Convulsions
May affect the urinary system
It may affect the immune system
May affect the endocrine system
May affect the cardiovascular system

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Carbon dioxide (CO₂). Dry chemical. Water spray mist or foam.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous combustion products Carbon Monoxide, Carbon Dioxide.

Specific hazards May be combustible at high temperatures. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Special Protective Actions for Firefighters

Specific Methods: No information available

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all sources of ignition. Avoid dust formation. Avoid dispersal of dust in the air. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Non-sparking tools should be used.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Avoid creating dust. Use only non-sparking tools. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Minimize dust generation and accumulation. Avoid dust formation. Dry powders can build static electricity charges when subjected to friction of transfer and mixing operations. All equipment used when handling the product must be grounded. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Keep away from incompatible materials.

Safe Handling Advice:

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Bisphenol A	80-05-7	None	None	None	None

Canada

Component	CAS No	Canada - Alberta	Canada - British	Canada - Ontario	Canada - Quebec
-----------	--------	------------------	------------------	------------------	-----------------

			Columbia		
Bisphenol A	80-05-7	None	None	None	None

Australia and Mexico

Component	CAS No	Australia	Mexico
Bisphenol A	80-05-7	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e. there is no leakage from the equipment). It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in the handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

- Eye protection:** Goggles or Safety glasses with side-shields.
- Skin and body protection:** Long sleeved clothing
Chemical resistant apron
Gloves
- Respiratory protection:** Effective dust mask. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds) , inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
- Hygiene measures:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Solid

Appearance:

Powder.

Color:

White.

Odor:

No information available.

Taste

No information available.

Formula

C₁₅H₁₆O₂

Molecular/Formula weight (g/mole):
228.29

Flammability (solid, gas)
no data available

Flashpoint (°C/°F):
79.4°C/ 174.9°F

212.78°C/ 415°F

Flash Point Tested according to:
Closed cup
Open cup

Autoignition Temperature (°C/°F):
No information available

Lower Explosion Limit (%):
No information available

Upper Explosion Limit (%):
No information available

Melting point/range(°C/°F):
150-158°C/ 302-316°F

Decomposition temperature(°C/°F):
No information available

Boiling point/range(°C/°F):
220°C/ 428°F

Bulk density:
No information available

Density (g/cm3):
No information available

Specific gravity:
1.195

pH
No information available

Vapor pressure @ 20°C (kPa):
No information available

Evaporation rate:
No information available

Vapor density:
No information available

VOC content (g/L):
No information available

Odor threshold (ppm):
No information available

**Partition coefficient
(n-octanol/water):**
3.3

Viscosity:
No information available

Miscibility:
No information available

Solubility:
Soluble in diethyl ether
Soluble in Acetone
Very slightly soluble in cold water
Soluble in Benzene
Soluble in Alcohol
Slightly soluble in Carbon Tetrachloride

10. STABILITY AND REACTIVITY

Reactivity

No information available

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Ignition sources. Avoid dust formation. Dust may form explosive mixture in air. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Incompatible materials.

Incompatible Materials: Oxidizing agents

Hazardous decomposition products: Carbon oxides.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Skin. Eyes. Inhalation. Ingestion.

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document
Component Information

Bisphenol A	
CAS No	80-05-7

LD50/oral/rat = 3300 mg/kg Oral LD50 Rat
LD50/oral/mouse = 2400 mg/kg Oral LD50 Mouse
LD50/dermal/rabbit = 3 mL/kg Dermal LD50 Rabbit
LD50/dermal/rat = No information available
LC50/inhalation/rat = > 170 mg/m³ Inhalation LC50 Rat
LC50/inhalation/mouse = > 1700 mg/m³/2H Inhalation LC50 Mouse
Other LD50 or LC50 information = 4000 mg/kg Oral LD50 Guinea Pig

Product Information

LD50/oral/rat =
Value - Acute Toxicity = 3300 mg/kg

LD50/oral/mouse =
Value - Acute Tox = 2400 mg/kg

LD50/dermal/rabbit
Value - Acute Toxicity = 3 mL/kg

LD50/dermal/rat
VALUE - Acute Tox = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = > 170 mg/m³

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = > 1700 mg/m³

Symptoms

Skin Contact: Mild skin irritation. May cause allergic skin reaction.

Eye Contact: Causes serious eye damage.

Inhalation May cause respiratory irritation. May cause dyspnea (difficulty breathing or shortness of breath).

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause loss of appetite. May cause headache. May affect behavior/central nervous system (somnolence, ataxia). May affect urinary system (kidneys). It may affect the immune system and cause decreased immune response. May affect the endocrine system. May affect the cardiovascular system. It may affect the spleen. May affect liver.

Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Prolonged or repeated contact may cause skin allergy. Prolonged or repeated

ingestion may cause weight loss. Prolonged or repeated ingestion may affect the blood. Prolonged or repeated ingestion may affect the liver, and kidneys. Prolonged or repeated inhalation may affect the spleen. Prolonged or repeated inhalation may affect the brain. Prolonged or repeated ingestion may affect the thyroid.

Sensitization: May cause sensitization by skin contact.

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Bisphenol A	80-05-7	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity Suspected of damaging fertility or the unborn child

Reproductive Effects: May cause harm to the unborn child
May impair fertility

Developmental Effects: No information available

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure respiratory system.

STOT - repeated exposure No information available.

Target Organs: Kidneys. Liver. Spleen. Thyroid. Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Bisphenol A - 80-05-7

Algae/aquatic plants

Fish

EC50: =2.5mg/L (96h, Pseudokirchneriella subcapitata)
LC50: 3.6 - 5.4mg/L (96h, Pimephales promelas) LC50: 4.0 - 5.5mg/L (96h, Pimephales promelas) LC50: =4mg/L (96h, Oncorhynchus mykiss) LC50: =9.9mg/L (96h, Brachydanio rerio)

Crustacea

EC50: =10.2mg/L (48h, Daphnia magna) EC50: =3.9mg/L (48h, Daphnia magna)
EC50: 9.2 - 11.4mg/L (48h, Daphnia magna)

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility in soil No information available

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Bisphenol A	80-05-7	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class No information available
Subsidiary Class No information available
Packing group: No information available
Emergency Response Guide Number No information available
Marine Pollutant No data available
DOT RQ (lbs): No information available
Special Provisions No Information available
Symbol(s): No information available
Description: No information available

TDG (Canada)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class No information available
Subsidiary Risk: No information available
Packing Group: No information available
Marine Pollutant No Information available
Description: No information available

ADR

UN Number Not regulated
Proper Shipping Name: No information available
Transport hazard class(es) No information available
Packing group No information available
Subsidiary Risk: No information available

IMDG

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Marine Pollutant No information available

RID

UN Number Not Regulated

Proper Shipping Name: No information available
Transport hazard class(es) No information available
Subsidiary Risk: No information available
Packing group No information available

ICAO (air)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class No information available
Subsidiary Risk: No information available
Packing Group: No information available

IATA

UN Number Not Regulated
Proper Shipping Name: No information available
Transport hazard class(es) No information available
Subsidiary Risk: No information available
Packing group No information available
Precautionary Statements - Response No information available
Special Provisions No information available

15. REGULATORY INFORMATION

International Inventories

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
Bisphenol A	80-05-7	Present ACTIVE	Present KE-23982	Present	Present (4)-123	Present	Present	Present 201-245-8

U.S. Regulations

Bisphenol A


Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 2388
New Jersey (EHS) List: 2388 500 lb TPQ
New Jersey - Discharge Prevention - List of Hazardous Substances: Present
Pennsylvania RTK: Environmental hazard
Pennsylvania RTK - Environmental Hazard List Present

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

 **WARNING:** This product contains a chemical known to the State of California to cause birth defects or other reproductive harm (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Bisphenol A	80-05-7	Not Listed	Not Listed	Not Listed	female reproductive toxicity

CERCLA/SARA

Component	CAS No	CERCLA - Hazardous Substances and	Section 302 Extremely Hazardous	Section 302 Extremely Hazardous	Section 313 - Chemical Category	Section 313 - Reporting de minimis

		their Reportable Quantities	Substances and TPQs	Substances and RQs		
Bisphenol A	80-05-7	None	None	None	None	1.0 % de minimis concentration

U.S. TSCA

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Bisphenol A	80-05-7	Not Applicable	Not Applicable

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component
Bisphenol A
80-05-7 (100)

WHMIS 2015 Hazard Classification
Serious Eye Damage/Eye Irritation - Category 1: H318 Causes serious eye damage.; Skin sensitizers - Category 1: H317 May cause allergic skin reaction.; Reproductive Toxicity - Category 2: H361 Suspected of damaging fertility or the unborn child.; Specific target organ toxicity - Single exposure - Category 3: H335 May cause respiratory irritation.; Combustible Dust - Category 1: May form combustible dust concentrations in air (factors such as combustibility and explosiveness of dusts including composition and shape and size of particles could cause substance to belong to 'Combustible dust' hazard class)

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Bisphenol A	80-05-7	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Bisphenol A	80-05-7	Present
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Bisphenol A	80-05-7	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Bisphenol A	80-05-7	Serious Eye Damage/Eye Irritation - Eye Dam. 1: H318 Causes serious eye damage.; Skin sensitizers - Skin Sens. 1: H317 May cause allergic skin reaction.; Reproductive Toxicity - Repr. 1B: H360F May damage fertility.; Specific target organ toxicity - Single exposure - STOT SE 3: H335 May cause respiratory irritation.604-030-00-0

EU - CLP (1272/2008)

R-phrase(s)

R37 - Irritating to respiratory system
R41 - Risk of serious damage to eyes
R43 - May cause sensitization by skin contact
R52 - Harmful to aquatic organisms
R62 - Possible risk of impaired fertility

S -phrase(s)

S 2 - Keep out of the reach of children.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S39 - Wear eye/face protection
S46 - If swallowed, seek medical advice immediately and show this container or label
S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.
S36/37 - Wear suitable protective clothing and gloves

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Bisphenol A	80-05-7	Xi; R37-41 R43 R52 Repr.Cat.3; R62	No information	S: (2)-26-36/37-39-46-61

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Xi - Irritant
C - Corrosive



16. OTHER INFORMATION

Preparation Date: 09/23/2019
Revision date: 09/23/2019
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on

technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet