# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

Page 1/8
Revision Date 25-Apr-2024
Version 3

ALFAAA14800

# 2,2'-Dihydroxybiphenyl

#### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品说明: 2,2'-二羟基联苯, 99% Product Description: 2,2'-Dihydroxybiphenyl

Cat No.: A14800

**Synonyms** 2,2`-Dihydroxybiphenyl

CAS No 1806-29-7 Molecular Formula C12 H10 O2

**Supplier** Avocado Research Chemicals Ltd.

(Part of Thermo Fisher Scientific)

Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom

Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608

Emergency Telephone Number For information US call: 001-800-227-6701 / Europe call: +32 14 57 52 11

Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99 **CHEMTREC** Tel. No. **US:**001-800-424-9300 / **Europe:**001-703-527-3887

E-mail address begel.sdsdesk@thermofisher.com

Recommended Use Laboratory chemicals. Uses advised against No Information available

# **SECTION 2. HAZARD IDENTIFICATION**

Physical StateAppearanceOdorPowder SolidBeigeOdorless

**Emergency Overview** 

Harmful if swallowed. Causes serious eye irritation.

## Classification of the substance or mixture

Acute Oral Toxicity	Category 4
Serious Eye Damage/Eye Irritation	Category 2

#### **Label Elements**



Signal Word Warning

**Hazard Statements** 

Page 2/8 Revision Date 25-Apr-2024

#### 2,2'-Dihydroxybiphenyl

H302 - Harmful if swallowed

H319 - Causes serious eye irritation

#### **Precautionary Statements**

#### Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves/protective clothing/eye protection/face protection

#### Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor

P330 - Rinse mouth

P362 + P364 - Take off contaminated clothing and wash it before reuse

#### Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

#### Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

#### **Physical and Chemical Hazards**

None identified.

#### **Health Hazards**

Harmful if swallowed. Causes serious eye irritation.

#### **Environmental hazards**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

This product does not contain any known or suspected endocrine disruptors.

# **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight %
[1,1'-Biphenyl]-2,2'-diol	1806-29-7	99

# **SECTION 4. FIRST AID MEASURES**

#### **Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

#### **Skin Contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. In the case of skin irritation or allergic reactions see a physician.

#### Inhalation

Remove from exposure, lie down. Remove to fresh air. If symptoms persist, call a physician. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

## Ingestion

Clean mouth with water. Get medical attention.

#### Most important symptoms and effects

Causes eye burns.

## Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Page 3/8 Revision Date 25-Apr-2024

2,2'-Dihydroxybiphenyl

#### **Notes to Physician**

Treat symptomatically.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

#### **Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Alcohol resistant foam.

#### Extinguishing media which must not be used for safety reasons

No information available.

#### **Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors.

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

# **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### **Personal Precautions**

Ensure adequate ventilation.

#### **Environmental Precautions**

See Section 12 for additional Ecological Information.

#### Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

# **SECTION 7. HANDLING AND STORAGE**

#### Handling

Avoid contact with skin and eyes. Avoid contact with skin and clothing. Avoid breathing vapors or mists. Do not ingest. If swallowed then seek immediate medical assistance.

#### Storage

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

#### Specific Use(s)

Use in laboratories

# **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

# **Control Parameters**

## **Exposure Controls**

# **Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

Page 4/8 Revision Date 25-Apr-2024

# 2,2'-Dihydroxybiphenyl

# Personal protective equipment

**Eye Protection** Goggles (European standard - EN 166)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Disposable gloves	See manufacturers	-	EN 374	(minimum requirement)
_	recommendations			

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Skin and body protection Long sleeved clothing

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

Large scale/emergency use In case of insufficient ventilation, wear suitable respiratory equipment

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure

limits are exceeded or if irritation or other symptoms are experienced.

When RPE is used a face piece Fit Test should be conducted

**Hygiene Measures**Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance Beige

Physical State Powder Solid

**Odor** Odorless

Odor Threshold No data available

**pH** No information available

Melting Point/Range 108 - 111 °C / 226.4 - 231.8 °F

Softening Point No data available Boiling Point/Range 315 °C / 599 °F

Flash Point 154 °C / 309.2 °F Method - No information available

Evaporation RateNo data availableFlammability (solid,gas)No information availableExplosion LimitsNo data available

Vapor Pressure No data available

**Vapor Density** No data available (Air = 1.0)

Specific Gravity / Density 0.830

Bulk Density No data available

Water Solubility Insoluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Autoignition Temperature 324 °C / 615.2 °F

Decomposition Temperature No data available

Viscosity No data available

Page 5/8 Revision Date 25-Apr-2024

2,2'-Dihydroxybiphenyl

Explosive Properties No information available Oxidizing Properties No information available

Molecular FormulaC12 H10 O2Molecular Weight186.21

## **SECTION 10. STABILITY AND REACTIVITY**

**Stability** Stable under normal conditions.

**Hazardous Reactions** No information available.

**Hazardous Polymerization** Hazardous polymerization does not occur.

Conditions to Avoid Incompatible products.

Materials to avoid Strong oxidizing agents.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO2).

# **SECTION 11. TOXICOLOGICAL INFORMATION**

Product Information No acute toxicity information is available for this product

(a) acute toxicity;

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; No data available

Other Adverse Effects The toxicological properties have not been fully investigated.

Symptoms / effects,both acute and No information available

Page 6/8 Revision Date 25-Apr-2024

2,2'-Dihydroxybiphenyl

delayed

**SECTION 12. ECOLOGICAL INFORMATION** 

Ecotoxicity effects Contains no substances known to be hazardous to the environment or that are not

degradable in waste water treatment plants.

Persistence and Degradability

No information available

Bioaccumulative Potential No information available

Mobility in soil No information available

**Endocrine Disruptor Information** 

	Component	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information		
[1,1'-Biphenyl]-2,2'-diol		Group III Chemical				
	Persistent Organic Pollutant	This product does not contain	any known or suspected subst	tance		

Ozone Depletion Potential

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

# **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste from Residues/Unused

**Products** 

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to

ensure complete and accurate classification.

Contaminated Packaging Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use

empty containers.

Other Information Waste codes should be assigned by the user based on the application for which the product

was used.

# **SECTION 14. TRANSPORT INFORMATION**

Road and Rail Transport Not Regulated

IMDG/IMO Not regulated

IATA Not regulated

Special Precautions for User No special precautions required

# **SECTION 15. REGULATORY INFORMATION**

#### International Inventories

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

Compo	nent The	List of	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL	
-------	----------	---------	------	-------	--------	------	-----	-------	------	------	------	------	--

Page 7/8 Revision Date 25-Apr-2024

#### 2,2'-Dihydroxybiphenyl

	Hazardous Chemicals (2015 Edition)											
[1,1'-Biphenyl]-2,2'-diol	-	-	X	-	217-303-0	X	Χ	Χ	-	Х	-	-

#### **National Regulations**

# **SECTION 16. OTHER INFORMATION**

Prepared By Health, Safety and Environmental Department

Revision Date 25-Apr-2024

**Revision Summary** New emergency telephone response service provider.

**Training Advice** 

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

## Legend

CAS - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b)
Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic

Substances/EU List of Notified Chemical Substances

Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances
IECSC - Chinese Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
NZIOC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit TWA - Time Weighted Average

ACGIH - American Conference of Governmental Industrial Hygienists IARC - International Agency for Research on Cancer

**DNEL** - Derived No Effect Level **PNEC** - Predicted No Effect Concentration

RPE - Respiratory Protective Equipment LD50 - Lethal Dose 50%

LC50 - Lethal Concentration 50%EC50 - Effective Concentration 50%NOEC - No Observed Effect ConcentrationPOW - Partition coefficient Octanol:Water

PBT - Persistent, Bioaccumulative, Toxic vPvB - very Persistent, very Bioaccumulative

ICAO/IATA - International Civil Aviation Organization/International Air
Transport Association

IMO/IMDG - International Maritime Organization/International Maritime
Dangerous Goods Code

ADR - European Agreement Concerning the International Carriage of MARPOL - International Convention for the Prevention of Pollution from

Dangerous Goods by Road

OECD - Organisation for Economic Co-operation and Development

ATE - Acute Toxicity Estimate

**OECD** - Organisation for Economic Co-operation and Development **BCF** - Bioconcentration factor **ATE** - Acute Toxicity Estimate **VOC** - (Volatile Organic Compound)

#### Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

ALFAAA14800

# **SAFETY DATA SHEET**

Page 8/8 Revision Date 25-Apr-2024

2,2'-Dihydroxybiphenyl

**End of Safety Data Sheet**