



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
HPR, Schedule 1

Revision date 21-Sep-2023

Revision Number 1

1. Identification

Product identifier

Product Name 4-Hydroxybiphenyl-d9 (rings-d9)

Other means of identification

Product Code(s) TRC-P336136-25MG

Recommended use of the chemical and restrictions on use

Recommended use Laboratory use

Restrictions on use No information available

Details of the supplier of the safety data sheet

Initial supplier identifier

Toronto Research Chemicals
2 Brisbane Road
Toronto, ON
M3J 2J8

Emergency number: +1(416) 665-9696 between 0800-1700 (GMT-5)

Fax: +14166654439

Web: www.trc-canada.com

E-mail sds-request@lgcgroup.com

Emergency telephone number

Emergency Telephone

For Hazardous Materials or Dangerous Goods Incident

Spill, Leak, Fire Exposure, or Accident

Call CHEMTREC:

USA & Canada 1-800-424-9300

Rest of the world +1 703-741-5970

2. Hazard identification

Classification

Classification according to WHIMIS

Skin corrosion/irritation	Category 2
Skin sensitisation	Category 1B
Chronic aquatic toxicity	Category 2



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Label elements

Warning

Hazard statements

Classification according to WHIMIS
Causes skin irritation
May cause an allergic skin reaction
Toxic to aquatic life with long lasting effects



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Avoid breathing dust, fume, gas, mist, vapors and spray
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves, protective clothing, eye protection and face protection
Avoid release to the environment

Skin

IF ON SKIN: Wash with plenty of water and soap
Take off all contaminated clothing and wash it before reuse
If skin irritation or rash occurs: Get medical advice and attention

Spill

Collect spillage

Precautionary Statements - Disposal

Dispose of contents and container to an approved waste disposal plant

Other information

No information available.

3. Composition/information on ingredients

Substance

Formula

C₁₂H₉O

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act	Date HMIRA filed and date exemption granted
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			registry number (HMIRA registry #)	(if applicable)
4-Hydroxybiphenyl-d9 (rings-d9)	126840-28-6	90 - 100%	-	

Additional information

This product contains a stable isotope

4. First-aid measures

Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.
Skin contact	May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor. Wash off immediately with soap and plenty of water for at least 15 minutes.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms	Itching. Rashes. Hives.
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Indication of any immediate medical attention and special treatment needed

Note to doctors	May cause sensitisation in susceptible persons. Treat symptomatically.
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5. Fire-fighting measures

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	Product is or contains a sensitiser. May cause sensitisation by skin contact.
Explosion data	
Sensitivity to mechanical impact	None.



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Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labelled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Please refer to the manufacturer's certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on the CoA. Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.



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Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

Hand protection The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374. Wear suitable gloves. Impervious gloves.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
	Wear protective butyl rubber gloves	0.5 mm	8 hours

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

General hygiene considerations Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid
Appearance Solid
Colour off-white
Odour No information available
Odour threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	No data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive	No data available	



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limits		
Lower flammability or explosive limits	No data available	
Vapour pressure	No data available	None known
Relative vapour density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility in other solvents	No data available	
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Other information		
Explosive properties	No information available.	
Oxidising properties	No information available.	
Softening point	No information available	
Molecular weight	179.26	
VOC content	No information available	
Liquid Density	No information available	
Bulk density	No information available	

10. Stability and reactivity

Reactivity

No information available.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

None known based on information supplied.

Incompatible materials

Strong acids. Strong bases. Strong oxidising agents.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation

Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.



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Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	May cause sensitisation by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes skin irritation.
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes.
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Acute toxicity

Numerical measures of toxicity
No information available

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

Skin corrosion/irritation	Classification based on data available for ingredients. Causes skin irritation.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

12. Ecological information



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Ecotoxicity	Toxic to aquatic life with long lasting effects.
Persistence and degradability	No information available.
Bioaccumulation	No information available.
Other adverse effects	No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

14. Transport information

TDG

UN number or ID number	UN3077
UN proper shipping name	Environmentally hazardous substances, solid, n.o.s. (4-Hydroxybiphenyl-d9 (rings-d9))
Transport hazard class(es)	9
Packing group	III
Special Provisions	16, 99
Marine pollutant	NP.
Description	UN3077, Environmentally hazardous substances, solid, n.o.s. (4-Hydroxybiphenyl-d9 (rings-d9)), 9, III

DOT

UN number or ID number	UN3077
Extended proper shipping name	Environmentally hazardous substances, solid, n.o.s. (4-Hydroxybiphenyl-d9 (rings-d9))
Transport hazard class(es)	9
Packing group	III
DOT Marine Pollutant	I.
Marine pollutant	4-Hydroxybiphenyl-d9 (rings-d9)
Description	UN3077, Environmentally hazardous substances, solid, n.o.s. (4-Hydroxybiphenyl-d9 (rings-d9)), 9, III, Marine pollutant
Special Provisions	8, 146, 335, 384, 441, A112, B54, B120, IB8, IP3, N20, N91, T1, TP33
Emergency Response Guide	171



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Number

MEX

UN number or ID number UN3077
UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (4-Hydroxybiphenyl-d9 (rings-d9))
Transport hazard class(es) 9
Packing group III
Description UN3077, Environmentally hazardous substances, solid, n.o.s. (4-Hydroxybiphenyl-d9 (rings-d9)), 9, III
Special Provisions 274, 331, 335

IATA

UN number or ID number UN3077
UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (4-Hydroxybiphenyl-d9 (rings-d9))
Transport hazard class(es) 9
Packing group III
ERG Code 9L
Special Provisions A97, A158, A179, A197, A215
Description UN3077, Environmentally hazardous substances, solid, n.o.s. (4-Hydroxybiphenyl-d9 (rings-d9)), 9, III

IMDG

UN number or ID number UN3077
UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (4-Hydroxybiphenyl-d9 (rings-d9))
Transport hazard class(es) 9
Packing group III
EmS-No. F-A, S-F
Special Provisions 274, 335, 966, 967, 969
Marine pollutant P
Description UN3077, Environmentally hazardous substances, solid, n.o.s. (4-Hydroxybiphenyl-d9 (rings-d9)), 9, III, Marine pollutant

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA Complies under research and development exemption or is regulated by a different government agency.
DSL/NDL Contact supplier for inventory compliance status.
EINECS/ELINCS Contact supplier for inventory compliance status.
ENCS Contact supplier for inventory compliance status.



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IECSC Contact supplier for inventory compliance status.
KECL Contact supplier for inventory compliance status.
PICCS Contact supplier for inventory compliance status.
AICC Contact supplier for inventory compliance status.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

16. Other information

NFPA	Health hazards 2	Flammability 0	Instability 0	Special hazards -
HMIS	Health hazards 2	Flammability 0	Physical hazards 0	Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AELG(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization



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Revision Note No information available.

Disclaimer

The information in this safety data sheet (SDS) has been prepared with due care and is true and accurate to the best of our knowledge. The user must determine the suitability of the information for its particular purpose, ensure compliance with existing laws and regulations, and be aware that other or additional safety or performance considerations may arise when using, handling and/ or storing the material. The information in this SDS does not purport to be all inclusive or a guarantee as to the properties of the material supplied, and should be used only as a guide. LGC makes no warranties or representations as to the accuracy and completeness of the information contained herein, shall not be held responsible for the suitability of this information for the user's intended purposes or the consequences of such use, and shall not be liable for any damage or loss, howsoever arising, direct or otherwise.

End of Safety Data Sheet