



SAFETY DATA SHEET

According to JIS Z 7253:2019

Revision date 25-Nov-2024

Revision Number 1

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	4-Bromobiphenyl-d9
Product Code	020-19951

Supplier FUJIFILM Wako Pure Chemical Corporation

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Recommended uses For research use only

Restrictions on useSeek expert judgment when using for purposes other than those recommended.

Section 2: HAZARDS IDENTIFICATION

GHS classification

Classification of the substance or mixture

Acute toxicity - OralCategory 4Skin corrosion/irritationCategory 2Serious eye damage/eye irritationCategory 1Specific target organ toxicity (single exposure)Category 3

Category 3 Respiratory irritation

Acute aquatic toxicity Category 1

Pictograms



Signal word

Danger

Hazard statements

- H315 Causes skin irritation
- H318 Causes serious eye damage
- H302 Harmful if swallowed
- H335 May cause respiratory irritation
- H400 Very toxic to aquatic life

Precautionary statements-(Prevention)

- · Wash face, hands and any exposed skin thoroughly after handling
- · Do not eat, drink or smoke when using this product
- Wear protective gloves/protective clothing/eye protection/face protection
- Avoid breathing dust/fume/gas/mist/vapors/spray
- · Use only outdoors or in a well-ventilated area
- · Avoid release to the environment

Precautionary statements-(Response)

- 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 doctor/physician

- IF ON SKIN: Wash with plenty of soap and water
- If skin irritation occurs: Get medical advice/attention
- · Take off contaminated clothing and wash before reuse
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Call a POISON CENTER or doctor/physician if you feel unwell
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- · Rinse mouth
- · Collect spillage

Precautionary statements-(Storage)

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

Precautionary statements-(Disposal)

• Dispose of contents/container to an approved waste disposal plant

Others

Other hazards Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Substance

Formula C12D9Br

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
4-Bromobiphenyl-d9	97.0	N/A	N/A	N/A	142475-00-1

Note on ISHL No.: * in the table means announced chemical substances.

Section 4: FIRST AID MEASURES

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders

Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Water spray (fog), Carbon dioxide (CO2), Foam, Extinguishing powder, Sand

Unsuitable extinguishing media

No information available

Specific hazards arising from the chemical product

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

Special extinguishing method

No information available

Special protective actions for fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminent and methods and materials for cleaning up

Sweep up and gather scattered particles, and collect it in an empty airtight container.

Recoverly, neutralization

No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling

Technical measures

Avoid contact with strong oxidizing agents. Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

Safety handling precautions

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Storage

Safe storage conditions

Storage conditions Keep container protect from light and tightly closed in well ventilated cool place under

25°C Packed with an inert gas. Glass

Safe packaging material

Incompatible substances Strong oxidizing agents

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and handand eye-wash facility. And display their position clearly.

Exposure limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Personal protective equipment

Respiratory protection Dust mask (JIS T 8151)

Hand protection chemical protective gloves (JIS T 8116)

Eye protection protective eyeglasses or chemical safety goggles (JIS T 8147)

Skin and body protection Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

If this product is classified as "Chemical Substances Hazardous to Skin, etc.", use appropriate protective equipment to them.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form

Color White - yellowish brown or grey

Boiling point, initial boiling point and boiling range 310 °C

Flammability no data available
Evaporation rate: no data available
Flammability (solid, gas): no data available

Upper/lower flammability or explosive limits

Upper:no data availableLower:no data availableFlash pointno data available

Auto-ignition temperature: >100 °C

Decomposition temperature: no data available no data available Viscosity (coefficient of viscosity) no data available **Dynamic viscosity** no data available **Solubilities** no data available n-Octanol/water partition coefficient:(log Pow) no data available Vapour pressure no data available Specific Gravity / Relative density no data available Vapour density no data available Particle characteristics no data available

Section 10: STABILITY AND REACTIVITY

Stability

Reactivity no data available **Chemical stability** May be altered by light.

Hazardous reactions

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Carbon monooxide (CO), Carbon dioxide (CO2), Halides

Section 11: TOXICOLOGICAL INFORMATION

*NITE: National Institute of Technology and Evaluation (JAPAN) https://www.chem-info.nite.go.jp/en/chem/chrip/chrip_search/srhInput

Acute toxicity no data available

Skin irritation/corrosionno data availableSerious eye damage/ irritationno data availableRespiratory or skin sensitizationno data availableReproductive cell mutagenicityno data availableCarcinogenicityno data available

Reproductive toxicityno data availableSTOT-single exposureno data availableSTOT-repeated exposureno data availableAspiration hazardno data available

Section 12: ECOLOGICAL INFORMATION

*NITE: National Institute of Technology and Evaluation (JAPAN) https://www.chem-info.nite.go.jp/en/chem/chrip/chrip_search/srhInput

Ecotoxicity no data available

Other data no data available

Persistence and degradability
Bioaccumulative potential
Mobility in soil
Hazard to the ozone layer

No information available
No information available
No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

ADR/RID

UN number UN3152

Proper shipping name: Polyhalogenated biphenyls, solid (4-Bromobiphenyl-d9)

UN classfication 9
Subsidiary hazard class

Packing group II
Marine pollutant Yes

IMDG

UN number UN3152

Proper shipping name: Polyhalogenated biphenyls, solid (4-Bromobiphenyl-d9)

UN classfication 9
Subsidiary hazard class P
Packing group II
Marine pollutant (Sea) Yes

Transport in bulk according to No information available

Annex II of MARPOL 73/78 and

the IBC Code

IATA

UN number UN3152

Proper shipping name: Polyhalogenated terphenyls, solid (4-Bromobiphenyl-d9)

UN classfication 9
Subsidiary hazard class
Packing group II
Environmentally Hazardous Yes

Substance

Section 15: REGULATORY INFORMATION

Japanese regulations

Fire Service Act
Poisonous and Deleterious
Not applicable
Not applicable

Substances Control Law

Industrial Safety and Health Act Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57)

Notifiable Substances (Law Art.57-2)

Regulations for the carriage and storage of dangerous

Chemical Substances Hazardous to Skin, etc.(Regulations Article 594-2 Paragraph 1) Noxious Substances (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1)

goods in ship Civil Aeronautics Law Transport by Ship and Storage, Attached Table 1)

Misellaneous Dangerous Substances and Articles (Ordinance Art.194, MITL Nortification for Air Transportation of Explosives etc., Attached Table 1)

Pollutant Release and Transfer Not applicable

Register Law (2023.4.1-)

Export Trade Control Order Appendix 1 Export licensed items.

Chemical Name	Poisonous and Deleterious Substances Control Law	Industrial Safety and Health Act Substances (Law Art.57-2)	Pollutant Release and Transfer Register Law (2023.4.1-)
4-Bromobiphenyl-d9 142475-00-1 (97.0)	-	Applicable	-

Section 16: OTHER INFORMATION

Key literature references and sources for data etc.

NITE: National Institute of Technology and Evaluation (JAPAN) https://www.chem-info.nite.go.jp/en/chem/chrip/chrip_search/srhInput

IATA dangerous Goods Regulations

RTECS:Registry of Toxic Effects of Chemical Substances Japan Industrial Safety and Health Association GHS Model SDS

Dictionary of Synthetic Oraganic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd.

Chemical Dictionary, Kyouritsu Publishing Co., Ltd.

etc

Disclaimer

This SDS is according to JIS Z 7253: 2019. 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, 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.

GHS Classification is according to JIS Z 7252:2019. *JIS: Japanese Industrial Standards

End of Safety Data Sheet