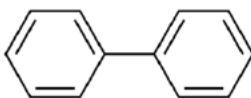


MATERIAL SAFETY DATA SHEET (MSDS)

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

1.1. Product identifier

Product form : Substance
:
EC Index-No. : 601-042-00-8
EC-No. : 202-163-5
CAS-No. : 92-52-4
Product code : 01962
Chemical structure :



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

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Labogens Fine Chem Industries
1st Floor , Above Bank of India, Guru Vihar , Rahon Road,
Ludhiana Pb. (141007)
+91 9316777775, +91 7707855700
sales@labogens.com - www.Labogens.com

1.4. Emergency telephone number

Emergency number : +91 7707855700 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, H315
Category 2
Serious eye damage/eye H319
irritation, Category 2
Specific target organ H335
toxicity — Single
exposure, Category 3,
Respiratory tract irritation
Hazardous to the aquatic H410
environment — Chronic
Hazard, Category 1

Full text of hazard classes and H-statements : see section 16

BIPHENYL FOR SYNTHESIS

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xi; R36/37/38

N; R50/53

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)

:



GHS07



GHS09

Signal word (CLP)

: Warning

Hazard statements (CLP)

: H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H410 - Very toxic to aquatic life with long lasting effects.
Precautionary statements (CLP): P261 - Avoid breathing vapours, dust, fume, gas.
P273 - Avoid release to the environment.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P501 - Dispose of contents/container to an approved waste disposal plant

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : BIPHENYL FOR SYNTHESIS
CAS-No. : 92-52-4
EC-No. : 202-163-5
EC Index-No. : 601-042-00-8

Full text of R- and H-statements: see section 16

BIPHENYL FOR SYNTHESIS

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

- | | |
|---------------------------------------|--|
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. |
| First-aid measures after skin contact | : Wash with plenty of water/.... Wash contaminated clothing before reuse. Get medical advice/attention. |
| First-aid measures after eye contact | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention. |
| First-aid measures after ingestion | : Rinse mouth. Do not induce vomiting. |

4.2. Most important symptoms and effects, both acute and delayed

- | | |
|-------------------------------------|-------------------------------------|
| Symptoms/effects after inhalation | : May cause respiratory irritation. |
| Symptoms/effects after skin contact | : Causes skin irritation. |
| Symptoms/effects after eye contact | : Causes serious eye irritation. |

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- | | |
|--------------------------------|--|
| Suitable extinguishing media | : Carbon dioxide. Dry powder. Foam. Water spray. |
| Unsuitable extinguishing media | : Do not use a heavy water stream. |

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- | | |
|--------------------------------|---|
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. |
|--------------------------------|---|

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- | | |
|----------------------|-----------------------------------|
| Emergency procedures | : Evacuate unnecessary personnel. |
|----------------------|-----------------------------------|

6.1.2. For emergency responders

- | | |
|----------------------|--|
| Protective equipment | : Use personal protective equipment as required. |
| Emergency procedures | : Ventilate area. |

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- | | |
|-------------------------|--|
| Methods for cleaning up | : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers. |
|-------------------------|--|

6.4. Reference to other sections

No additional information available

BIPHENYL FOR SYNTHESIS

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- | | |
|-------------------------------|---|
| Precautions for safe handling | : Avoid contact with skin and eyes. Use only outdoors or in a well-ventilated area. Do not breathe vapours. |
| Hygiene measures | : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |

7.2. Conditions for safe storage, including any incompatibilities

- | | |
|--------------------|--|
| Storage conditions | : Keep container tightly closed. Store in a well-ventilated place. |
|--------------------|--|

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

- | | |
|--------------------------|--|
| Hand protection | : Protective gloves |
| Eye protection | : Chemical goggles or safety glasses |
| Skin and body protection | : Wear suitable protective clothing |
| Respiratory protection | : [In case of inadequate ventilation] wear respiratory protection. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- | | |
|--|------------------------|
| Physical state | : Solid |
| Molecular mass | : 154.21 g/mol |
| Colour | : White powder. |
| Odour | : characteristic odor. |
| Odour threshold | : No data available |
| pH | : 5.5 |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : 69 - 72 °C |
| Freezing point | : No data available |
| Boiling point | : 255 °C |
| Flash point | : 110 °C |
| Auto-ignition temperature | : 540 °C |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : No data available |

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Vapour pressure	: 0.04 hPa at 20 °C
Relative vapour density at 20 °C	: 5.31
Relative density	: No data available
Density	: 1.041 g/cm ³
Solubility	: Water: 0.0075 g/l at 15 °C
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 0.006 - 0.058 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Direct sunlight. Air contact. Moisture.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Causes skin irritation. pH: 5.5
Serious eye damage/irritation	: Causes serious eye irritation. pH: 5.5
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

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Reproductive toxicity : Not classified
STOT-single exposure : May cause respiratory irritation.

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

BIPHENYL FOR SYNTHESIS (92-52-4)

Persistence and degradability	May cause long-term adverse effects in the environment.
-------------------------------	---

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR)	: 3077
UN-No. (IMDG)	: 3077
UN-No. (IATA)	: 3077
UN-No. (ADN)	: 3077

BIPHENYL FOR SYNTHESIS

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

UN-No. (RID) : 3077

14.2. UN proper shipping name

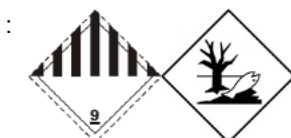
Proper Shipping Name (ADR)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Proper Shipping Name (IMDG)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Proper Shipping Name (IATA)	: Environmentally hazardous substance, solid, n.o.s.
Proper Shipping Name (ADN)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Proper Shipping Name (RID)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Transport document description (ADR)	: UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III, (-)
Transport document description (IMDG)	: UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III, MARINE POLLUTANT
Transport document description (IATA)	: UN 3077 Environmentally hazardous substance, solid, n.o.s., 9, III
Transport document description (ADN)	: UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III
Transport document description (RID)	: UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 9

Danger labels (ADR) : 9



IMDG

Transport hazard class(es) (IMDG) : 9

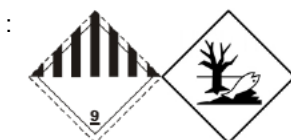
Danger labels (IMDG) : 9



IATA

Transport hazard class(es) (IATA) : 9

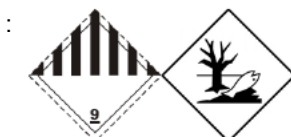
Hazard labels (IATA) : 9



ADN

Transport hazard class(es) (ADN) : 9

Danger labels (ADN) : 9



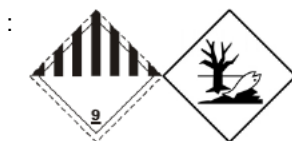
BIPHENYL FOR SYNTHESIS

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

RID

Transport hazard class(es) (RID) : 9
Danger labels (RID) : 9



14.4. Packing group

Packing group (ADR) : III
Packing group (IMDG) : III
Packing group (IATA) : III
Packing group (ADN) : III
Packing group (RID) : III

14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : M7
Special provisions (ADR) : 274, 335, 375, 601
Limited quantities (ADR) : 5kg
Excepted quantities (ADR) : E1
Packing instructions (ADR) : P002, IBC08, LP02, R001
Special packing provisions (ADR) : PP12, B3
Mixed packing provisions (ADR) : MP10
Portable tank and bulk container instructions (ADR) : T1, BK1, BK2, BK3
Portable tank and bulk container special provisions (ADR) : TP33
Tank code (ADR) : SGAV, LGBV
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V13
Special provisions for carriage - Bulk (ADR) : VC1, VC2
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13
Hazard identification number (Kemler No.) : 90
Orange plates :



Tunnel restriction code (ADR) : -
EAC code : 2Z

- Transport by sea

Special provisions (IMDG) : 274, 335, 966, 967, 969

BIPHENYL FOR SYNTHESIS

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Limited quantities (IMDG)	: 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP02, P002
Special packing provisions (IMDG)	: PP12
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: BK1, BK2, BK3, T1
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW23
MFAG-No	: 171

- Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y956
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 956
PCA max net quantity (IATA)	: 400kg
CAO packing instructions (IATA)	: 956
CAO max net quantity (IATA)	: 400kg
Special provisions (IATA)	: A97, A158, A179, A197
ERG code (IATA)	: 9L

- Inland waterway transport

Classification code (ADN)	: M7
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5 kg
Excepted quantities (ADN)	: E1
Equipment required (ADN)	: PP, A
Number of blue cones/lights (ADN)	: 0
Additional requirements/Remarks (ADN)	: * Only in the molten state. ** For carriage in bulk see also 7.1.4.1. *** Only in the case of transport in bulk.

- Rail transport

Classification code (RID)	: M7
Special provisions (RID)	: 274, 335, 375, 601
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P002, IBC08, LP02, R001
Special packing provisions (RID)	: PP12, B3
Mixed packing provisions (RID)	: MP10
Portable tank and bulk container instructions (RID)	: T1, BK1, BK2, BK3
Portable tank and bulk container special provisions (RID)	: TP33
Tank codes for RID tanks (RID)	: SGAV, LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W13
Special provisions for carriage – Bulk (RID)	: VC1, VC2
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW31

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Colis express (express parcels) (RID) : CE11
Hazard identification number (RID) : 90

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

BIPHENYL FOR SYNTHESIS is not on the REACH Candidate List

BIPHENYL FOR SYNTHESIS is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed
SZW-lijst van mutagene stoffen : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-statements:

Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
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BIPHENYL FOR SYNTHESIS

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H410	Very toxic to aquatic life with long lasting effects.
R36/37/38	Irritating to eyes, respiratory system and skin
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
N	Dangerous for the environment
Xi	Irritant

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product