SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Name:	Bicyclo[2.2.1]hepta-2,5-diene-2,3-dicarboxylic acid
CAS Number:	15872-28-3
Catalog Numbers:	BD67911

1.2 Relevant identified uses of the substance or mixture and uses advised against ldentified uses: For laboratory research purposes.Not for drug or household use.

1.3 Details of the supplier of the safety data sheet
 2nd floor, building 3, No.1, Middle Wangdong Road,
 Sijing Town, Songjiang District, Shanghai, 201601, China
 Telephone: 86-21-61629022 | Fax: 86-21-61629029

1.4 Emergency telephone

Emergency Phone: 1-352-323-3500 400 120 0761

2. HAZARDS IDENTIFICATION

2.1	Classification of the substance or mixture	
	GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)	
	Acute toxicity, oral(Category 4)	H302
	Acute toxicity, dermal (Category 4)	H312
	Skin corrosion/irritation (Category 2)	H315
	Serious eye damage/eye irritation(Category 2A)	H319
	Acute toxicity, inhalation (Category 4)	H332
	Specific target organ toxicity, single exposure;Respiratory system(Category 3)	H335
	No Resource File	

2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal word	Warning
Hazard statement(s)	
H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
Precautionary statement(s)	
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands 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.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P330	Rinse mouth.

BLDpharm

BLD Pharmatech

P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to in accordance with local regulation

2.3 Other hazards.

Additional precautionary phrases are located throughout the safety data sheet.

3. COMPOSITION, INFORMATION ON INGREDIENTS Molecular Formula: C9H8O4

Molecular Weight: 180.16

Component		Concentration	
Bicyclo[2.2.1]hepta-2,5-diene	-2,3-dicarboxylic acid		
CAS Number	15872-28-3	-	

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

lf inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

- **4.2 Most important symptoms and effects, both acute and delayed** The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
- 4.3 Indication of any immediate medical attention and special treatment needed No data available

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: alcohol-resistant foam, dry chemical or carbon dioxide Unsuitable extinguishing media: no data

5.2 Special hazards arising from the substance or mixture In combustion toxic fumes may form.

5.3 Advice for firefighters

Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas.

Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Do not attempt to take action without suitable protective clothing.

For personal protection see section 8.

BLDpharm

BLD Pharmatech

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains or river. Alert the neighbourhood to the presence of fumes or gas.

6.3 Methods and materials for containment and cleaning up

Mix with sand or vermiculite. Sweep up and shovel. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4 Reference to other sections

For disposal see section 13.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Wash hands thoroughly after handling. Ensure there is sufficient ventilation of the area.

Normal measures for preventive fire protection. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated area. Containers which are opened must be carefully resealed and kept upright to prevent leakage.Sealed in dry, 2-8°C

7.3 Specific end use(s)

The end use(s) have not been fully determined. The substance is supplied for Research and Development purposes by professionals only.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid
Boiling Point	No data available
Melting Point	No data available
Odour	No data available
Odour Threshold	No data available
pН	No data available
Flash point	No data available
Evapouration rate	No data available
Vapour pressure	No data available
Vapor Density	No data available
Relative density	No data available
Solubility in water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity No Data	No data available
Explosive properties	No data available
Oxidizing properties	No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions No data available

- 10.4 Conditions to avoid No data available
- 10.5 Incompatible materials No data available
- 10.6 Hazardous decomposition products Carbon monoxide , carbon dioxide

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye Damage/irritation	No data available
Respiratory or skin sensitisation	No data available
Germ Cell mutagenicity	No data available
Carcinogenicity	No data available
Reproductive toxicity	No data available
STOT-single exposure	No data available
STOT-repeated exposure	No data available
Aspiration hazard	No data available

11.2 Additional

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available

12.2 Persistence and degradability

BLDpharm

BLD Pharmatech

No data available 12.4 Mobility in soil No data available 12.5 Results of PBT and vPvB assessment No data available 12.6 Other adverse effects No data available 13. DISPOSAL CONSIDERATIONS 13.1 Waste treatment methods Disposal Operations Consult state, local or national regulations for proper disposal. Hand over to authorised disposal company as hazar Disposal of Packaging Disposal of Packaging Disposal must be made according to official regulations. 14. TRANSPORT INFORMATION 14.1 TRANSPORT INFORMATION 14.2 UN proper shipping name ADR/RID:- MDG:- MDG: Not dangerous goods MDR: Not dangerous goods ADR/RID:- IMDG:- MDR: Not dangerous goods ADR/RID:- IMDG:- ADR/RID:- IMDG:- ADR/RID:- IMDG:- ADR/RID:- IMDG:- ADR/RID:- IMDG:- No special precautions for	
12.4 Mobility in soil No data available 12.5 Results of PBT and vPvB assessment No data available 12.6 Other adverse effects No data available 13. DISPOSAL CONSIDERATIONS 13.1 Waste treatment methods Disposal Operations Consult state, local or national regulations for proper disposal. Hand over to authorised disposal company as hazar Disposal of Packaging Disposal of Packaging Disposal of Packaging Disposal must be made according to official regulations. 14. TRANSPORT INFORMATION 14.1 UN number ADR/RID:- IMDC:- IATA:- 14.2 UN proper shipping name ADR/RID:- IMDG:- IATA:- 14.3 Transport hazard class(es) MDG:Not dangerous goods IMDG:Not dangerous goods MDG:- IATA:- 14.4 Packaging group ADR/RID:- IMDG:- IATA:- 14.5 Environmental hazards ADR/RID:- IMDG:- IATA:- 14.5 Environmental hazards ADR/RID:- IMDG:- IATA:- 14.5 Special precautions for user No special precautions required IATA:- 14.7 Further information No data available IMDG:- IATA:- 15. REGULATORY INFORMATION Safety, Assessment No Chemical Safety Assessment No Chemical Safety Assessment IND Chemical Safety Assessment 16. OTHER INFORMATION Safety Assessment No Chemical Safety Assessment INT Chemical Safety Assessment <th></th>	
12.4 Mobility in soil No data available 12.5 Results of PBT and vPvB assessment No data available 12.6 Other adverse effects No data available 13. DISPOSAL CONSIDERATIONS 13.1 Waste treatment methods Disposal Operations Consult state, local or national regulations for proper disposal. Hand over to authorised disposal company as hazar Disposal of Packaging Disposal of Packaging Disposal of Packaging Disposal must be made according to official regulations. 14. TRANSPORT INFORMATION 14.1 UN number ADR/RID: - IMDG: - IATA: - 14.2 UN proper shipping name ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: - 14.3 Transport hazard class(es) ADR/RID: - IMDG: - IATA: - 14.4 Packaging group ADR/RID: - IMDG: - IATA: - 14.5 Environmental hazards ADR/RID: - IMDG: - IATA: - 14.5 Environmental hazards ADR/RID: - IMDG: - IATA: - 14.5 Special precautions for user No special precautions for user No special precautions required IATA: - 14.7 Further information No data available Immonental and national regulations: Product is not subject to any additional regulations or provisions Safety, Assessment No Chemical Safety Assessment Immonental and national regulations: Product is not subject to any additional regulations or provisions	
No data available 12.5 REsults of PBT and vPvB assessment No data available 12.6 Other adverse effects No data available 13. DISPOSAL CONSIDERATIONS 13.1 Waste treatment methods Disposal Operations Consult state, local or national regulations for proper disposal. Hand over to authorised disposal company as hazar Disposal of Packaging Disposal of Packaging Disposal of Packaging Disposal must be made according to official regulations. 14. TRANSPORT INFORMATION 14.1 UN number ADR/RID:- IMDG:- IATA:- 14.2 UN proper shipping name ADR/RID:Not dangerous goods IATA: Not data available IATA: IATA:-	
No data available 12.6 Other adverse effects No data available 13. DISPOSAL CONSIDERATIONS 13.1 Waste treatment methods Disposal Operations Consult state, local or national regulations for proper disposal. Hand over to authorised disposal company as hazar Disposal of Packaging Disposal must be made according to official regulations. 14. TRANSPORT INFORMATION 14.1 UN number ADR/RD: - IMDG: - IATA: - 14.2 UN proper shipping name ADR/RD: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods I	
No data available 13. DISPOSAL CONSIDERATIONS 13.1 Waste treatment methods Disposal Operations Consult state, local or national regulations for proper disposal. Hand over to authorised disposal company as hazar Disposal of Packaging Disposal must be made according to official regulations. 14. TRANSPORT INFORMATION 14.1 UN number ADR/RD: - IMDG: - IATA: - 14.2 UN proper shipping name ADR/RD: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods IATA: - 14.3 Transport hazard class(es) ADR/RD: - IMDG: - IATA: - 14.4 Packaging group ADR/RD: - IMDG: - IATA: - 14.5 Environmental hazards ADR/RD: - IMDG: - IATA: - 14.6 Special precautions for user No special precautions for user No special precautions required IMDG: - IATA: - 15. REGULATORY INFORMATION Safety Assessment No Chemical Safety Assessment Importation regulations or provisions Safety Assessment No Chemical Safety Assessment Importation regulations or provisions 16. OTHER INFORMATION Importation Importation Importation	
13. DISPOSAL CONSIDERATIONS 13.1 Waste treatment methods Disposal Operations Consult state, local or national regulations for proper disposal. Hand over to authorised disposal company as hazar Disposal of Packaging Disposal of Packaging Disposal must be made according to official regulations. 14. TRANSPORT INFORMATION 14.1 UN number ADR/RD: - IMDG: - ADR/RD: Not dangerous goods IMDG: Not dangerous goods MATA: Not dangerous goods ADR/RD: - IMDG: - ADR/RD: - IMDG: - <	
 13.1 Waste treatment methods Disposal Operations Consult state, local or national regulations for proper disposal. Hand over to authorised disposal company as hazar Disposal of Packaging Disposal must be made according to official regulations. 14. TRANSPORT INFORMATION 14.1 UN number ADR/RD: - IMDG: - IATA: - 14.2 UN proper shipping name ADR/RD: Not dangerous goods IMDG: Not dangerous goods IMTA: Not dangerous goods IATA: No IATA: - IATA:	
Disposal Operations Consult state, local or national regulations for proper disposal. Hand over to authorised disposal company as hazar Disposal of Packaging Disposal must be made according to official regulations. 14. TRANSPORT INFORMATION 14.1 UN number ADR/RID: - IMDG: - IATA: - 14.2 UN proper shipping name ADR/RID: Not dangerous goods IMDG: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods 14.3 Transport hazard class(es) ADR/RID: - IMDG: - IATA: - 14.4 Packaging group ADR/RID: - IMDG: - IATA: - 14.5 Environmental hazards ADR/RID: - IMDG: - IATA: - 14.6 Special precautions for user No special precautions for user No special precautions required 15. REGULATORY INFORMATION Safety, health and environmental and national regulations: Product is not subject to any additional regulations or provisions Safety Assessment No Chemical Safety Assessment 16. OTHER INFORMATION	
14.1 UN number MDG: - IATA: - ADR/RID: - IMDG: - IATA: - 14.2 UN proper shipping name ADR/RID: Not dangerous goods IATA: - ADR/RID: Not dangerous goods IATA: Not dangerous goods IATA: - 14.3 Transport hazard class(es) IATA: Not dangeroup IATA: - ADR/RID: - IMDG: - IATA: - 14.4 Packaging group IMDG: - IATA: - ADR/RID: - IMDG: - IATA: - 14.5 Environmental hazards IMDG: - IATA: - 14.6 Special precautions for user No special precautions required IATA: - 14.7 Further information No data available Into an autional regulations: Product is not subject to any additional regulations or provisions Safety Assessment No Chemical Safety Assessment No Chemical Safety Assessment Into an autional regulations or provisions 16. OTHER INFORMATION Safety Information International regulations or provisions International regulations or provisions	nazardous waste.
ADR/RD:- IMDG:- IATA:- 14.2 UN proper shipping name ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods 14.3 Transport hazard class(es) ADR/RID:- IMDG:- IATA:- 14.4 Packaging group ADR/RD:- IMDG:- IATA:- 14.5 Environmental hazards ADR/RID:- IMDG:- IATA:- 14.6 Special precautions for user No special precautions required 14.7 Further information No data available 15. REGULATORY INFORMATION Safety, health and environmental and national regulations: Product is not subject to any additional regulations or provisions Safety Assessment No Chemical Safety Assessment 16. OTHER INFORMATION	
14.2 UN proper shipping name ADR/RID: Not dangerous goods MDG: Not dangerous goods 14.3 Transport hazard class(es) ADR/RID: - IMDG: - ADR/RID: - IMDG: - 14.4 Packaging group ADR/RID: - IMDG: - ADR/RID: - IMDG: - HDG: - IMDG: - IATA: - 14.5 Environmental hazards ADR/RID: - IMDG: - IATA: - 14.6 Special precautions for user No special precautions required 14.7 Further information No data available 15. REGULATORY INFORMATION Safety, health and environmental and national regulations: Product is not subject to any additional regulations or provisions Safety Assessment No Chemical Safety Assessment No Chemical Safety Assessment No Chemical Safety Assessment	
ADR/RID: Not dangerous goods IMDG: Not dangerous goods 14.3 Transport hazard class(es) ADR/RID: - IMDG: - IATA: - 14.4 Packaging group ADR/RID: - IMDG: - IATA: - 14.5 Environmental hazards ADR/RID: - IMDG: - IATA: - 14.6 Special precautions for user No special precautions for user No special precautions required 14.7 Further information No data available 15. REGULATORY INFORMATION Safety, health and environmental and national regulations: Product is not subject to any additional regulations or provisions Safety Assessment No Chemical Safety Assessment No Chemical Safety Assessment No Chemical Safety Assessment	
ADR/RD: - IMDG: - IATA: - 14.4 Packaging group ADR/RID: - IMDG: - IATA: - 14.5 Environmental hazards ADR/RID: - IMDG: - IATA: - 14.6 Special precautions for user No special precautions required IATA: - 14.7 Further information No data available IATA: - 15. REGULATORY INFORMATION Safety, health and environmental and national regulations: Product is not subject to any additional regulations or provisions Safety Assessment No Chemical Safety Assessment Image: Ima	
ADR/RID: - IMDG: - IATA: - 14.5 Environmental hazards ADR/RID: - IMDG: - IATA: - 14.6 Special precautions for user No special precautions required IATA: - 14.7 Further information No data available IATA: - 15. REGULATORY INFORMATION Safety, health and environmental and national regulations: Product is not subject to any additional regulations or provisions Safety Assessment No Chemical Safety Assessment IATA: - 16. OTHER INFORMATION	
ADR/RID: - IMDG: - IATA: - 14.6 Special precautions for user No special precautions required IATA: - 14.7 Further information No data available IATA: - 15. REGULATORY INFORMATION Safety, health and environmental and national regulations: Product is not subject to any additional regulations or provisions Safety Assessment No Chemical Safety Assessment 16. OTHER INFORMATION IATA: -	
No special precautions required 14.7 Further information No data available 15. REGULATORY INFORMATION Safety, health and environmental and national regulations: Product is not subject to any additional regulations or provisions Safety Assessment No Chemical Safety Assessment 16. OTHER INFORMATION	
No data available 15. REGULATORY INFORMATION Safety, health and environmental and national regulations: Product is not subject to any additional regulations or provisions Safety Assessment No Chemical Safety Assessment 16. OTHER INFORMATION	
Safety, health and environmental and national regulations: Product is not subject to any additional regulations or provisions Safety Assessment No Chemical Safety Assessment 16. OTHER INFORMATION	
Company: BLD Pharmatech Ltd. Address: 2nd floor, building 3, No.1, Middle Wangdong Road, Sijing Town, Songjiang District, Shanghai, 201601, China Telephone: 86-21-61629022 Fax: 86-21-61629029	



BLD Pharmatech

bldpharm.com Version 6.2

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

Revision Date 12/18/2024 Print Date 06/16/2025