MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers
Product Name: Spiro[piperidine-4,4’-pyrido[2,3-d][1,3]oxazin]-2’(1’H)-one
CAS Number: 753440-87-8
Catalog Numbers: BD209383

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses: For R&D use only
Uses advised against: None

1.3 Details of the supplier of the safety data sheet
Room 402, Building B, 326 Edison Road
Zhangjiang Hi-Tech Park Pudong New Area
Shanghai 201203, China
Tel: 86-21-61629020 | Fax: 86-21-61629029

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
- Skin corrosion/irritation (Category 2) H315
- Serious eye damage/eye irritation (Category 2A) H319
- Acute toxicity, inhalation (Category 4) H332
- STOT- single exposure (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
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H332 Harmful if inhaled
- H335 May cause respiratory irritation

Precautionary statement(s)
- P264 Wash hands thoroughly after handling
- 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.
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P501 Dispose of contents/container to in accordance with local regulation

2.3 Associated risk phrases according to european directive 67/548/EEC
Hazard symbol(s)  

R-phrase(s)  
R22  Harmful if swallowed.  
R36  Irritating to eyes.  
R37  Irritating to respiratory system.  
R38  Irritating to skin.  

S-phrase(s)  
S26  In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S28  After contact with skin, wash immediately with plenty of water.  
S28B  After contact with skin, wash immediately with plenty of water and soap.  
S44  If you feel unwell, seek medical advice (show the label where possible).  
S61  Avoid release to the environment. Refer to special instructions/Safety data sheets.  

3. COMPOSITION, INFORMATION ON INGREDIENTS  
Molecular Formula:  \( \text{C11H13N3O2} \)  
Molecular Weight:  219.24g/mol  

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiro[piperidine-4,4'-pyrido[2,3-d][1,3]oxazin]-2'(1'H)-one</td>
<td>-</td>
</tr>
<tr>
<td>CAS Number</td>
<td>753440-87-8</td>
</tr>
</tbody>
</table>

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.  

If 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 date

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.

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.
Store at 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**
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
For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Solid</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>No data available</td>
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<tr>
<td>Melting Point</td>
<td>No data available</td>
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<tr>
<td>Odour</td>
<td>No data available</td>
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<tr>
<td>Odour Threshold</td>
<td>No data available</td>
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<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation rate</td>
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<tr>
<td>Vapour pressure</td>
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<tr>
<td>Vapor Density</td>
<td>No data available</td>
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<tr>
<td>Relative density</td>
<td>No data available</td>
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<tr>
<td>Solubility in water</td>
<td>No data available</td>
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<tr>
<td>Auto-ignition temperature</td>
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<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
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<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
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</tbody>
</table>

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
10.6 Hazardous decomposition products
Carbon monoxide, carbon dioxide, nitrogen oxides.

11. TOXICOLOGICAL INFORMATION
11.1 Information on toxicological effects

<table>
<thead>
<tr>
<th>Acute Toxicity</th>
<th>No date available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Irritant for skin and mucous membranes</td>
</tr>
<tr>
<td>Serious eye Damage/irritation</td>
<td>Irritant effect</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>No date available</td>
</tr>
<tr>
<td>Germ Cell mutagenicity</td>
<td>No date available</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>No date available</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>No date available</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>No date available</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>No date available</td>
</tr>
<tr>
<td>Aspiration hazard</td>
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</table>

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
No data available.

12.3 Bioaccumulative potential
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 hazardous waste.

Disposal of Packaging
Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION
DOT (US)
Not dangerous goods

IMDG
Not dangerous goods
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
The reference company name of written contents
Company: Bide Pharmatech, Ltd.
Address: 326 Edison Road Zhangjiang Hi-Tech Park Pudon New Area Shanghai, China
Telephone: 86-21-61629020
Fax: 86-21-61629029

This MSDS 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 "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration 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.