

SAFETY DATA SHEET

SDS

No.: W202305259
Creation Date: 08-04-2016
Revision Date: 22-05-2023

Section 1 Product and Company Identification

Product Identifier

Product Name: 1-Methylimidazole

Recommended Use of the Product and Restrictions on Use

Recommended Uses: Please consult manufacturer or supplier.

Restrictions on Uses: Please consult manufacturer or supplier.

Details of the Supplier

Supplier Name: JIANGXI JINKAI CHEMICAL CO., LTD.

Address: Duiqiao industrial zone, Jinxi County, Fuzhou City, Jiangxi Province.

Post Code: 344803

Telephone: +86-115376072011

Fax: -

E-mail : sales3@dyckbiotech.com

Chemical Accident Emergency Call: +86-539-2541166

Section 2 Hazards Identification

GHS Hazard Class

Flammable liquids (category 4)
Acute toxicity - oral (category 4)
Acute toxicity - dermal (category 3)
Skin corrosion/irritation (category 1B)
Serious eye damage/irritation (category 1)
Reproductive toxicity (category 2)

GHS Label Elements

Pictogram:



Singal Word: Danger

Hazard Statements: H227 Combustible liquid
H302 Harmful if swallowed
H311 Toxic in contact with skin
H314 Causes severe skin burns and eye damage

H361 Suspected of damaging fertility or the unborn child

- Prevention: P203 Obtain, read and follow all safety instructions before use.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P260 Do not breathe dusts or mists.
 P270 Do not eat, drink or smoke when using this product.
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
 P264 + P265 Wash body contact parts thoroughly after handling. Do not touch eyes.
- Response: P321 Specific treatment.
 P330 Rinse mouth.
 P363 Wash contaminated clothing before reuse.
 P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P308 + P316 IF exposed or concerned: Get emergency medical help immediately.
 P361 + P364 Take off immediately all contaminated clothing and wash it before reuse.
 P370 + P378 In case of fire: Suggest using alcohol-resistant foam/ dry powder/ dry sand/ carbon dioxide (CO₂) extinguish. Please choose the appropriate fire extinguishing medium according to the specific situation.
 P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P302 + P352 + P316 IF ON SKIN: Wash with plenty of water. Get emergency medical help immediately.
 P302 + P361 + P354 IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes.
 P305 + P354 + P338 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Storage: P403 Store in a well-ventilated place.
 P405 Store locked up.
- Disposal: P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other Hazards Which Are Not Covered by The GHS

No information available.

Section 3 Composition/Information on Ingredients

Component	Concentration (%)	CAS NO.	EC NO.
1-Methylimidazole	100	616-47-7	210-484-7

Section 4 First-aid Measures

Description of First Aid Measures

- Inhalation:** Move the victim to fresh air and keep airway unobstructed. Keep the victim warm and quiet. Call the medical emergency services. If breathing is difficult, give oxygen. If not breathe, give artificial respiration. Please do not give mouth-to-mouth resuscitation. If mouth-to-mouth resuscitation is required, use a check valve mask or other appropriate medical respirator.
- Skin Contact:** Remove and insulate contaminated clothing, shoes and socks. Flush the skin with running water at least 20 minutes. If feel unwell, get medical help. In case of burns, immediately cool the injured skin with cold water for a long time. If clothing sticks to skin, do not try to remove it immediately.
- Eye Contact:** Flush the eyes with running water at least 20 minutes immediately. If feel unwell, get medical help.
- Ingestion:** Rinse mouth. Do not induce vomiting without medical advice. Keep the victim warm and quiet. Call the medical emergency services. If breathing is difficult, give oxygen. If not breathe, give artificial respiration. Please do not give mouth-to-mouth resuscitation. If mouth-to-mouth resuscitation is required, use a check valve mask or other appropriate medical respirator.
- Protecting of First-aiders:** Ensure that first-aiders are aware of the hazard characteristics of the product. Take precautions to protect themselves and prevent spread of contamination.

Most Important Symptoms/Effects, Acute and Delayed.

No information available.

Indication of Immediate Medical Attention and Special Treatment Needed

Reaction from exposure to the substance (including inhalation, ingestion and skin contact) may be delayed.

Section 5 Fire-fighting Measures

Extinguishing Media

Suitable extinguishing media: It is recommended to use alcohol-resistant foam/ dry powder/ dry sand/ carbon dioxide (CO₂) to extinguish the fire. Please select the suitable extinguishing medium according to the specific situation.

Unsuitable extinguishing media: Avoid using water as it may scatter or spread fire.

Specific Hazards Arising From the Chemical

It may release irritating and toxic smokes under high temperature or burning conditions. The sealed container may explode if heated. Easily ignited by friction, heat, sparks or open flames. Vapor can form explosive mixture with air. Vapor diffusion can cause re-ignition when encountering a fire source.

Special Protective Equipment and Precautions for Fire-fighters

As in any fire, wear self-contained breathing apparatus (SCBA) and full protective gear. Remove containers containing substance from the scene of the accident when there is no danger. In the event of a major fire, use a remote control fire extinguisher to extinguish the fire. If it fails, evacuate the fire area and let it burn. Evacuate quickly if the safety valve of the container makes a noise or the container changes color. Keep away from tanks that are engulfed by fire.

Section 6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

On the premise of ensuring safety, cut off the source of leakage as much as possible. Evacuate personnel to safe areas quickly. Keep people away from and upwind of spill/leak. Stay away from low-lying areas. Use personal protective equipment and avoid breathing vapor, smoke, gas or dust. Ensure adequate ventilation. Remove all sources of ignition. Beware of the accumulation of vapor or dust to form explosive concentrations. It is recommended that emergency personnel wear self-contained breathing apparatus (SCBA) and anti-static chemical protective clothing.

Environmental Precautions

Collect the leakage. Do not let the product release into the drain. Avoid discharging to the environment.

Methods and Materials for Containment and Cleaning Up

If small amount of leakage, absorb spilled material in dry sand or inert absorbent. If large amount of leakage, it is necessary to construct a dam in front of the leakage for subsequent treatment. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

Section 7 Handling and Storage

Precautions for Safe Handling

Operators should be specially trained and strictly abide by the operating procedures. Operation and disposal should be carried out in a place with local ventilation or comprehensive ventilation facilities. Avoid contacting with eyes and skin. Avoid breathing vapor, mist or dust. See section 8 (Exposure Control/Personal Protection) for personal protection measures. Keep away from fire and heat sources. Smoking is strictly prohibited in the workplace. Avoid contacting with incompatible materials if not for its intended purpose. See section 10 (Stability and Reactivity) for incompatible substances. Hazardous materials may remain in used containers. Load and unload lightly during transportation to prevent the package from breaking. Wash hands and face thoroughly after the operation, and prohibit eating or drinking in the workplace. The flow rate should be controlled during filling, and there should be a grounding device to prevent static electricity from accumulating. It is forbidden to use equipment and tools that are prone to sparks.

Conditions for Safe Storage

Refer to relevant national and local regulations before storage. Store in a dry, cool and ventilated place. It should be stored separately from incompatible materials, food and food containers. See section 10 (Stability and Reactivity) for incompatible substances. Keep the container tightly closed. Keep away from fire, heat sources. Prevent exposure to the sun. The storage area should be equipped with emergency treatment equipment and suitable storage materials. Materials with different fire extinguishing methods should be stored separately. The warehouse should be far away from residential areas and water sources. The warehouse should have safety protection and treatment measures for mechanical ventilation. The warehouse should undergo anti-corrosion and anti-seepage treatments. The warehouse must be equipped with lightning protection facilities. All metal parts on the device must be grounded to prevent the vapor or dust from catching fire due to static discharge. Use explosion-proof lighting and ventilation facilities. In the warehouse where combustible gas or combustible steam may be emitted (or leaked), a combustible gas detection and alarm device should be installed.

Section 8 Exposure Controls/Personal Protection

Control Parameters

According to GBZ 2.1-2019 “Occupational exposure limits for hazardous agents in the workplace - Part 1: Chemical hazardous agents”

Limits in The Air of The Workplace: No information available.

Biological Limit Values: No information available.

Appropriate Engineering Controls

Maintain adequate ventilation, especially in enclosed areas. Provide eyewash and shower facilities near the workplace. Set up emergency evacuation channels. Equipped with corresponding types and quantities of fire-fighting equipment and leakage emergency treatment equipment. Equipped with explosion-proof ventilation and lighting equipment.

Individual Protection Measures

Eye/Face Protection: Wear chemical safety protective glasses or face shield.

Body Protection: Wear flame-retardant, anti-static and anti-seeping protective clothing. Wear anti-static protective boots.

Hand Protection: Wear chemical protection gloves.

Respiratory protection: When the concentration in the air exceeds the occupational exposure limit or irritation and other symptoms occur, please use a full-face multifunctional gas mask.

Other Protection: Smoking is prohibited in the workplace. Wash thoroughly after work and do not bring work clothes to non-workplaces. The type of protective equipment must be selected according to the concentration and property of hazardous substances in a specific workplace.

Section 9 Physical and Chemical Properties

Appearance	Colorless transparent liquid
Odour	No information available.
pH	10.56 (10% Water solution)
Melting Point/Freezing Point (°C)	No information available.
Boiling Point/ Initial Boiling Point/ Boiling Range (°C)	No information available.
Flash Point (Closed Cup) (°C)	91.5
Flammability	Combustible liquid.
Density (g/cm³)	1.01
Solubility	Easily soluble in water.
Lower/Upper Explosion Limit [% (v/v)]	No information available.

Vapour Pressure (MPa)	No information available.
Relative vapour density	No information available.
n-Octanol/Water Partition Coefficient	No information available.
Auto-ignition Temperature (°C)	No information available.
Decomposition Temperature (°C)	No information available.
Kinematic Viscosity (mm²/s)	No information available.
Particle Characteristics	Not applicable.

Section 10 Stability and Reactivity

Reactivity	Contacting with incompatible substances can cause decomposition or other chemical reactions.
Chemical Stability	Stable under correct conditions of storage and use.
Possibility of Hazardous Reactions	No information available.
Conditions to Avoid	High temperature, open flame, sparks, static electricity and direct sunlight.
Incompatible Materials	Strong oxidants.
Hazardous Decomposition products	Under correct conditions of storage and use, hazardous decomposition products should not be produced.

Section 11 Toxicological Information

Acute Toxicity

1-Methylimidazole: LD₅₀ (Rat Oral) - 1144mg/kg
LD₅₀ (Rabbit Dermal) – 400-600mg/kg

Skin Corrosion/Irritation	Causes severe skin burns (category 1B)
Serious Eye Damage/Irritation	Causes serious eye damage (category 1)
Skin Sensitization	No information available.
Respiratory Sensitization	No information available.
Germ Cell Mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive Toxicity	Suspected of damaging fertility or the unborn child (category 2)
STOT-Single Exposure	No information available.
STOT-Repeated Exposure	No information available.

Aspiration Hazard No information available.

Section 12 Ecological Information

Ecotoxicity

1-Methylimidazole: LC₅₀ (Fish) - >100-215mg/L-96h
EC₅₀ (Crustacea)- 267.94mg/L-48h
ErC₅₀ (Algae or Other Aquatic Plants)- 180.7mg/L-72h

Persistence and Degradability No information available.

Bioaccumulative Potential No information available.

Mobility in Soil No information available.

Other Adverse Effects No information available.

Section 13 Disposal Considerations

Waste Chemicals Before disposal should refer to the relevant national and local laws and regulations. Recommend disposing by qualified hazardous waste treatment company.

Contaminated Packaging Containers may still present chemical hazard when empty. Return to supplier for recycling if possible or disposal in accordance with national and local regulations.

Other Disposal Information For the safety of persons conducting disposal, recycling or reclamation activities, see section 8 (Exposure controls and Personal protection) of the SDS.

Section 14 Transport Information

UN Number 2922

Proper Shipping Name CORROSIVE LIQUID, TOXIC, N.O.S.(1-Methylimidazole)

Transport Hazard Class 8

Transport Subsidiary Hazard Class 6.1

Packing Group II

Dangerous to the Aquatic Environment No

Attentions for Transportation The transport information, such as UN Number, is based on UN "Recommendations on the Transport of Dangerous Goods Model Regulations"(Rev. 22). Refer to relevant national and local regulations before transportation. Comply with relevant regulations on maritime, air, and land transportation. Make sure

the container does not leak before transportation. Avoid exposure to sunlight and high temperature during transportation. Transportation vehicles should be equipped with corresponding types and quantities of fire-fighting equipment and leakage emergency treatment equipment during transportation. It is strictly forbidden to mix and transport with incompatible substances, food and food containers, etc. The exhaust pipe of the vehicle carrying the item must be equipped with a fire arrester, and it is forbidden to use mechanical equipment and tools that are prone to sparks to load and unload.

Section 15 Regulatory Information

China Regulations on the Control over Safety of Dangerous Chemicals

1. The regulations applicable to the safety management for the production, storage, use, business and transportation of hazardous chemicals.
2. Whether the product is listed in "China Catalog of Hazardous Chemicals" (2015 Edition): No
3. Whether the product complies with the "Principles for Definition and Determination of Hazardous Chemicals" in "China Catalogue of Hazardous Chemicals" (2015 Edition): Yes

China Provisions on Environmental Administration of New Chemical Substances

1. The provisions applicable to the environmental management of new chemical substances which is used in research, production, import and processing.
2. Whether the product is listed in "China Inventory of Existing Chemical Substances" (2013 Edition): Included

Section 16 Other Information

Organization that Prepared the SDS	Technology Center of Nanchang Customs District
Creation Date	08-04-2016
Revision Date	22-05-2023
According to the Standard	UN "Globally Harmonized System of Classification and Labelling of Chemicals" (Rev.9)

Abbreviations

GHS–Globally Harmonized System of Classification and Labelling of Chemicals.	EC NO.–European Inventory of Existing Commercial Chemical Substances Number.
CAS NO.–Chemical Abstract Service Number.	MAC- Maximum Allowable Concentration.
PC-STEL–Permissible Concentration-Short Term Exposure Limit.	PC-TWA–Permissible Concentration-Time Weighted Average.
EC ₅₀ –The effective concentration of substance that causes 50% of the maximum response.	LC ₅₀ –The concentration of a chemical which causes the death of 50% of a group of test animals.
LD ₅₀ –The amount of a chemical which causes the	IARC–International Agency for the Research on Cancer.

death of 50% of a group of test animals.

NOEC–No Observed Effect Concentration.

ErC₅₀–EC₅₀ in terms of reduction of growth rate.

Disclaimer

This Safety Data Sheet (SDS) was prepared according to ingredient content and other information provided by the entrusting party and our knowledge mastered currently. We try to ensure the correctness and completeness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for reference. Users should make their independent judgment of applicability of this information for reality. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.