

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product name : 2-Mercapto-1-methylimidazole
 CAS No. : 60-56-0

Manufacturer or supplier's details

Company : Heynova (Shanghai) New Material Technology CO., Ltd
 Address : Building 3, No. 690 Bibo Road, Pudong New Area, Shanghai, China
 Telephone : +86-178-2110-2608
 E-mail address : info@heynovachem.com

2. HAZARDS IDENTIFICATION



Emergency Overview

Appearance : Solid form
Color : white
 May be harmful if swallowed. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child.

GHS Classification

Acute toxicity (Oral) : Category 5
 Skin sensitization : Category 1
 Reproductive toxicity : Category 2

GHS label elements

Hazard pictograms :  

Signal Word : Warning

Hazard Statements : H303 May be harmful if swallowed.
 H317 May cause an allergic skin reaction.
 H361 Suspected of damaging fertility or the unborn child.

Precautionary Statements : **Prevention:**
 P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
 P302 + P352 IF ON SKIN: Wash with plenty of water.
 P312 Call a POISON CENTER/ doctor if you feel unwell.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/ atten-

tion.

P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Physical and chemical hazards

Not classified based on available information.

Health hazards

May be harmful if swallowed. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child.

Environmental hazards

Not classified based on available information.

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Components

| Chemical name | CAS RN | Concentration (% w/w) |
|------------------------------|---------|-----------------------|
| 2-Mercapto-1-methylimidazole | 60-56-0 | 98 |

4. FIRST AID MEASURES

- If inhaled : Remove person to fresh air and keep comfortable for breathing.
Get medical advice/ attention.
- In case of skin contact : Take off all contaminated clothing immediately.
Wash off with plenty of water.
Get medical advice/ attention.
- In case of eye contact : Rinse with plenty of water.
If easy to do, remove contact lens, if worn.
Get medical advice/ attention.
- If swallowed : Call a POISON CENTER or doctor/ physician if you feel unwell.
Rinse mouth.
- Most important symptoms and effects, both acute and delayed : None known.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Dry powder, Foam, Water spray, Carbon dioxide (CO₂)
- Specific hazards during fire fighting : No information available.
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Immediately evacuate personnel to safe areas.
Remove undamaged containers from fire area if it is safe to do so.
- Special protective equipment for fire-fighters : Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

| | |
|---|--|
| Personal precautions, protective equipment and emergency procedures | : Wear suitable protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc. |
| Environmental precautions | : Prevent product from entering drains. |
| Methods and materials for containment and cleaning up | : Pick up and arrange disposal without creating dust. |

7. HANDLING AND STORAGE

Handling

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|-------------------------|---|
| Technical measures | : Prevent dispersion of dust. |
| Local/Total ventilation | : Ensure adequate ventilation. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. Use a local exhaust ventilation. |
| Advice on safe handling | : Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Wash hands and face thoroughly after handling. |
| Avoidance of contact | : Oxidizing agents |

Storage

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|-----------------------------|---|
| Conditions for safe storage | : Keep container tightly closed. Store in a cool and shaded area. Keep under inert gas. Store locked up. |
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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

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|-----------------------------|---|
| Engineering measures | : Install a closed system or local exhaust. Also install safety shower and eye bath. |
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Personal protective equipment

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|--------------------------|--|
| Respiratory protection | : Dustproof gas mask Self-contained breathing apparatus |
| Eye/face protection | : Safety glasses Safety goggles Face-shield |
| Skin and body protection | : Impervious protective clothing |
| Hand protection | : Impervious gloves |

*Use personal protective equipment(PPE) approved under appropriate government standards and follow local and national regulations.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|--|---|---|
| Appearance | : | solid |
| Color | : | white |
| Odor | : | No data available |
| Odor Threshold | : | No data available |
| pH | : | No data available |
| Melting point/freezing point | : | 145 °C |
| Boiling point/boiling range | : | No data available |
| Flash point | : | No data available |
| Evaporation rate | : | No data available |
| Flammability | : | No data available |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapor pressure | : | No data available |
| Solubility(ies) | | |
| Water solubility | : | very soluble |
| Solubility in other solvents | : | soluble Solvent: Alcohol |
| | | soluble Solvent: Chloroform |
| | | slightly soluble Solvent: Benzene |
| | | very slightly soluble Solvent: Ether |
| Partition coefficient: n-octanol/water | : | -0.34 |
| Autoignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity | | |
| Viscosity, dynamic | : | No data available |
| Viscosity, kinematic | : | No data available |
| Molecular weight | : | 114.17 g/mol |

10. STABILITY AND REACTIVITY

| | | |
|------------------------------------|---|---------------------------------|
| Reactivity | : | No data available |
| Chemical stability | : | Stable under normal conditions. |
| Possibility of hazardous reactions | : | None under normal processing. |

| | | |
|----------------------------------|---|--|
| Conditions to avoid | : | Exposure to air. |
| Incompatible materials | : | Oxidizing agents |
| Hazardous decomposition products | : | Carbon monoxide, Carbon dioxide (CO ₂), Nitrogen oxides (NO _x) |

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

| | | |
|---------------------|---|--|
| Acute oral toxicity | : | Assessment: The component/mixture is minimally toxic after single ingestion. |
|---------------------|---|--|

Components:

2-Mercapto-1-methylimidazole:

| | | |
|---------------------|---|---|
| Acute oral toxicity | : | LD50 (Rat): 2,250 mg/kg Assessment: The component/mixture is minimally toxic after single ingestion. |
|---------------------|---|---|

| | | |
|---|---|---|
| Acute toxicity (other routes of administration) | : | LD50 (Mouse): 500 mg/kg Application Route: Intraperitoneal injection LD50 (Rat): 1,050 mg/kg Application Route: Subcutaneous |
|---|---|---|

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|----------------------------------|---|---------------------------|
| Skin corrosion/irritation | : | No information available. |
|----------------------------------|---|---------------------------|

| | | |
|--|---|---------------------------|
| Serious eye damage/eye irritation | : | No information available. |
|--|---|---------------------------|

Respiratory or skin sensitization

Product:

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|------------|---|--|
| Assessment | : | May cause sensitization by skin contact. |
|------------|---|--|

Components:

2-Mercapto-1-methylimidazole:

| | | |
|------------|---|--|
| Assessment | : | May cause sensitization by skin contact. |
|------------|---|--|

| | | |
|-------------------------------|---|---------------------------|
| Germ cell mutagenicity | : | No information available. |
|-------------------------------|---|---------------------------|

| | | |
|------------------------|---|---------------------------|
| Carcinogenicity | : | No information available. |
|------------------------|---|---------------------------|

Reproductive toxicity

Product:

| | | |
|------------------------------------|---|---------------------------------------|
| Reproductive toxicity - Assessment | : | Suspected human reproductive toxicant |
|------------------------------------|---|---------------------------------------|

Components:

2-Mercapto-1-methylimidazole:

| | | |
|------------------------------------|---|---------------------------------------|
| Reproductive toxicity - Assessment | : | Suspected human reproductive toxicant |
|------------------------------------|---|---------------------------------------|

| | | |
|-----------------------------|---|---------------------------|
| STOT-single exposure | : | No information available. |
|-----------------------------|---|---------------------------|

| | | |
|-------------------------------|---|---------------------------|
| STOT-repeated exposure | : | No information available. |
|-------------------------------|---|---------------------------|

| | | |
|-------------------------------|---|--|
| Repeated dose toxicity | : | No information available. |
| Aspiration toxicity | : | No information available. |
| RTECS No. | : | NI8615000 (2-Mercapto-1-methylimidazole) |

12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

Components:

2-Mercapto-1-methylimidazole:

Partition coefficient: n-octanol/water : -0.34

Mobility in soil

No data available

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Disposal methods

| | | |
|------------------------|---|---|
| Waste from residues | : | Disposal in accordance with local and national regulations. Entrust disposal to a licensed waste disposal company. |
| Contaminated packaging | : | Disposal in accordance with local and national regulations. Before disposal of used container, remove contents completely. |

14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

| | | |
|----------------------|---|----------------|
| UN/ID No. | : | Not applicable |
| Proper shipping name | : | Not applicable |
| Class | : | Not applicable |
| Subsidiary risk | : | Not applicable |
| Packing group | : | Not applicable |

IMDG-Code

| | | |
|----------------------|---|----------------|
| UN number | : | Not applicable |
| Proper shipping name | : | Not applicable |
| Class | : | Not applicable |
| Subsidiary risk | : | Not applicable |
| Packing group | : | Not applicable |
| EmS Code | : | Not applicable |

Domestic regulation

GB 6944/12268

| | | |
|----------------------|---|----------------|
| UN number | : | Not applicable |
| Proper shipping name | : | Not applicable |

| | | |
|-----------------|---|----------------|
| Class | : | Not applicable |
| Subsidiary risk | : | Not applicable |
| Packing group | : | Not applicable |

15. REGULATORY INFORMATION

The ingredients of this product are reported in the following inventories:

| | | |
|-----------|---|--|
| CH BAGREG | : | On the inventory, or in compliance with the inventory |
| TSCA | : | All substances listed as active on the TSCA inventory |
| AICS | : | On the inventory, or in compliance with the inventory |
| DSL | : | All components of this product are on the Canadian DSL |
| ENCS | : | On the inventory, or in compliance with the inventory |
| ISHL | : | On the inventory, or in compliance with the inventory |
| KECI | : | On the inventory, or in compliance with the inventory |
| PICCS | : | Not in compliance with the inventory |
| IECSC | : | On the inventory, or in compliance with the inventory |
| NZIoC | : | On the inventory, or in compliance with the inventory |

16. OTHER INFORMATION

| | | |
|---------------|---|------------|
| Revision Date | : | 2024/12/28 |
| Date format | : | yyyy/mm/dd |

Disclaimer

This SDS was prepared sincerely based on the information 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. The 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 operations, sufficient care should be taken, in addition to the safety measures suitable for the given 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.