Chemical Safety Data Sheet MSDS / SDS

**2-Mercaptonicotinic acid**

Revision Date:2024-07-20Revision Number:1

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

**Product identifier**

* Product name: 2-Mercaptonicotinic acid
* CAS: 38521-46-9
* EINECS Number: 629-602-7
* Synonyms: 2-mercaptonicotinic acid,2-thioxo-1,2-dihydropyridine-3-carboxylic acid

**Relevant identified uses of the substance or mixture and uses advised against**

* Relevant identified uses: For R&D use only. Not for medicinal, household or other use.
* Uses advised against: none

**Company Identification**

* Company: Shijiazhuang Dowell Chemical Co., Ltd
* Address: Xiyangling, high tech Zone, Shijiazhuang, Hebei, China
* Telephone: -86-311-89805679

SECTION 2: Hazards identification

**Classification of the substance or mixture**

Skin irritation, Category 2

Eye irritation, Category 2

Specific target organ toxicity – single exposure, Category 3

**Label elements**

**Pictogram(s)**



* Signal wordWarning

**Hazard statement(s)**

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

**Precautionary statement(s)**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P264 Wash skin thouroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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. Continuerinsing.

P405 Store locked up.

**Prevention**

P264 Wash ... thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

**Response**

P302+P352 IF ON SKIN: Wash with plenty of water/...

P321 Specific treatment (see ... on this label).

P332+P317 If skin irritation occurs: Get medical help.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P319 Get medical help if you feel unwell.

**Storage**

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

**Disposal**

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Other hazards**

no data available

SECTION 3: Composition/information on ingredients

**Substance**

* Product name: 2-Mercaptonicotinic acid
* Synonyms: 2-mercaptonicotinic acid,2-thioxo-1,2-dihydropyridine-3-carboxylic acid
* CAS: 38521-46-9
* EC number: 629-602-7
* MF: C6H5NO2S
* MW: 155.17

SECTION 4: First aid measures

**Description of first aid measures**

**If inhaled**

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

**Following skin contact**

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

**Following eye contact**

Rinse with pure water for at least 15 minutes. Consult a doctor.

**Following ingestion**

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

**Most important symptoms and effects, both acute and delayed**

no data available

**Indication of any immediate medical attention and special treatment needed**

no data available

SECTION 5: Firefighting measures

**Extinguishing media**

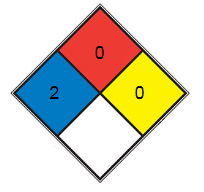
Use dry chemical, carbon dioxide or alcohol-resistant foam.

**Specific Hazards Arising from the Chemical**

no data available

**Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**NFPA 704**

2

0

0

|  |  |  |  |
| --- | --- | --- | --- |
|  | **HEALTH** | 2 | Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury (e.g.[diethyl ether](https://www.chemicalbook.com/ChemicalProductProperty_EN_CB6853949.htm#Safety), ammonium phosphate, iodine) |
|  | **FIRE** | 0 | Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand. Materials that will not burn in air when exposed to a temperature of 820 °C (1,500 °F) for a period of 5 minutes.(e.g. Carbon tetrachloride) |
|  | **REACT** | 0 | Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium,[N2](https://www.chemicalbook.com/ChemicalProductProperty_EN_CB2159243.htm#Safety)) |
|  | **SPEC. HAZ.** |  |  |

SECTION 6: Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing mist, gas or vapours.Avoid contacting with skin and eye. Use personal protective equipment.Wear chemical impermeable gloves. Ensure adequate ventilation.Remove all sources of ignition. Evacuate personnel to safe areas.Keep people away from and upwind of spill/leak.

**Environmental precautions**

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

**Methods and materials for containment and cleaning up**

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

SECTION 7: Handling and storage

**Precautions for safe handling**

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

**Conditions for safe storage, including any incompatibilities**

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

SECTION 8: Exposure controls/personal protection

**Control parameters**

**Occupational Exposure limit values**

no data available

**Biological limit values**

no data available

**Exposure controls**

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

**Individual protection measures**

**Eye/face protection**

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

**Skin protection**

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Respiratory protection**

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

**Thermal hazards**

no data available

SECTION 9: Physical and chemical properties

**Information on basic physicochemical properties**

* Physical statecrystalline (fine)
* Colouryellow
* Odour

no data available

* Melting point/freezing point

-66°C(lit.)

* Boiling point or initial boiling point and boiling range

109°C

* Flammability

no data available

* Lower and upper explosion limit/flammability limit

no data available

* Flash point

10°C(lit.)

* Auto-ignition temperature

no data available

* Decomposition temperature

no data available

* pH

no data available

* Kinematic viscosity

no data available

* Solubility

no data available

* Partition coefficient n-octanol/water

no data available

* Vapour pressure

no data available

* Density and/or relative density

1.49 g/cm3

* Relative vapour density

no data available

* Particle characteristics

no data available

SECTION 10: Stability and reactivity

**Reactivity**

no data available

**Chemical stability**

no data available

**Possibility of hazardous reactions**

no data available

**Conditions to avoid**

no data available

**Incompatible materials**

no data available

**Hazardous decomposition products**

no data available

SECTION 11: Toxicological information

**Acute toxicity**

* Oral: no data available
* Inhalation: no data available
* Dermal: no data available

**Skin corrosion/irritation**

no data available

**Serious eye damage/irritation**

no data available

**Respiratory or skin sensitization**

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

SECTION 12: Ecological information

**Toxicity**

* Toxicity to fish: no data available
* Toxicity to daphnia and other aquatic invertebrates: no data available
* Toxicity to algae: no data available
* Toxicity to microorganisms: no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**Other adverse effects**

no data available

SECTION 13: Disposal considerations

**Disposal methods**

**Product**

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

**Contaminated packaging**

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

SECTION 14: Transport information

**SECTION 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: 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: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

no data available

SECTION 15: Regulatory information

**Safety, health and environmental regulations specific for the product in question**

**European Inventory of Existing Commercial Chemical Substances (EINECS)**

Not Listed.

**EC Inventory**

Not Listed.

**United States Toxic Substances Control Act (TSCA) Inventory**

Listed.

**China Catalog of Hazardous chemicals 2015**

Not Listed.

**New Zealand Inventory of Chemicals (NZIoC)**

Listed.

**PICCS**

Not Listed.

**Vietnam National Chemical Inventory**

Listed.

**IECSC**

Not Listed.

**Korea Existing Chemicals List (KECL)**

Listed.

SECTION 16: Other information

**Abbreviations and acronyms**

* CAS: Chemical Abstracts Service
* ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
* RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
* IMDG: International Maritime Dangerous Goods
* IATA: International Air Transportation Association
* TWA: Time Weighted Average
* STEL: Short term exposure limit
* LC50: Lethal Concentration 50%
* LD50: Lethal Dose 50%
* EC50: Effective Concentration 50%

**References**

* IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
* HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
* IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/
* eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en
* CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
* ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
* ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
* Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
* ECHA - European Chemicals Agency, website: https://echa.europa.eu/