

Classified as hazardous according to criteria of EPA New Zealand

## Section 1 - Identification

**Product Name** 2-(4-Pyridyl)-1,3-thiazole-4-carboxylic acid

**CAS-No** 21278-86-4

**Product Code** CC34701CB; CC34701DA; CC34701EA; CC34701FL; CC34701ZZ

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**Recommended Use** Laboratory chemicals.

## Section 2 - Hazard(s) Identification

### Classification under Work Safe New Zealand

6.3A - Substances that are irritating to the skin

6.4A - Substances that are irritating to the eye

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### GHS Classification

#### Physical hazards

Based on available data, the classification criteria are not met

#### Health hazards

Skin Corrosion/Irritation

Serious Eye Damage/Eye Irritation

Category 2

Category 2

#### Environmental hazards

Based on available data, the classification criteria are not met

### Label Elements



**Signal Word****Warning****Hazard Statements**

H315 - Causes skin irritation

H319 - Causes serious eye irritation

**Precautionary Statements**

P264 - Wash face, hands and any exposed skin thoroughly after handling

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

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

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

P362 - Take off contaminated clothing and wash before reuse

P403 - Store in a well-ventilated place

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

**Other information**

No information available

## Section 3 - Composition and Information on Ingredients

| Component                                    | CAS-No     | Weight % |
|--|------------|----------|
| 2-(4-Pyridyl)-1,3-thiazole-4-carboxylic acid | 21278-86-4 | >95      |

## Section 4 - First Aid Measures

|  |   |
|--|---|
| <b>Inhalation</b>                          | Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention.                             |
| <b>Ingestion</b>                           | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.           |
| <b>Skin Contact</b>                        | Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.                       |
| <b>Eye Contact</b>                         | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. |
| <b>General Advice</b>                      | If symptoms persist, call a physician.  |
| <b>Self-Protection of the First Aider</b>  | Use personal protective equipment as required.  |
| <b>First Aid Facilities</b>                | Eyewash, safety shower and washroom.  |
| <b>Most important symptoms and effects</b> | None reasonably foreseeable.  |
| <b>Notes to Physician</b>                  | Treat symptomatically.  |

## Section 5 - Fire Fighting Measures

**Suitable Extinguishing Media**Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam.**Extinguishing media which must not be used for safety reasons**

No information available.

#### Hazardous Combustion Products

Nitrogen oxides (NO<sub>x</sub>), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Sulfur oxides.

#### Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors.

#### Special protective equipment and precautions for fire fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## Section 6 - Accidental Release Measures

#### Emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation.

#### Environmental Precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

#### Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

#### Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

## Section 7 - Handling and Storage

#### Precautions for Safe Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

#### Conditions for Safe Storage, Including any Incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place.

AS/NZS 2243.10:2004, Safety in laboratories - Storage of chemicals

## Section 8 - Exposure Controls and Personal Protection

#### Exposure limits

The product does not contain any hazardous materials with occupational exposure limits established.

#### Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

#### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

#### Personal protective equipment

##### Eye Protection

Goggles (Australian/New Zealand Standard AS/NZS 1337 - Eye protectors for Industrial applications)

##### Hand Protection

Protective gloves

| Glove material   | Breakthrough time                 | Glove thickness | AUS/NZ Standard | Glove comments        |
|--|-----------------------------------|-----------------|-----------------|-----------------------|
| Natural rubber, Butyl rubber, Nitrile rubber, Neoprene, PVC. | See manufacturers recommendations | -               | AS/NZS 2161     | (minimum requirement) |

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

**Skin and body protection** Long sleeved clothing

**Respiratory Protection** Use an AS/NZS 1716 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained in line with AS/NZS 1715 on the use and maintenance of respiratory protective devices

**Recommended Filter type:** Particulates filter conforming to EN 143 (or AUS/NZ equivalent)

**Recommended half mask:-** Valve filtering: EN405 or Half mask: EN140 plus filter, EN 141 (or AUS/NZ equivalent)

When RPE is used a face piece Fit Test should be conducted

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

## Section 9 - Physical and Chemical Properties

### Information on basic physical and chemical properties

|  |                                 |  |
|--|---------------------------------|--|
| <b>Appearance</b>                              | Brown                           |  |
| <b>Physical State</b>                          | Solid                           |  |
| <b>Odor</b>                                    | No information available        |  |
| <b>Odor Threshold</b>                          | No data available               |  |
| <b>pH</b>                                      | No information available        |  |
| <b>Melting Point/Range</b>                     | 304 - 307 °C / 579.2 - 584.6 °F | Measured                                 |
| <b>Softening Point</b>                         | No data available               |  |
| <b>Boiling Point/Range</b>                     | No information available        |  |
| <b>Flash Point</b>                             | No information available        | <b>Method -</b> No information available |
| <b>Evaporation Rate</b>                        | Not applicable                  | Solid                                    |
| <b>Flammability (solid,gas)</b>                | No information available        |  |
| <b>Explosion Limits</b>                        | No data available               |  |
| <b>Vapor Pressure</b>                          | No data available               |  |
| <b>Vapor Density</b>                           | Not applicable                  | Solid                                    |
| <b>Specific Gravity / Density</b>              | No data available               |  |
| <b>Bulk Density</b>                            | No data available               |  |
| <b>Water Solubility</b>                        | No information available        |  |
| <b>Solubility in other solvents</b>            | No information available        |  |
| <b>Partition Coefficient (n-octanol/water)</b> |                                 |  |
| <b>Autoignition Temperature</b>                | No data available               |  |
| <b>Decomposition Temperature</b>               | No data available               |  |
| <b>Viscosity</b>                               | Not applicable                  | Solid                                    |
| <b>Explosive Properties</b>                    | No information available        |  |
| <b>Oxidizing Properties</b>                    | No information available        |  |
| <b>Other information</b>                       |                                 |  |
| <b>Molecular Formula</b>                       | C9 H6 N2 O2 S                   |  |
| <b>Molecular Weight</b>                        | 206.22                          |  |

## Section 10 - Stability and Reactivity

|                                  |  |
|----------------------------------|--|
| Reactivity                       | None known, based on information available   |
| Stability                        | Stable under normal conditions.  |
| Conditions to Avoid              | Incompatible products, Excess heat, Avoid dust formation.                                      |
| Incompatible Materials           | Strong oxidizing agents, Strong bases, Amines.   |
| Hazardous Decomposition Products | Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ). Sulfur oxides. |
| Hazardous Polymerization         | Hazardous polymerization does not occur.   |

## Section 11 - Toxicological Information

### Information on Toxicological Effects

|  |  |
|--|--|
| Product Information                        | No acute toxicity information is available for this product    |
| (a) acute toxicity;                        |  |
| Oral                                       | No data available  |
| Dermal                                     | No data available  |
| Inhalation                                 | No data available  |
| (b) skin corrosion/irritation;             | Category 2   |
| (c) serious eye damage/irritation;         | Category 2   |
| (d) respiratory or skin sensitization;     |  |
| Respiratory                                | No data available  |
| Skin                                       | No data available  |
| (e) germ cell mutagenicity;                | No data available  |
| (f) carcinogenicity;                       | No data available  |
|  | There are no known carcinogenic chemicals in this product      |
| (g) reproductive toxicity;                 | No data available  |
| (h) STOT-single exposure;                  | No data available  |
| (i) STOT-repeated exposure;                | No data available  |
| Target Organs                              | No information available.                                      |
| (j) aspiration hazard;                     | Not applicable   |
|  | Solid  |
| Other Adverse Effects                      | The toxicological properties have not been fully investigated. |
| Symptoms / effects, both acute and delayed | No information available                                       |

## Section 12 - Ecological Information

|  |   |
|--|---|
| <b>Ecotoxicity effects</b>             | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. |
| <b>Persistence and Degradability</b>   | No information available  |
| <b>Bioaccumulative Potential</b>       | No information available  |
| <b>Mobility</b>                        | No information available.   |
| <b>Endocrine Disruptor Information</b> | This product does not contain any known or suspected endocrine disruptors   |
| <b>Persistent Organic Pollutant</b>    | This product does not contain any known or suspected substance  |
| <b>Ozone Depletion Potential</b>       | This product does not contain any known or suspected substance  |

## Section 13 - Disposal Considerations

|  |  |
|--|--|
| <b>Waste from Residues/Unused Products</b> | Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations. Assure conformity with all applicable regulations. |
| <b>Contaminated Packaging</b>              | Dispose of this container to hazardous or special waste collection point.  |
| <b>Other Information</b>                   | Disposal agencies or waste contractors must comply with the New Zealand Hazardous Substances (Disposal) Regulations . Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains.  |

## Section 14 - Transport Information

|                               |                                 |
|-------------------------------|---------------------------------|
| <b><u>IMDG/IMO</u></b>        | Not regulated                   |
| <b><u>NZS 5433:2012</u></b>   | Not regulated                   |
| <b><u>IATA</u></b>            | Not regulated                   |
| <b>Environmental hazards</b>  | No hazards identified           |
| <b>Special Precautions</b>    | No special precautions required |
| <b>Additional information</b> | None known                      |

## Section 15 - Regulatory Information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

|                                  |            |
|----------------------------------|------------|
| <b>International Inventories</b> | X = listed |
|----------------------------------|------------|

**Prohibition or notification/licensing requirements** Shown below are details of specific prohibition/notifications or licensing requirements when they apply.

## Section 16 - Other Information

**This safety data sheet complies with the requirements of WorkSafe New Zealand Regulations**

### Legend

|  |  |
|--|--|
| <b>AICS</b> - Australian Inventory of Chemical Substances  | <b>NZIoC</b> - New Zealand Inventory of Chemicals  |
| <b>TSCA</b> - United States Toxic Substances Control Act Section 8(b) Inventory                      | <b>EINECS/ELINCS</b> - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances |
| <b>DSL/NDL</b> - Canadian Domestic Substances List/Non-Domestic Substances List                      | <b>ENCS</b> - Japanese Existing and New Chemical Substances  |
| <b>IECSC</b> - Chinese Inventory of Existing Chemical Substances                                     | <b>KECL</b> - Korean Existing and Evaluated Chemical Substances  |
| <b>PICCS</b> - Philippines Inventory of Chemicals and Chemical Substances                            | <b>CAS</b> - Chemical Abstracts Service  |
| <b>TWA</b> - Time Weighted Average   | <b>ACGIH</b> - American Conference of Governmental Industrial Hygienists Predicted No Effect Concentration (PNEC)            |
| <b>IARC</b> - International Agency for Research on Cancer  | <b>IMO/IMDG</b> - International Maritime Organization/International Maritime Dangerous Goods Code                            |
| <b>ICAO/IATA</b> - International Civil Aviation Organization/International Air Transport Association | <b>ADG</b> Australian Code for the Transport of Dangerous Goods by Road and Rail   |
| <b>MARPOL</b> - International Convention for the Prevention of Pollution from Ships                  | <b>OECD</b> - Organisation for Economic Co-operation and Development   |
| <b>NZS 5433:2012</b> - Transport of Dangerous Goods on Land  | <b>LC50</b> - Lethal Concentration 50%   |
| <b>LD50</b> - Lethal Dose 50%  | <b>ATE</b> - Acute Toxicity Estimate   |
| <b>EC50</b> - Effective Concentration 50%  | <b>RPE</b> - Respiratory Protective Equipment  |
| <b>WEL</b> - Workplace Exposure Limit  | <b>NOEC</b> - No Observed Effect Concentration   |
| <b>DNEL</b> - Derived No Effect Level  | <b>BCF</b> - Bioconcentration factor   |
| <b>POW</b> - Partition coefficient Octanol:Water   | <b>PBT</b> - Persistent, Bioaccumulative, Toxic  |
| <b>vPvB</b> - very Persistent, very Bioaccumulative  |  |
| <b>VOC</b> (volatile organic compound)   |  |

### **Key literature references and sources for data**

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

### **Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

|                         |                 |
|-------------------------|-----------------|
| <b>Revision Date</b>    | 11-Aug-2020     |
| <b>Revision Summary</b> | Initial Release |

### **Disclaimer**

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## End of Safety Data Sheet