

Safety Data Sheet 4257113 according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 06/23/2016 Version: 1.0

| SECTION 1: Identification | |
|--|--|
| 1.1. Identification | |
| Product form : | Substance |
| Substance name | (1R,2R)-2-Aminocyclohexanecarboxylic acid |
| CAS No | 26685-83-6 |
| Product code | 4257-1-13 |
| Formula | C7H13NO2 |
| | MFCD08276263 |
| 1.2. Relevant identified uses of the substa | nce or mixture and uses advised against |
| | Laboratory chemicals Manufacture of substances Scientific research and development |
| 1.3. Details of the supplier of the safety da | ta sheet |
| SynQuest Laboratories, Inc. P.O. Box 309 Alachua, FL 32615 - United States of America T (386) 462-0788 - F (386) 462-7097 info@synquestlabs.com - www.synquestlabs.com | |
| 1.4. Emergency telephone number | |
| Emergency number : | (844) 523-4086 (3E Company - Account 10069) |
| SECTION 2: Hazard(s) identification | |
| 2.1. Classification of the substance or mix | ture |
| Classification (GHS-US) | |
| Skin Irrit. 2 H315 - Causes skin irritation | |
| Eye Irrit. 2A H319 - Causes serious eye irritatio STOT SE 3 H335 - May cause respiratory irrita | |
| Full text of H-phrases: see section 16 | |
| | |
| 2.2. Label elements | |
| GHS-US labeling | |
| Hazard pictograms (GHS-US) : | GHS07 |
| Signal word (GHS-US) | Warning |
| Hazard statements (GHS-US) : | H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation |
| Precautionary statements (GHS-US) | P261 - Avoid breathing dust, mist, spray P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep 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 P312 - Call a POISON CENTER or doctor/physician if you feel unwell P321 - Specific treatment (see supplemental first aid instructions on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P403+P233 - Store in a well-ventilated place. Keep container tightly closed P405 - Store locked up P501 - Dispose of contents/container to an approved waste disposal plant |

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|---|----------------------|--|--------------------------------------|--|
| 2.3. Other hazards | | | | |
| No additional information available | | | | |
| 2.4. Unknown acute toxicity (GHS US) | | | | |
| Not applicable | | | | |
| SECTION 3: Composition/informatio | n <mark>on in</mark> | gredients | | |
| 3.1. Substance | | | | |
| Substance type | : Mono | -constituent | | |
| Name | | Product identifier | % | Classification (GHS-US) |
| (1R,2R)-2-Aminocyclohexanecarboxylic acid | | (CAS No) 26685-83-6 | <= 100 | Skin Irrit. 2, H315 |
| (Main constituent) | | | | Eye Irrit. 2A, H319 STOT SE 3, H335 |
| Full text of H-phrases: see section 16 | | | | |
| 3.2. Mixture | | | | |
| Not applicable | | | | |
| SECTION 4: First aid measures | | | | |
| 4.1. Description of first aid measures | | | | |
| First-aid measures general | : In cas | e of accident or if you feel unwell, seek | medical advice i | mmediately (show the label |
| <u> </u> | | e possible). Move the affected personnel | | |
| First-aid measures after inhalation | | ove person to fresh air and keep comforta ation. Get medical advice/attention. | able for breathin | g. If not breathing, give artificial |
| First-aid measures after skin contact | | with plenty of soap and water. Get med | | |
| First-aid measures after eye contact | : Imme prese | diately flush eyes thoroughly with water the and easy to do. Continue rinsing. Get | for at least 15 m medical advice/ | inutes. Remove contact lenses, if attention. |
| First-aid measures after ingestion | | OT induce vomiting. Never give anything out with water. Get medical advice/atte | | unconscious person. Rinse |
| 4.2. Most important symptoms and effect | ts, both | acute and delayed | | |
| Symptoms/injuries | | nost important known symptoms and effe nd/or in section 11. | ects are describe | ed in the labelling (see section |
| 4.3. Indication of any immediate medical | attentio | n and special treatment needed | | |
| Treat symptomatically. | | | | |
| | | | | |
| SECTION 5: Firefighting measures 5.1. Extinguishing media | | | | |
| 5.1. Extinguishing media Suitable extinguishing media | Alcoh | ol resistant foam. Carbon dioxide. Dry po | owder Water sp | ray Lise extinguishing media |
| | appro | priate for surrounding fire. | | |
| 5.2. Special hazards arising from the sul | | | | |
| Fire hazard | : Therr | nal decomposition generates: Carbon ox | ides. Nitrogen o | xides. |
| 5.3. Advice for firefighters | | | | |
| Firefighting instructions | : In cas | se of fire: Evacuate area. | | |
| Protection during firefighting | | gas tight chemically protective clothing i atus. For further information refer to sec | | |
| SECTION 6: Accidental release meas | sures | | | |
| 6.1. Personal precautions, protective eq | | and emergency procedures | | |
| General measures | | late unnecessary personnel. Ensure ade | auate air ventile | tion. Do not breathe dust |
| General measures | . Lvaci | ale unnecessary personnel. Ensure ade | | alon. Do not breathe dust. |
| 6.1.1. For non-emergency personnel | | | | |
| Emergency procedures | : Only | qualified personnel equipped with suitabl | e protective equ | ipment may intervene. |
| 6.1.2. For emergency responders | | | | |
| Protective equipment | : Do no | at attempt to take action without suitable | protective equip | ment. For further information |
| | | to section 8: "Exposure controls/persona | | |
| 6.2. Environmental precautions | | | | |
| Avoid release to the environment. Notify authoriti | es if proc | uct enters sewers or public waters. | | |
| 6.3. Methods and material for containme | | | | |
| For containment | | eak if safe to do so. | | |
| | . 5.00 | | | |

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| Methods for cleaning up | : Sweep or shovel spills into appropriate container for disposal. Minimize generation of dust. |
|-------------------------------------|--|
| Other information | : For disposal of solid materials or residues refer to section 13 : "Disposal considerations". |
| 6.4. Reference to other sections | |
| No additional information available | |
| SECTION 7: Handling and sto | rage |
| 7.1. Precautions for safe handli | ng |
| Precautions for safe handling | Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station. Do not breathe dust, mist, spray. Wear personal protective equipment. Avoid contact with skin and eyes. |
| Hygiene measures | : Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |
| 7.2. Conditions for safe storage | including any incompatibilities |
| Technical measures | : Comply with applicable regulations. |
| Storage conditions | : Keep container closed when not in use. |
| Incompatible materials | : Refer to Section 10 on Incompatible Materials. |

Storage area : Store in dry, cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

| 8.2. Exposure controls | |
|----------------------------------|---|
| Appropriate engineering controls | : Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. |
| Hand protection | : Protective gloves. 29 CFR 1910.138: Hand Protection. |
| Eye protection | : Chemical goggles or safety glasses. Face shield. 29 CFR 1910.133: Eye and Face Protection. |
| Skin and body protection | : Wear suitable protective clothing. |
| Respiratory protection | : In case of inadequate ventilation wear respiratory protection. 29 CFR 1910.134: Respiratory Protection. |
| Other information | : Safety shoes. 29 CFR 1910.136: Foot Protection. |

SECTION 9: Physical and chemical properties

| 9.1. Information on basic physical and | d chemical properties |
|---|-----------------------|
| Physical state | : Solid |
| Color | : No data available |
| Odor | : No data available |
| Odor threshold | : No data available |
| рН | : No data available |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability (solid, gas) | : No data available |
| Explosion limits | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |
| Vapor pressure | : No data available |
| Relative density | : No data available |
| Relative vapor density at 20 °C | : No data available |
| Molecular mass | : 143.18 g/mol |
| Solubility | : No data available |
| Log Pow | : No data available |
| | |

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|--|--|
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| 9.2. Other information | |
| No additional information available | |
| SECTION 10: Stability and reactivity | |
| 10.1. Reactivity | |
| No additional information available | |
| 10.2. Chemical stability | |
| The product is stable at normal handling and sto | orage conditions. |
| 10.3. Possibility of hazardous reactions | |
| No additional information available | |
| 10.4. Conditions to avoid | |
| Keep away from heat, sparks and flame. | |
| 10.5. Incompatible materials | |
| Strong oxidizing agents. | |
| 10.6. Hazardous decomposition products | S |
| Under normal conditions of storage and use, has fire, see Section 5. | zardous decomposition products should not be produced. Hazardous decomposition products in case of |
| SECTION 11: Toxicological informat | tion |
| 11.1. Information on toxicological effects | \$ |
| | |
| Acute toxicity | : Not classified |
| Skin corrosion/irritation | : Causes skin irritation. |
| Serious eye damage/irritation | : Causes serious eye irritation. |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| Specific target organ toxicity (single exposure) | : May cause respiratory irritation. |
| | |

Specific target organ toxicity (repeated : Not classified exposure)

Aspiration hazard

: Not classified

| SECTION 12: Ecological information | |
|-------------------------------------|--|
| 12.1. Toxicity | |
| No additional information available | |
| 12.2. Persistence and degradability | |
| No additional information available | |
| 12.3. Bioaccumulative potential | |
| No additional information available | |
| 12.4. Mobility in soil | |
| No additional information available | |
| 12.5. Other adverse effects | |
| No additional information available | |

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| SECTION 13: Disposal conside | rations |
|-------------------------------------|---|
| 13.1. Waste treatment methods | |
| Waste treatment methods | : Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber. |
| Waste disposal recommendations | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| Additional information | : Recycle the material as far as possible. |

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

| (1R,2R)-2-Aminocyclohexanecarboxylic acid | CAS No 26685-83-6 | 100% |
|---|-------------------|------|
| | | |

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

No additional information available

EU-Regulations No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

SECTION 16: Other information

Full text of H-phrases:

| Eye Irrit. 2A | Serious eye damage/eye irritation Category 2A |
|---------------|---|
| Skin Irrit. 2 | Skin corrosion/irritation Category 2 |
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H335 | May cause respiratory irritation |

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| NFPA health hazard | : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given. |
|--------------------|---|
| NFPA fire hazard | : 0 - Materials that will not burn. |
| NFPA reactivity | : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water. |
| HMIS III Rating | |
| Health | : 2 Moderate Hazard - Temporary or minor injury may occur |
| Flammability | : 0 Minimal Hazard - Materials that will not burn |
| Physical | : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives. |

SDS US (GHS HazCom 2012)

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is offered solely for your consideration, investigation, and verification. It does not represent any guarantee of the properties of the product nor that the hazard precautions or procedures described are the only ones which exist. SynQuest shall not be held liable or any damage resulting from handling or from contact with the above product.