



Banff Green Technologies, Inc

TEL: 86-21-54795870 FAX: 86-21-54795870 Email: sales@banffgt.com
ADDRESS: Floor 29, CapitaMalls Plaza, No. 6088 Humin Rd., Minhang Dist., Shanghai 201100, China

Material Safety Data Sheet

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

1.1 Product identifiers

Product name : L-2-Aminobutyric acid

REACH No. : Not available.

CAS No.: 1492-24-6

1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses:

Details of the supplier of the safety data sheet

Company: Banff Green Technologies, Inc.

Address: Floor 29, CapitaMalls Plaza, No. 6088 Humin Rd.,
Minhang Dist., Shanghai 201100
CHINA

Telephone/Fax: +86 21-54795870

E-mail address: sales@banffgt.com

1.3 Emergency telephone number

Emergency Phone #: +86 21-61995660

★ SECTION 2: Hazards identification

Eyes: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.

Inhalation: May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

EC Safety Phrase

S 22 2425

★ SECTION 3: Composition/information on ingredients

Molecular Formula: C₄H₉NO₂



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Molecular Weight: 103.12

Boiling point: 215.2° C at 760 mmHg

Density:

Flash point: 83.9° C

★ SECTION 4: First aid measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

★ SECTION 5: Firefighting measures

Extinguishing Media

Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

General information

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHANIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

★ SECTION 6: Accidental release measures

General information

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

★ SECTION 7: Handling and storage



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Handling

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

★ SECTION 8: Exposure controls/personal protection

Engineering Controls

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

★ SECTION 9: Physical and chemical properties

Molecular Formula: C₄H₉NO₂

Molecular Weight: 103.12

Boiling point: 215.2° C at 760 mmHg

Density:

Flash point: 83.9° C

★ SECTION 10: Stability and reactivity

Chemical stability

Stable under normal temperatures and pressures.

Conditions to avoid:



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Incompatible materials, dust generation, excess heat, strong oxidants.

Incompatibilities with Other Materials:

Oxidizing agents.

Hazardous combustion or Decomposition products

Nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, nitrogen.
Hazardous Polymerization has not been reported.

★ SECTION 11: Toxicological information

RTECS#

CAS# 1492-24-6 unlisted.

LD50LC50

Not available.

Carcinogenicity

L-(+)-2-Aminobutyric Acid - Not listed by ACGIH, IARC, or NTP.

★ SECTION 12: Ecological information

★ SECTION 13: Disposal considerations

Dispose of in a manner consistent with federal, state, and local regulations.

★ SECTION 14: Transport information

IATA

Not regulated as a hazardous material.

IMO

Not regulated as a hazardous material.

RIDADR

Not regulated as a hazardous material.

★ SECTION 15: Regulatory information

European International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols Not available.



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Risk Phrases

Safety Phrases

S 2425 Avoid contact with skin and eyes.

S 28A After contact with skin, wash immediately with plenty of water.

S 37 Wear suitable gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water DangerProtection)

CAS# 1492-24-6 0

Canada

CAS# 1492-24-6 is listed on Canadas NDSL List.

CAS# 1492-24-6 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 1492-24-6 is listed on the TSCA inventory.

★ SECTION 16: Other information

This material must only be handled by suitably qualified experienced scientists in appropriately equipped and authorized facilities. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide and only for experienced personnel. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Always consult your safety advisor and follow appropriate local and national safety legislature. The absence of warning must not, under any circumstance, be taken to mean that no hazard exists. Banff Green Technologies, Inc. disclaims all liability for any damage resulting from handling or from contact with the above product.