成都普瑞法科技开发有限公司
Chengdu Biopurify Phytochemicals Ltd.

1. Chemical Product and company Identification

Product Name: 左旋四氢巴马汀

English Name: L-Tetrahydropalmatine

Catalogue No: 483-14-7
Supplier: Chengdu Biopurify Phytochemicals Ltd.
Address: No.11 Building,No.388 Rongtaidadao CNSTP,Wenjiang Zone,
Chengdu Sichuan 611130 China
Tel：+86-28-82633987 Fax：+86-28-82633165
Website: www.phytopurify.com
Email: sevice@phytopurify.com

2、Composition, Information on Ingredients

Alias: (S)-form; Rotundine
CAS Number: 483-14-7
Mol. Formula: C21H25NO4
Mol. Weight: 355.434
Identified uses: Laboratory chemicals, for R&D
Storage: Room temperature for transportation, 2~8℃ for long term storage, protected from strong light, keep package airproofed when not in use.

3、Hazards identification

Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008
This substance is not classified as dangerous according to Directive 67/548/EEC.

Label elements

Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

Other hazards -

The chemical, Physical and toxicological properties of this product have not been thoroughly investigated. Use appropriate procedures to prevent opportunities for direct contact with the skin or eyes and to prevent inhalation.

4、First-aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a doctor.

In case of skin contact

Wash off with soap and plenty of water. Consult a doctor.

In case of eye contact

Flush eyes with water as a precaution. Consult a doctor.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a doctor.

Indication of any immediate medical attention and special treatment needed

No data available
Show this safety data sheet to the doctor in attendance.
Immediate medical attention is required.

5、Fire-fighting measures

Conditions of flammability
Not flammable or combustible.
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous combustion products
Hazardous decomposition products formed under fire conditions. - Carbon oxides

6、Accidental release measures
Personal precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
Environmental precautions
Do not let product enter drains.
Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7、Handing and storage
Handling:
Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Keep away from sources of ignition. Avoid prolonged or repeated exposure.
Storage:
Store in a well closed container. Protected from air and light, put into refrigerate or freeze for long term storage.
Specific end uses
Use in a laboratory fume hood where possible. Refer to employer is COSHH risk assessment.

8、Exposure controls, personal protection
Contains no substances with occupational exposure limit values.
Personal protective equipment
Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Eye protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin and body protection
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9、Physical and chemical properties
Physical Description : Off-white solid

Property	Values
pH	No information available
Melting point/freezing point	141-143°C
Boiling point	482.9°C at 760 mmHg
Flash point	138.7°C
Density	1.23 g/cm3
Evaporation rate	No information available
Upper flammability limits	No information available
Lower flammability limit	No information available
Vapor pressure	No information available

Vapor density	No information available
Specific gravity	No information available
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Kinematic viscosity	No information available
Decomposition temperature	No information available
Explosive properties	No information available
Oxidizing properties	No information available

10、Stability and reactivity
Chemical stability
Stable under recommended storage conditions.
Possibility of hazardous reactions
no data available
Conditions to avoid
no data available
Materials to avoid
Strong oxidizing agents
Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - no data available

11、Toxicological information
Acute toxicity
Oral LD50: no data available
Inhalation LC50: no data available
Dermal LD50: no data available
Other information on acute toxicity: no data available

no data available
Serious eye damage/eye irritation
no data available
Respiratory or skin sensitisation
no data available
Germ cell mutagenicity
no data available
Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity
no data available
Teratogenicity
no data available
Specific target organ toxicity - single exposure (Globally Harmonized System)
no data available
Specific target organ toxicity - repeated exposure (Globally Harmonized System)
no data available
Aspiration hazard
no data available
Potential health effects
Inhalation May be harmful if inhaled. Causes respiratory tract irritation.
Ingestion May be harmful if swallowed.
Skin May be harmful if absorbed through skin. Causes skin irritation.
Eyes May be caused eye irritation.
Synergistic effects
no data available

Additional Information
RTECS: Not available

12、Ecological information
Toxicity
no data available
Persistence and degradability
no data available
Bioaccumulative potential
no data available
Mobility in soil
no data available
PBT and vPvB assessment
no data available
Other adverse effects
no data available

13、Disposal considerations
Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging
Dispose of as unused product.

14、Transport information
Classified according to the criteria of the UN Model Regulations as reflected in the IMDG Code, ADR, RID and IATA.
UN number
Does not meet the criteria for classification as hazardous for transport.
UN proper shipping name
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods
Transport hazard class(es)
Does not meet the criteria for classification as hazardous for transport.
Packaging group
Does not meet the criteria for classification as hazardous for transport.
Environmental hazards
This product is not classified as environmentally hazardous according to the UN Model Regulations, nor a marine pollutant according to the IMDG Code.
Special precautions for user
no data available

15、Regulatory information
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
Safety, health and environmental regulations/legislation specific for the substance or mixture
no data available
Chemical Safety Assessment
For this product a chemical safety assessment was not carried out

16、Other information
DISCLAIMER
For R&D use only. Not for drug, household or other uses.
WARRANTY
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 applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Biopurify and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.phytopurify.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.