

Neimenggu Fufeng Biotechnologies Co., Ltd.

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Material Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product information

Trade name : L-Threonine Feed Grade Use of the Substance / : Feed Additive

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name : L-Threonine

Formula : C4 H9 N O3 CAS-No. : 72-19-5

Other information :

This material is classified as not hazardous under OSHA regulations.

This product is intended for FDA use only.

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Eye contact : No hazard expected in normal use.

Skin Contact : No hazard expected in normal use.

Inhalation : No hazard expected in normal use.

Ingestion : No hazard expected in normal use.

4. FIRST AID MEASURES

Inhalation :

In case product dust is released : Possible discomfort: cough, sneezing , Take affected persons out into the fresh air.

Skin contact : No hazards which require special first aid measures.

Eye contact : Possible discomfort is due to foreign substance effect. Rinse thoroughly with plenty of water keeping eyelid open.

In case of persistent discomfort: Consult an ophthalmologist.

Ingestion :

Have the mouth rinsed with water. After absorbing large amounts of substance Consult a physician. Notes to physician .after absorbing large amounts of substance: Acceleration of gastrointestinal passage

5. FIRE-FIGHTING MEASURES

Lower explosion limit dust : 60 g/m³ Method : VDI 3 673

Autoignition temperature 400 ° C Method: DIN 51 794

for dust whirled up Suitable extinguishing media : water mist foam

Extinguishing media which must not be used for safety reasons : quenching powder carbon dioxide (CO₂)

6. ACCIDENTAL RELEASE MEASURES

Personal precautions :

Wear personal protective equipment. Keep unauthorised persons away.

Environmental precautions : Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

Methods for cleaning up : Absorb mechanically avoiding production of dust.

7. HANDLING AND STORAGE

Handling : Safe handling advice ,Handle in accordance with good industrial hygiene and safety practices. Advice on protection against fire and explosion :

Storage : Requirements for storage areas and containers Keep in a dry, cool place. Avoid light effect. Keep container tightly closed and dry.

8. STABILITY AND REACTIVITY

Hazardous decomposition products : Hazardous decomposition products not known decomposition products when exposed to heat flammable smouldering gases

Thermal decomposition : 253 ° C TG (thermal gravimetric analysis)

Hazardous reactions : Avoid dust formation. Stable at room temperature.

9. TOXICOLOGICAL INFORMATION

Product Acute oral toxicity LD₅₀ Rat : > 2150 mg/kg

Method: OECD Test Guideline 401

Product Acute inhalation toxicity LC₅₀ Rat(male/female): > 5.15 mg/l / 4 h

Method : OECD Test Guideline 403

limit test (maximum concentration attainable in experiments) - No deaths occurred.

Product Skin irritation : Rabbit not irritating Method: OECD Test Guideline 404

Product Eye irritation : Rabbit not irritating Method: OECD Test Guideline 405

Product Sensitization : Magnusson & Kligman guinea pig: not sensitizing to the skin

Method : OECD Test Guideline 406

10. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

Biodegradability : Readily biodegradable. 91 %

Exposure time : 16 day Method : literature Ecotoxicity effects Toxicity to daphnia :

EC50 static test Daphnia magna: > 1000 mg/l / 48 h , Method: OECD TG 202

EC50 static test Daphnia magna: > 1000 mg/l / 24 h , Method: OECD TG 202

Toxicity to algae : EC50 static test scenedesmus subspicatus: > 1000 mg/l / 72 h

Toxicity to bacteria : EC 80 nitrobacteria: 119 mg/l / 69 h , Method: literature

Toxicity in terrestrial plants : EC 40 Hordeum spec.: ca. 119 mg/l / 144 h , Method: literature

11. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL Advice on disposal : Waste must be disposed of in accordance with federal, provincial and local regulations.

12. TRANSPORT INFORMATION

Transport/further information : Not classified as dangerous in the meaning of transport regulations.

13. REGULATORY INFORMATION

US Federal Regulations

OSHA :

If listed below, chemical specific standards apply to the product or components : None listed

Clean Air Act Section (112)

If listed below, components present at or above the de minimus level are hazardous air pollutants : None listed

CERCLA Reportable Quantities

If listed below, a reportable quantity (RQ) applies to the product based on the percent of the named component : None listed

SARA Title III Section 311/312 Hazard Categories

The product meets the criteria only for the listed hazard classes : No SARA Hazards

SARA Title III Section 313 Reportable Substances

If listed below, components are 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 :
None listed

Toxic Substances Control Act (TSCA)

If listed below, non-proprietary substances are subject to export notification under Section 12 (b) of TSCA : None listed

State Regulations

California Proposition 65

A warning under the California Drinking Water Act is required only if listed below : None
listed

14. OTHER INFORMATION

HMIS Ratings

Health : 0 Flammability : 1

Physical Hazard : 0 Further information

DISCLAIMER:

The information (including data and statements) in this Material Safety Data Sheet (MSDS) is based on experimental data from Neimenggu Fufeng Biotechnologies Co., Ltd., and believed to be true and accurate as of the date issued.

But all recommendations or suggestions are made without guarantee, since the conditions and methods of using the product and information referred to herein beyond the control of us. It is our policy, to assist our customers and to help solve particular problems, which may arise in applying our products.

*****END OF MSDS*****

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