Xinjiang Fufeng Biotechnologies Co., Ltd.

Emergency Contact/Product Information: 7:00AM—5:00PM Beijing Time Issue Date: August 1, 2012

Version: 02

Material Safety Data Sheet

SECTION I - PRODUCT IDENTIFICATION

Product Name: L-Valine

End Use: Food Additive, Nutritional Supplement

Description: White crystals or crystalline powder

Chemical Name: L-Valine

Chemical Family or Formula: Amino Acid

HMIS Rating: Health 0 Flammability 1 Reactivity 0

SECTION II – INGREDIENTS

Components: L-Valine

CAS #: 72-18-4

SECTION III - HEALTH HAZARD DATA

Route(s) of Entry:

Eye Yes
Inhalation Yes
Skin No
Ingestion Yes

Nature of Principle Hazard: Not a health hazard as defined by OSHA.

Health Effects: No specific information is available in our data base regarding the toxic effects of this material for humans. However, exposure to any chemical should be kept to a minimum. Skin and eye contact may result in irritation. May be harmful if inhaled or ingested. Always follow safe industrial hygiene practices and wear proper protective equipment when handling this compound.

SECTION IV - FIRST AID PROCEDURES

Ingestion: May result in the material swelling in the throat. Drink large amounts of water. Never give anything by mouth to an unconscious person.

Eye Contact: Flush with plenty of water. If irritation develops, call a physician.

Skin Contact: No harmful effects expected. Wash with water. Get medical attention if irritation develops.

Inhalation: If large quantities have been inhaled, keep airway open as necessary.

If swallowed: Symptomatic treatment. No harmful effects are expected.

SECTION V - FIRE AND EXPLOSION DATA

Flash Point: Not applicable.

Extinguishing Agents: Dry chemical, CO₂, Foam.

Fire and Explosion Hazards: Carbon oxides formed when burned.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and

protective equipment when entering area of fire

involving this material.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Steps to Be Taken in Case Material is Released or Spilled:

Sweep up spilled material and repackage. Avoid creating dust clouds; hose spill area thoroughly with water. Use appropriate tools to put the spilled solid in a convenient waste disposal container.

SECTION VII - HANDLING AND STORAGE

Store in a cool, well-ventilated place and away from extreme heat and strong oxidizing agents. Keep container dry tightly closed.

SECTION VIII - PERSONAL PROTECTION INFORMATION

Respiratory Protection: In heavy product dust exposure a protecting mask is recommended.

Ventilation Type Required: Local exhaust.

Other: Treat as a nuisance dust.

Protective Gloves: Not normally required. Eye Protection: Not normally required.

Other Protective Clothing or Equipment: None.

SECTION IX - CHEMICAL AND PHYSICAL PROPERTIES

Appearance: White crystals or crystalline powder. Odor: Odorless.

Boiling Point: Not applicable. Specific Gravity (H₂O=1): Not applicable.

Melting Point: Not applicable. Vapor Pressure (mm Hg): Not applicable.

Evap. Rate (Butyl Acetate=1): Not applicable. Vapor Density (Air=1): Not applicable.

PH: 5.5-7.0 Taste: Slightly Sweet.

Solubility in Water: Partially soluble in cold water. Very slightly soluble in methanol, acetone.

SECTION X - REACTIVITY DATA

Stability: Stable.

Incompatibility: Strong oxidants.

Hazardous polymerization: Will not occur.

Carbon dioxide and carbon monoxide formed

Hazardous decomposition Products:

when burned.

Conditions to avoid: Not applicable.

SECTION XI – TOXICOLOGICAL INFORMATION

Routes of Entry: Eye contact, Inhalation, Ingestion.

Toxicity to Animals: Not available.

LD50: Not available. LC50: Not available. Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of

ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

SECTION XII - ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products

are not likely. However, long term degradation products may arise.

Special Remarks on the Products of Biodegradation: Not available.

SECTION XIII - DISPOSAL CONSIDERATIONS

Disposal Method: Bury in a licensed landfill according to federal, state, and local regulations and laws.

Contaminated Packing: Follow all approved national or native regulations and laws

SECTION XIV - TRANSPORTATION INFORMATION

Shipping Name: L-Valine.

Hazard Class: Not regulated.

ID Number: None.

Label(s) Required: None.

Shipping Description: Not regulated.

Packaging References: Not regulated.

Special Transportation Notes: None.

SECTION XV - REGULATORY INFORMATION

Risk Phrases: None. Safety Phrases: None.

SECTION XVI – ADDITIONAL INFORMATION

References: Not available.

Other Special Considerations: Not available.

DISCLAIMER:

The information (including data and statements) in this Material Safety Data Sheet (MSDS) is based on experimental data from Xinjiang 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.