

**AJINOMOTO**

**AJINOMOTO HEARTLAND, INC.**

**AJINOMOTO ANIMAL NUTRITION GROUP**

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[www.lysine.com](http://www.lysine.com)

## **SAFETY DATA SHEET**

### *L-Valine [Feed Grade(96.5%)]*

*Manufactured by:* **Ajinomoto Eurolysine SAS**  
**Paris, France**

*Distributed by:* **Ajinomoto Heartland, Inc.**  
**1116 Hwy 137**  
**Eddyville, IA 52553**

*Emergency Phone:* **(641) 969-4551 – Eddyville, IA**  
**(773) 380-7000 – Chicago, IL**

*A MSDS is not required for the concerned product in accordance with the Regulation (EC) n° 1907/2006 and these codicils. The present information sheet was voluntarily created.*

#### **1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY**

##### **1.1. Product identifier**

**Trade Name:** L-Valine Feed Grade

##### **1.2. Relevant identified uses of the product**

**Identified uses:** This product shall exclusively be used in animal nutrition.  
It shall not be used for any food application

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### 1.3. Identification of the Company

Manufacturing Company: AJINOMOTO EUROLYSINE SAS  
153, rue de Courcelles  
75817 PARIS CEDEX 17 – FRANCE

Telephone number: +33 1 44 40 12 12  
Telefax: +33 1 44 40 12 13  
Email: [Infos\\_FDS@eli.ajinomoto.com](mailto:Infos_FDS@eli.ajinomoto.com)

1.4. Emergency telephone number +33 3 22 54 70 00

### 2. HAZARDS IDENTIFICATION

#### 2.1. Classification of the mixture

**Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]**

This product is not classified according to Regulation (EC) No 1272/2008.

**Classification according to Directive 67/548/EEC**

This product is not classified according to Directive 67/548/EEC

#### 2.2. Label Elements

**Labeling according to regulation (EC) No 1272/2008 [EU-GHS/CLP]**

Pictogram (s): -  
Signal Word: -  
Hazard Statement: -  
Precautionary Statement Prevention: -  
Precautionary Statement Response: -  
Precautionary Statement Storage: -  
Precautionary Statement Disposal: -

**Labeling according to Directive 67/548/EEC**

Symbol (s): -  
Risk phrase (s): -  
Safety advice: -

#### 2.3. Other Hazards

None

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	Classification	Concentration
L-Valine		
$\alpha$ -Aminoisovaleric acid		
(S)-2-Amino-3-methylbutanoic acid		
L-Val, C <sub>5</sub> H <sub>11</sub> NO <sub>2</sub>		
No CAS: 72-18-4		>96.5% (as is) &
No EINECS: 200-773-6	-	> 98% (dry
No Index: -	-	matter basis)

### 4. FIRST AID MEASURES

#### 4.1. Description of first aid measures

##### General advices

No data available

##### If inhaled

In case of breathing trouble, immediately relocate to a fresh air environment. Rinse mouth with water. If not breathing, give artificial respiration. If breathing becomes difficult, give oxygen and seek medical attention.

##### In case of skin contact

In case of exposure, wash with soap and copious amounts of water. If irritation persists, seek medical attention.

##### In case of eye contact

Flush eyes with copious amounts of water for at least 15 minutes. Ensure adequate flushing by separating eyelids with fingers. If contact lenses are worn, remove lenses and continue rinsing. Seek medical attention.

##### If swallowed

Rinse mouth with water. If any trouble appears, seek medical attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

No data available

#### 4.3. Indication of any immediate medical attention and special treatment needed

No data available

### 5. FIREFIGHTING MEASURES

#### 5.1. Extinguishing media

Water spray, carbon dioxide, dry chemical powder/foam.

#### 5.2. Special hazards arising from substance or mixture

No data available

#### 5.3. Advice for firefighters

Wear protective clothing and breathing mask to protect from fumes

#### 5.4. Further information

No data available

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### **6. ACCIDENTAL RELEASE MEASURES**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

Wear a mask. (See paragraph 8).

#### **6.2. Environmental precautions**

In case of release in large quantities, avoid releasing in sewers and water courses.

#### **6.3. Methods and materials for containment and cleaning**

Prevent spills from entering sewers and water courses.

Avoid dust generation and ventilate the area. Collect the product and place it in bags or containers for later disposal and elimination as waste, according to local legislation. After material has been removed, rinse the spill site with water.

### **7. HANDLING AND STORAGE**

#### **7.1. Precautions for safe handling**

Follow good manufacturing practice and personal hygiene.

Standard precautions for powdered products or products generating dust:

- Avoid dust dispersion during grinding or blending operations
- Provide mechanical exhaust or ventilation
- Clean and eliminate dust from equipment regularly
- Use anti-static equipment
- Avoid heat sources and sparks.

#### **7.2. Conditions for safe storage, including any incompatibilities**

Storage in the bags in which the product has been delivered.

Keep in dry conditions.

Keep away from electric sparks and heat sources.

#### **7.3. Specific end uses**

No data available

### **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **8.1. Control Parameters**

**Components with workplace control parameters**

Does not contain any substance subject to an exposure limit value.

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### 8.2. Exposure controls

#### Engineering controls

No data available

#### Personal protective equipment

##### Eye/face protection

Wear safety goggles in case of direct contact

##### Body protection

Wear protective clothes covering skin. Discard or wash protective clothes after exposure to dust of the product.

##### Skin protection

Wear gloves, especially in case of extended contact

##### Respiratory protection

Wear a (paper) mask covering nose and mouth.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1. Information on basic physical and chemical properties

Appearance	White powder
Odor	No data available
Odor Threshold	No data available
pH	5 to 6 (5% solution)
Melting point / freezing point	315°C (closed capillary), then sublimes
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper / lower flammability or explosive limits	No data available
Vapor pressure	No data available
Vapor density	0.5 to 0.6
Water solubility	At 0°C: 83.4 g/L At 25°C: 88.5 g/L At 50°C: 96.2 g/L At 65°C: 102.4 g/L
Partition coefficient: n-octanol / water	Log Pow = -2.30
Auto ignition	Between 10mJ and 30mJ
Decomposition temperature	315°C
Self-ignition temperature	>400°C (layer)
Viscosity	No data available
Explosive properties	Explosion maximal overpressure: 5.7 bar Maximum explosion pressure rise: 507 bar.s <sup>-1</sup> Kst: 138 bar.m/s <sup>-1</sup> The product is classified in ST1 class
Oxidizing properties	No data available

#### 9.2. Other safety information

No data available

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### 10. STABILITY AND REACTIVITY

#### 10.1. Reactivity

Exothermic reaction between 340°C and 360°C

#### 10.2. Chemical stability

Stable for 2 years if stored in recommended conditions.

#### 10.3. Possibility of hazardous reactions

No data available

#### 10.4. Conditions to avoid

Avoid electrostatic sparks and ignition sources.

#### 10.5. Incompatible materials

No data available on incompatible materials.

#### 10.6. Hazardous decomposition products

When heated to decomposition, carbon and nitrous oxides will be emitted.

### 11. TOXICOLOGICAL INFORMATION

#### 11.1. Acute toxicity

*Acute oral toxicity:* Not toxic when ingested: acute oral LD<sub>50</sub> > 2000mg/kg in rat.

*Acute inhalation toxicity:* Not toxic when inhaled: LC<sub>50</sub> ≥ 5.26 g/m<sup>3</sup> in rat.

#### 11.2. Skin corrosion / irritation

Not irritating to (human) skin (according to EC standards, OJEC, L 110 A, Vol 36, 4 May 1993)

#### 11.3. Serious eye damage / eye irritation

Not irritation to (human) eyes (according to EC standards, OJEC, L 110 A, Vol 36, 4 May 1993).

#### 11.4. Respiratory or skin sensitization.

Not sensitizing for the skin.

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### **11.5. Germ cell mutagenicity**

Not mutagenic (Bacterial reverse mutation test, Gene mutation test at the TK-locus of L5178Y cells, Chromosomal aberration test in cultured Chinese hamster Ovary (CHO) cells).

### **11.6. Carcinogenicity**

No data available

### **11.7. Reproductive toxicity**

Based on study report and to the best knowledge of Ajinomoto Eurolysine, no effect on fetal development.

### **11.8. Specific target organ toxicity – single exposure**

No data available

### **11.9. Specific target organ toxicity – repeated exposure**

No data available

### **11.10. Aspiration hazard**

No data available

### **11.11. Signs and symptoms of exposure**

No data available

### **11.12. Additional information**

NOAEL (No adverse effect level, oral administration) is conservatively: 628 mg/kg bw (90 day sub-chronic toxicity in rat).

## **12. ECOLOGICAL INFORMATION**

### **12.1. Toxicity**

Not toxic for animal and plant.

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### **12.2. Persistence and degradability**

Biodegradable

### **12.3. Bioaccumulative potential**

None.

### **12.4. Mobility in soil**

No data available.

### **12.5. Results of PBT and vPvB assessment**

No data available

### **12.6. Other adverse effects**

When a large quantity of the product is released in a river or waste treatment plant, the ecosystem or the functioning of the plant may be disturbed due to increased demand in oxygen required to degrade the product (increase of the biological oxygen demand – BOD = 0.849 g/g – of water)

### **13. Disposal Consideration**

#### **Waste treatment methods**

Treat wastes in accordance with the local // national legislation.

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## **14. Transport Information**

### **14.1. UN Number**

ADR / RID: -                                  IMDG: -                                  IATA: -

### **14.2. UN proper shipping name**

ADR / RID: -                                  IMDG: -                                  IATA: -

### **14.3. Transport hazard class (es)**

ADR / RID: -                                  IMDG: -                                  IATA: -

### **14.4. Packing group**

ADR / RID: -                                  IMDG: -                                  IATA: -

### **14.5. Environmental hazards**

ADR / RID: No                                  IMDG Marine pollutant: No                                  IATA: No

### **14.6. Special precautions for user**

No data available

## **15. REGULATORY INFORMATION**

### **15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture**

This product is within the scope of Regulation (EC) No 1831 / 2003 of 22 / 09 / 2003 on additives for use in animal nutrition (OJ EU n° L 268 of 18 / 10 / 2003).

### **15.2. Chemical Safety Assessment**

No data available

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### 16. OTHER INFORMATION

#### References

The Merck Index 13<sup>th</sup> edition. Merck and Co., 2001

Partition coefficient (n-octanol / water):

TNO Quality of Life, Zeist, The Netherlands.  
Report to Ajinomoto Eurolysine No V8947 / 09  
(15 July 2010).

Particle size distribution & Dusting potential:

TNO Nutrition and Food Research, Zeist,  
The Netherlands, BCV\_05\_0292 / SMC (2005).

Flammability, explosion characteristics,  
auto-ignition, etc.:

INERIS. Study report of Ajinomoto Eurolysine  
No 76597, 12 July 2006.

Acute oral toxicity:

TNO Nutrition and Food Research, Zeist,  
The Netherlands. Report to Ajinomoto Eurolysine  
No V6210 / 04, 2005

Acute 4-hour toxicity study in rat:

TNO Nutrition and Food Research, Zeist,  
The Netherlands. Report to Ajinomoto Eurolysine  
No V6201 / 08, 4 Oct 2005.

Skin and eye  
Irritation / corrosion

TNO Nutrition and Food Research, Zeist.  
The Netherlands. Reports to Ajinomoto Eurolysine  
No V6211 / 03 (June 2005) and No V6215 / 14  
(June 2005).

Skin sensitization:

TNO Nutrition and Food Research, Zeist,  
The Netherlands. Report to Ajinomoto Eurolysine  
No V6496, 27 Sept. 2005

Mutagenicity:

TNO Nutrition and Food Research, Zeist,  
The Netherlands. Reports to Ajinomoto Eurolysine  
V6205 / 06 (2005), No V6202 / 02 (2005) and  
No V6203 / 04 (2005).

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Sub-chronic toxicity:

TNO Nutrition and Food Research, Zeist,  
The Netherlands. Report to Ajinomoto Eurolysine  
No V6357, (2006)  
Tsubuku and al. 2004 *International Journal of  
Toxicology*, vol. 23, pp. 119-126

Prenatal developmental toxicity:

TNO Nutrition and Food research, Zeist,  
The Netherlands. Report of Ajinomoto Eurolysine  
No V6306 (2005).

### **Disclaimer of responsibility**

The present information sheet was created voluntarily.

The pieces of information contained in this document come from sources we consider as reliable.

Nevertheless, they are supplied without any guarantee, explicit or implicit, of their accuracy.

The conditions or methods for handling, storage, use or disposal of the product are out of our control and may fall out of the scope of our competence.

For this reason, among others, we decline any liability in case of loss, damage or cost resulting of or linked to, in any manner, the handling, storage, use or disposal of the product.

This present information was written and shall be used only for this product. Were this product used as a constituent of another product, information contained in this sheet may no longer apply.

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