

Revision Date 16-Nov-2010

Revision Number 2

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

**Product Description:** L-3-(3,4-Dihydroxyphenyl)alanine  
**Cat No.** 167530000; 167530050; 167530250  
**Synonyms** Levodopa; L-DOPA

### Relevant identified uses of the substance or mixture and uses advised against

**Recommended Use** Laboratory chemicals  
**Uses advised against** No Information available

### Details of the supplier of the safety data sheet

#### Company

Acros Organics BVBA  
 Janssen Pharmaceuticaaan 3a  
 2440 Geel, Belgium

**E-mail address** begel.sdsdesk@thermofisher.com

#### Emergency Telephone Number

For information in the US, call: 800-ACROS-01  
 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99  
 Emergency Number, US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300  
 CHEMTREC Phone Number, Europe: 703-527-3887

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

**REGULATION (EC) No 1272/2008**

Acute oral toxicity	Category 4
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### Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R phrases mentioned in this Section, see Section 16

**Symbol(s)** Xn - Harmful  
**R -phrase(s)** R22 - Harmful if swallowed

### Label Elements



**Signal Word**

**Warning**

**Hazard Statements**

H302 - Harmful if swallowed

**Precautionary Statements - EU (§28, 1272/2008)**

P301+ P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

**Other Hazards**

No information available.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
L-Tyrosine, 3-hydroxy-	EEC No. 200-445-2	99	59-92-7	Xn; R22	Acute Tox. 4 (H302)	

For the full text of the R phrases mentioned in this Section, see Section 16

**4. FIRST AID MEASURES****Description of first aid measures****Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Obtain medical attention

**Skin Contact**

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes

**Ingestion**

Do not induce vomiting Never give anything by mouth to an unconscious person Drink plenty of water If possible drink milk afterwards

**Inhalation**

Remove from exposure, lie down Move to fresh air If breathing is difficult, give oxygen If not breathing, give artificial respiration

**Notes to Physician**

Treat symptomatically

**5. FIRE-FIGHTING MEASURES****Extinguishing media****Suitable Extinguishing Media**Water spray Carbon dioxide (CO<sub>2</sub>) Dry chemical alcohol-resistant foam**Extinguishing media which must not be used for safety reasons**

No information available.

**Special hazards arising from the substance or mixture**

Thermal decomposition can lead to release of irritating gases and vapors

**Advice for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear Thermal decomposition can lead to release of irritating gases and vapors

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

### Environmental precautions

Prevent further leakage or spillage if safe to do so

### Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Avoid contact with skin and eyes Avoid contact with clothing Remove and wash contaminated clothing before re-use Avoid breathing vapors or mists Do not ingest Wash thoroughly after handling

### Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place Keep container tightly closed

### Specific End Uses

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters

#### Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### Derived No Effect Level (DNEL)

No information available.

#### Predicted No Effect Concentration (PNEC)

No information available.

### Exposure controls

#### Engineering Measures

Ensure adequate ventilation, especially in confined areas

#### Personal protective equipment

##### Eye Protection

Safety glasses with side-shields Goggles

##### Hand Protection

Protective gloves

##### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

##### Respiratory Protection

Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

### Environmental exposure controls

No information available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical State

Powder, Solid

### Appearance

Light cream

### odor

odorless

### pH

No information available.

### Boiling Point/Range

No information available.

### Melting Point/Range

295°C / 563°F

### Flash Point

No information available.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Water Solubility	66 mg/40 ml water
Molecular Formula	C9 H11 N O4
Molecular Weight	197.19

**10. STABILITY AND REACTIVITY****Reactivity****Chemical Stability**

Stable under normal conditions. Light sensitive. Air sensitive.

**Possibility of Hazardous Reactions**

**Hazardous Polymerization** No information available.

**Hazardous Reactions .** No information available.

**Conditions to Avoid**

Incompatible products.

**Incompatible Materials**

Strong oxidizing agents.

**Hazardous Decomposition Products**

Nitrogen oxides (NOx). Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

**11. TOXICOLOGICAL INFORMATION****Information on Toxicological Effects****Acute Toxicity**

**Product Information** No acute toxicity information is available for this product

**Component Information****Component**

L-Tyrosine, 3-hydroxy-

LD50 Oral	LD50 Dermal	LC50 Inhalation
1780 mg/kg ( Rat )		

**Chronic Toxicity****Carcinogenicity**

There are no known carcinogenic chemicals in this product

**Sensitization**

No information available.

**Mutagenic Effects**

No information available

**Reproductive Effects**

No information available.

**Developmental Effects**

No information available.

**Target Organs**

No information available.

**Other Adverse Effects**

The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information

**Endocrine Disruptor Information**

None known

## 12. ECOLOGICAL INFORMATION

### Toxicity

#### Ecotoxicity effects

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

### Persistence and degradability

No information available

#### Bioaccumulative potential

No information available.

#### Mobility in soil

No information available.

### Results of PBT and vPvB assessment

#### Other adverse effects

No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### Waste from Residues / Unused

Dispose of in accordance with local regulations

#### Products

#### Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal

## 14. TRANSPORT INFORMATION

### IMDG/IMO

Not regulated

### ADR

Not regulated

### IATA

Not regulated

## 15. REGULATORY INFORMATION

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

#### International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
L-Tyrosine, 3-hydroxy-	200-445-2	-		X	-	X	X	X	X	X	KE-10853 X

### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory Lists

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**CHINA** - China Inventory of Existing Chemical Substances

**AICS** - Inventory of Chemical Substances

KECL - Existing and Evaluated Chemical Substances

**Chemical Safety Assessment**

**16. OTHER INFORMATION**

**Text of R phrases mentioned in Section 2-3**

R22 - Harmful if swallowed

Revision Date 16-Nov-2010

Revision Summary Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

**Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

End of Safety Data Sheet