SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

L-Phenylalanine

L-Phenylalanine

Trade name

CAS Number:
63-91-2

EC number:
200-568-1

1.2 Relevant identified uses of the substance or mixture and uses advised against.

Identified use:
SU24 Scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
Alfa Aesar GmbH & Co KG
A Johnson Matthey Company
Zeppelinstr. 7b
76185 Karlsruhe / Germany
Tel: +49 (0) 721 84007 280
Fax: +49 (0) 721 84007 300
Email: tech@alfa.com
www.alfa.com

Informing department:
Product safety Tel + +049 (0) 7275 988687-0

1.4 Emergency telephone number:
Carechem 24: +44 (o) 1235 239 670 (Multi-language emergency number)
Poison Information Center Mainz
www.giftinfo.uni-mainz.de  Telephone: +49(0)6131/19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The substance is not classified as hazardous to health or the environment according to the CLP regulation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC
Not applicable

Information concerning particular hazards
for human and environment:
No information known.

Other hazards that do not result in classification
No information known.

2.2 Label elements

Hazard pictograms
Not applicable

Signal word
Not applicable

Hazard statements
Not applicable

2.3 Other hazards

Results of PBT and vPvB assessment
PBT:
Not applicable.

vPvB:
Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Substances

CAS# Designation:
63-91-2 L-Phenylalanine

EC number:
200-568-1

SECTION 4: First aid measures

4.1 Description of first aid measures

After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact
Instantly wash with water and soap and rinse thoroughly. Seek immediate medical advice.

After eye contact
Rinse opened eye for several minutes under running water. Then consult doctor.

After swallowing
Seek medical treatment.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

If this product is involved in a fire, the following can be released:
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)

5.3 Advice for firefighters

Protective equipment:
Wear self-contained breathing apparatus. Wear full protective suit.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Do not allow product to reach sewage system or water bodies. Do not allow to enter the ground/soil. Collect mechanically. No special measures required. See Section 7 for information on safe handling. See section 8 for information on personal protection equipment. See Section 13 for information on disposal.

6.2 Environmental precautions:

Collect mechanically.

6.3 Methods and material for containment and cleaning up:

Prevention of secondary hazards:

See Section 7 for information on safe handling.

6.4 Reference to other sections

See Section 13 for information on disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep containers tightly sealed. Store in cool, dry place in tightly closed containers.
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: L-Phenylalanine

Information about protection against explosions and fires: No information known.
7.2 Conditions for safe storage, including any incompatibilities
Storage
Requirements to be met by storerooms and containers:
Information about storage in one common storage facility:
Further information about storage conditions:
7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

Additional information about design of technical systems:
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

8.1 Control parameters
Components with critical values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Additional information:
No data

8.2 Exposure controls
Personal protective equipment
General protective and hygienic measures
The usual precautionary measures should be adhered to in handling the chemicals.

Breathing equipment:
Recommended filter device for short term use:
Use a respirator with type N95 (USA) or PE (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards.

Protection of hands:
Check protective gloves prior to each use for their proper condition.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Material of gloves
Nitrile rubber, NBR
Penetration time of glove material
Not determined
Eye protection:
Safety glasses
Body protection:
Protective work clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
General Information
Appearance:
Form:
Crystalline powder
Colour:
White
Smell:
Not determined
Odour threshold:
Not determined.

pH-value:
Not applicable.

Change in condition
Melting point/Melting range:
ca 275 °C (dec)
Sublimation temperature / start:
Not determined
Inflammability (solid, gaseous):
Not determined.
Ignition temperature:
Not determined.
Decomposition temperature:
Not determined.
Self-inflammability:
Not determined.

Danger of explosion:
Not determined.
Critical values for explosion:
Lower:
Not determined
Upper:
Not determined
Steam pressure:
Not applicable.
Density
Not determined.
Relative density
Not determined.
Vapour density
Not applicable.
Evaporation rate
Not applicable.
Solubility in / Miscibility with Water:
Not determined.
Partition coefficient (n-octanol/water):
Not determined.
Viscosity:
dynamic:
Not applicable.
kinematic:
Not applicable.

9.2 Other information
No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
10.2 Chemical stability
Thermal decomposition / conditions to be avoided:
10.3 Possibility of hazardous reactions
10.5 Incompatible materials:
10.6 Hazardous decomposition products:

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity:
LD/LC50 values that are relevant for classification:
Skin irritation or corrosion:
Eye irritation or corrosion:
Sensitization:

The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance.
No data
May cause irritation
May cause irritation
No sensitizing effect known.

(Contd. on page 3)
Germ cell mutagenicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for this substance.
Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.
Reproductive toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive data for this substance.
Specific target organ system toxicity - repeated exposure: No effects known.
Specific target organ system toxicity - single exposure: No effects known.
Aspiration hazard: The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive data for this substance.
Subacute to chronic toxicity: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

SECTION 12: Ecological information

12.1 Toxicity: No further relevant information available.
12.2 Persistence and degradability: No further relevant information available.
12.3 Bioaccumulative potential: No further relevant information available.
12.4 Mobility in soil: Water hazard class 1 (Self-assessment): slightly hazardous for water.
Additional ecological information: Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system. Avoid transfer into the environment.
12.5 Results of PBT and vPvB assessment: Not applicable.
12.6 Other adverse effects: No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods: Hand over to disposers of hazardous waste.
Recommendation: Must be specially treated under adherence to official regulations.
Consult state, local or national regulations for proper disposal.
Uncleaned packagings: Disposal must be made according to official regulations.

SECTION 14: Transport information

UN-Number: Not applicable
ADR, ADN, IMDG, IATA: Not applicable
14.2 UN proper shipping name: Not applicable
ADR, ADN, IMDG, IATA: Not applicable
14.3 Transport hazard class(es): Not applicable
ADR, ADN, IMDG, IATA: Not applicable
14.5 Environmental hazards: Not applicable.
14.6 Special precautions for user: Not applicable.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.
UN "Model Regulation": -

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture: Substance is listed.
Australian Inventory of Chemical Substances: Substance is listed.
Standard for the Uniform Scheduling of Medicines and Poisons: Substance is listed.
National regulations: Substance is listed.
Information about limitation of use: Substance is not listed.
Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
Other regulations, limitations and prohibitive regulations: Substance is not listed.
ELINCS (European List of Notified Chemical Substances): Substance is not listed.
Substance of Very High Concern (SVHC) according to the REACH Regulations (EC): Substance is not listed.
No. 1907/2006. REACH - Pre-registered substances: Substance is not listed.
15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing SDS: Health, Safety and Environmental Department.
Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
vPvB: very Persistent and very Bioaccumulative
ACGIH: American Conference of Governmental Industrial Hygienists (USA)
OSHA: Occupational Safety and Health Administration (USA)
NTP: National Toxicology Program (USA)
IARC: International Agency for Research on Cancer
EPA: Environmental Protection Agency (USA)