

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : G 12417

Product Name : L-GLUTAMIC ACID

Manufacturer / supplier identification

Company : NICE Chemicals (P) Ltd., Cochin, India

Tel - 0484 2800212, 2802755

Contact For Information : Tel . No. – 0484 2802536 Fax : 0484 2802483 Emergency Telephone No. : 0484 2801583 Tele fax No. : 0484 2802483

2. COMPOSITION / INFORMATION ON INGREDIENTS

Synonyms: L-a – Aminoglutaric acid

CAS-No : 56-86-0 EC-Index-No : ---- EC -No. : 200-293-7

M: 147.13 g/mol Formula Hill: $C_5H_9NO_4$

Molecular formula (Hill) : -----

Chemical formula : ----

3. HAZARDS IDENTIFICATION : No hazardous product as specified in Directive 67/548/EEC.

4. FIRST AID MEASURES : After skin contact : Wash off with water.

After eye contact: Rinse out with water.

After inhalation : Fresh air.

After swallowing: Swallowing (large amounts): Consult

doctor if feeling unwell..

5. FIRE – FIGHTING MEASURES : Suitable extinguishing media : In adaption to materials stored in the

immediate neighbourhood.

Special risks: Combustible. Formation of hazardous combustion

gases or vapours possible in the event of fire.

Product Name : L-GLUTAMIC ACID

Special protective equipments for fire fighting: Do not stay in dangerous zone without self-contained breathing apparatus.

Other information: Contain escaping vapours with water. Prevent fire-fighting water from entering surface water or ground water.

6. ACCIDENTAL RELEASE MEASURES : Environmental–protection measures :

Do not allow to enter sewerage system

Procedures for cleaning/absorption: Take up dry. Forward for disposal.

Clean up effected area.

7. HANDLING AND STORAGE : Handling: No further requirements.

Storage: Tightly closed. Dry. At $+5^{\circ}$ C to $+30^{\circ}$ C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection: Required when dusts are generated.

Eye protection : Required

Hand protection : Use recommended

Protective clothing should be selected specifically For the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.



Product Name : L-GLUTAMIC ACID

Industrial hygiene: Wash hands after working with substance.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Solid

Colour : Off- white

Odour : Characteristic odour pH value at $8.6 \text{ g/l H}_2\text{O}$ (25°C) : 3.0-3.5

Melting temperature : 160°C

Boiling temperature : Not available

Ignition temperature : Not available
Flash point : Not applicable

Explosion limits lower : Not available

Upper : Not available

Density (20°C) : 1.54 g/cm³

Bulk density : 460 kg/m³

Solubility in water(25°C) : 11.1 g/l

Log P(oct): : -3.69 (experimental)

10. STABILITY AND REACTIVITY : Conditions to be avoided : No information available.

Substance to be avoided : No information available.

Hazardous decomposition products: No information available.

11. TOXICOLOGICAL INFORMATION : Acute toxicity : LD 50 (oral, rat) : 30000 mg/kg.

Eye irritation test (rabbit) : Slight irritations.

Skin irritation test (rabbit): No irritation.

Subacute to chronic toxicity: Bacterial mutagenicity:

Ames -test: negative (Sodium salt).

Sensitization test (guinea pig): No sensitising effect.



Product Name : L-GLUTAMIC ACID

Further toxicological information: This is a non-essential amino acid that occurs in many forms in natural protein.

After eye contact: Slight irritations.

After swallowing of large amounts: nausea.

Further data : No toxic effects are to be expected when the product is handled appropriately. The product should be handled with the care usual when dealing with chemicals.

12. ECOLOGICAL INFORMATION

Behavior in environmental compartments:

Log p(o/w): -3.69 (experimental).

No bioaccumulation is to be expected ($\log p(o/w < 1)$).

Ecotoxic effects: Quantitative data on the ecological effect of this product are not available.

Further ecologic data: BOD 64 % from TOD /5 d.(Mixture of isomers.). No ecological problems are to be expected when the product is handled and used with due care and attention.

13. DISPOSAL METHOD

Chemicals must be disposed of in compliance with the respective national regulations. Under www. retrologestik. de you will find country- and substance-specific information as well as contact partners.

Nice product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system. Under www. retrologistik.de you will find special information on the respective national conditions as well as contact partners.

Product Name : L-GLUTAMIC ACID

14. TRANSPORT INFORMATION: Not subject to transport regulations.

15. REGULATORY INFORMATION

Labelling according to EC Directives

 Symbol
 :

 R-phrases
 :

 S-phrases
 :

Water pollution class : ----

16. OTHER INFORMATION

Change in the chapter on toxicology.

General update.

Regional representation:

The information is given on the authorised Safety Data Sheet for your country.

The information contained here in is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.