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

Catalogue Number	CS-T-77995
Product Name	L-Glutamic Acid Monosodium Salt
CAS No.	142-47-2
Category	Intermediate
Synonyms	Not available
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email **sales@clearsynth.com** for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Not available

2.2 Label Elements

Signal Word: Not available

Not available

Hazard Statement(s)

Code	Statement
Not available	Not available

Precautionary Statement(s)

Code	Statement
Not available	Not available

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : L-Glutamic Acid Monosodium Salt
CAS Number : 142-47-2
Molecular Formula : Not available
Molecular Weight : Not available
Parent Chemical : Glutamic Acid
Synonyms : Not available
Concentration : Not available

SECTION 4: First aid measures

Not available

SECTION 5: Firefighting measures

Not available

SECTION 6: Accidental release measures

Not available

SECTION-7: Handling and storage

Not available

SECTION 8: Exposure controls / personal protection

Not available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	No data available
IR spectrum	No data available
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available

Property	Value
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

Not available

SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity: L-Glutamic acid and its ammonium, calcium, monosodium and potassium salts were evaluated by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) in 1988. The Committee noted that intestinal and hepatic metabolism results in elevation of levels in systemic circulation only after extremely high doses given by gavage (>30mg/kg body weight). Ingestion of monosodium glutamate (MSG) was not associated with elevated levels in maternal milk, and glutamate did not readily pass the placental barrier. Human infants metabolized glutamate similarly to adults. Conventional toxicity studies using dietary administration of MSG in several species did not reveal any specific toxic or carcinogenic effects nor were there any adverse outcomes in reproduction and teratology studies. Attention was paid to central nervous system lesions produced in several species after parenteral administration of MSG or as a consequence of very high doses by gavage. Comparative studies indicated that the neonatal mouse was most sensitive to neuronal injury; older animals and other species (including primates) were less so. Blood levels of glutamate associated with lesions of the hypothalamus in the neonatal mouse were not

approached in humans even after bolus doses of 10 g MSG in drinking water. Because human studies failed to confirm an involvement of MSG in "Chinese Restaurant Syndrome" or other idiosyncratic intolerance, the JECFA allocated an "acceptable daily intake (ADI) not specified" to glutamic acid and its salts. No additional risk to infants was indicated. The Scientific Committee for Food (SCF) of the European Commission reached a similar evaluation in 1991. The conclusions of a subsequent review by the Federation of American Societies for Experimental Biology (FASEB) and the Federal Drug Administration (FDA) did not discount the existence of a sensitive subpopulation but otherwise concurred with the safety evaluation of JECFA and the SCF. For more Human Toxicity Excerpts (Complete) data for MONOSODIUM GLUTAMATE (21 total), please visit the HSDB record page.
- Skin corrosion/irritation: No data available.
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: No data available.
- Carcinogenicity: L-Glutamic acid and its ammonium, calcium, monosodium and potassium salts were evaluated by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) in 1988. The Committee noted that intestinal and hepatic metabolism results in elevation of levels in systemic circulation only after extremely high doses given by gavage (>30mg/kg body weight). Ingestion of monosodium glutamate (MSG) was not associated with elevated levels in maternal milk, and glutamate did not readily pass the placental barrier. Human infants metabolized glutamate similarly to adults. Conventional toxicity studies using dietary administration of MSG in several species did not reveal any specific toxic or carcinogenic effects nor were there any adverse outcomes in reproduction and teratology studies. Attention was paid to central nervous system lesions produced in several species after parenteral administration of MSG or as a consequence of very high doses by gavage. Comparative studies indicated that the neonatal mouse was most sensitive to neuronal injury; older animals and other species (including primates) were less so. Blood levels of glutamate associated with lesions of the hypothalamus in the neonatal mouse were not approached in humans even after bolus doses of 10 g MSG in drinking water. Because human studies failed to confirm an involvement of MSG in "Chinese Restaurant Syndrome" or other idiosyncratic intolerance, the JECFA allocated an "acceptable daily intake (ADI) not specified" to glutamic acid and its salts. No additional risk to infants was indicated. The Scientific Committee for Food (SCF) of the European Commission reached a similar evaluation in 1991. The conclusions of a subsequent review by the Federation of American Societies for Experimental Biology (FASEB) and the Federal Drug Administration (FDA) did not discount the existence of a sensitive subpopulation but otherwise concurred with the safety evaluation of JECFA and the SCF.
- Reproductive toxicity: No data available.
- STOT-single exposure: No data available.
- STOT-repeated exposure: /HUMAN EXPOSURE STUDIES/ This study sought to determine the prevalence of reactions to additives, including monosodium glutamate (MSG), in patients with chronic urticaria using a rigorous protocol. Sixty-five subjects (44 women, 21 men; ages 14-67) /were studied/. All had urticaria for >6 wk without discernible etiology. Subjects with active urticaria were studied while they were taking the lowest effective dose of antihistamine. Screening challenges to the 11 additives most commonly associated with exacerbations of chronic idiopathic urticaria were performed in a single-blind fashion. The dose of MSG given was 2500 mg. Skin scores were obtained to determine a positive reaction in an objective manner. Subjects with a positive screening challenge were rechallenged (at least 2 wk later) with a double-blind, placebo-controlled protocol as in-patients in our General Clinical Research Center. Two subjects had positive single-blind, placebo-controlled challenges, but neither had a positive double-blind, placebo-controlled challenge. It is concluded, with 95% confidence, that MSG is an unusual (<3% at most) exacerbant of chronic idiopathic urticaria.
- Aspiration hazard: No data available.

Likely routes of exposure

- L-Glutamic acid and its ammonium, calcium, monosodium and potassium salts were evaluated by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) in 1988. The Committee noted that intestinal and hepatic metabolism results in elevation of levels in systemic circulation only after extremely high doses given by gavage (>30mg/kg body weight). Ingestion of monosodium glutamate (MSG) was not associated with elevated levels in maternal milk, and glutamate did not readily pass the placental barrier. Human infants metabolized glutamate similarly to adults. Conventional toxicity studies using dietary administration of MSG in several species did not reveal any specific toxic or carcinogenic effects nor were there any adverse outcomes in reproduction and teratology studies. Attention was paid to central nervous system lesions produced in several species after parenteral administration of MSG or as a consequence of very high doses by gavage. Comparative studies indicated that the neonatal mouse was most sensitive to neuronal injury; older animals and other species (including primates) were less so. Blood levels of glutamate associated with lesions of the hypothalamus in the neonatal mouse were not approached in humans even after bolus doses of 10 g MSG in drinking water. Because human studies failed to confirm an involvement of MSG in "Chinese Restaurant Syndrome" or other idiosyncratic intolerance, the JECFA allocated an "acceptable daily intake (ADI) not specified" to glutamic acid and its salts. No additional risk to infants was indicated. The Scientific Committee for Food (SCF) of the European Commission reached a similar evaluation in 1991. The conclusions of a subsequent review by the Federation of American Societies for Experimental Biology (FASEB) and the Federal Drug Administration (FDA) did not discount the existence of a sensitive subpopulation but otherwise concurred with the safety evaluation of JECFA and the SCF.

Symptoms related to the physical, chemical and toxicological characteristics

- L-Glutamic acid and its ammonium, calcium, monosodium and potassium salts were evaluated by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) in 1988. The Committee noted that intestinal and hepatic metabolism results in elevation of levels in systemic circulation only after extremely high doses given by gavage (>30mg/kg body weight). Ingestion of monosodium glutamate (MSG) was not associated with elevated levels in maternal milk, and glutamate did not readily pass the placental barrier. Human infants metabolized glutamate similarly to adults. Conventional toxicity studies using dietary administration of MSG in several species did not reveal any specific toxic or carcinogenic effects nor were there any adverse outcomes in reproduction and teratology studies. Attention was paid to central nervous system lesions produced in several species after parenteral administration of MSG or as a consequence of very high doses by gavage. Comparative studies indicated that the neonatal mouse was most sensitive to neuronal injury; older animals and other species (including primates) were less so. Blood levels of glutamate associated with lesions of the hypothalamus in the neonatal mouse were not approached in humans even after bolus doses of 10 g MSG in drinking water. Because human studies failed to confirm an involvement of MSG in "Chinese Restaurant Syndrome" or other idiosyncratic intolerance, the JECFA allocated an "acceptable daily intake (ADI) not specified" to glutamic acid and its salts. No additional risk to infants was indicated. The Scientific Committee for Food (SCF) of the European Commission reached a similar evaluation in 1991. The conclusions of a subsequent review by the Federation of American Societies for Experimental Biology (FASEB) and the Federal Drug Administration (FDA) did not discount the existence of a sensitive subpopulation but otherwise concurred with the safety evaluation of JECFA and the SCF.

SECTION 12: Ecological information

Not available

SECTION 13: Disposal considerations

Not available

SECTION 14: Transport information

Not available

SECTION 15: Regulatory information

Not available

SECTION 16: Other information

Not available

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