Monosodium Glutamate
L-Glutamic Acid, Monosodium Salt; MSG; Sodium Hydrogen L-(-)-Amino Glutarate
Flavour enhancer in foods.
Amino Acid (Essential)
C5H8NNaO4•H2O
Monosodium Glutamate
Made from corn.
L-Glutamic Acid, Monosodium Salt; MSG; Sodium Hydrogen L-(+)-Amino Glutarate

1. IDENTIFICATION

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Other Names</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td></td>
<td></td>
<td>Amino Acid (Essential)</td>
</tr>
</tbody>
</table>

2. HAZARD IDENTIFICATION

<table>
<thead>
<tr>
<th>ADG Code</th>
<th>Non-Dangerous Goods according to the criteria of the Australian Dangerous Goods Code (ADG Code).</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASCC Hazard Classification</td>
<td>NOT Hazardous according to the criteria of ASCC [NOHSC:1008(2004)]</td>
</tr>
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</table>

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Chemical Entity</th>
<th>Formula</th>
<th>CAS Number</th>
<th>Proportion</th>
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<tbody>
<tr>
<td></td>
<td>Monosodium Glutamate, Monohydrate</td>
<td>No Data Available</td>
<td>6106-04-3</td>
<td>100.0 %</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

**Description of necessary measures according to routes of exposure**

**Swallowed**
Rinse mouth with water. Give water to drink. Do NOT induce vomiting. If vomiting occurs, give further water. Seek medical advice.

**Eye**
Immediately flush eyes with plenty of water for 15 minutes, holding eyelids open. In all cases of eye contamination, it is a sensible precaution to seek medical advice.

**Skin**
If skin contact occurs, remove any contaminated clothing and wash skin with soap and running water. Be careful to clean folds, crevices, creases and groin. If irritation occurs, seek medical advice.

**Inhaled**
Remove victim from exposure to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

**Advice to Doctor**
Treat symptomatically based on judgement of doctor and individual reactions of patient.

**Medical Conditions Aggravated by Exposure**
Repeated or prolonged exposure is not known to aggravate medical condition. This product is not dangerous to the human body and is suitable for human consumption.

5. FIRE FIGHTING MEASURES

**General Measures**
Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk.

**Flammability Conditions**
No Data Available

**Extinguishing Media**
In case of fire, appropriate extinguishing media include water.

**Fire and Explosion Hazard**
Non-Flammable. Not a fire hazard.

**Hazardous Products of Combustion**
No information available.

**Special Fire Fighting Instructions**
Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.

**Personal Protective Equipment**
Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves).

**Flash Point**
No Data Available

**Lower Explosion Limit**
No Data Available

**Upper Explosion Limit**
No Data Available

**Auto Ignition Temperature**
No Data Available

**Hazchem Code**
No Data Available

6. ACCIDENTAL RELEASE MEASURES

**General Response Procedure**
Avoid accidents, clean up immediately. Slippery when spilt. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Stop leak if safe to do so. Isolate the danger area. Use clean, non-sparking tools and equipment.

**Clean Up Procedures**
Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Transfer to a suitable, labelled container and dispose of promptly as hazardous waste.

**Containment**
Stop leak if safe to do so. Isolate the danger area.

**Decontamination**
Wash area with water. Avoid high pressure rinsing.

**Environmental Precautionary Measures**
Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management.

**Evacuation Criteria**
Evacuate all unnecessary personnel.

**Personal Precautionary Measures**
Personnel involved in the clean up should wear full protective clothing as listed in section 8.

7. HANDLING AND STORAGE
Handling

Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Avoid contact with eyes, skin and clothing. Do not inhale product dust/fumes. Recommended to wear glove and face mask if excessive handling is necessary. Keep workplace clean.

Storage

Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. Store in ambient temperature, sheltered from sunlight and avoid contact with harmful substances. This product is not classified dangerous for transport according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.

Container

Store in original packaging as approved by manufacturer.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General

No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC). However, the exposure standard for dust not otherwise specified is 10mg/m³ (for inspirable dust) and 3mg/m³ (for respirable dust).

NOTE: The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.

These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Exposure Limits

No Data Available

Biological Limits

No information available on biological limit values for this product.

Engineering Measures

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

Personal Protection Equipment

RESPIRATOR: Wear effective respiratory protection where dusts are generated and engineering controls are inadequate (AS1715/1716).

EYES: Safety glasses with side shields (AS1336/1337).

HANDS: Wear protective gloves (AS2161).

CLOTHING: Long-sleeved protective clothing and safety footwear (AS3765/2210).

NOTE: Suggested protective clothing might not be sufficient; consult a specialist before handling this product.

Work Hygienic Practices

No Data Available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Solid

Appearance

Free flowing Crystals

Odour

Odourless

Colour

White or Colourless

pH

6.7 - 7.5

Vapour Pressure

No Data Available

Relative Vapour Density

No Data Available

Boiling/Melting Point

No Data Available

Solubility

Very soluble in water, sparingly soluble in alcohol

Freezing Point

No Data Available

Specific Gravity

No Data Available

Flash Point

No Data Available

Auto Ignition Temp

No Data Available

Evaporation Rate

No Data Available

Bulk Density

0.793 - 0.854 g/mL

Corrosion Rate

No Data Available

Decomposition Temperature

No Data Available

Density

No Data Available

Specific Heat

No Data Available

Molecular Weight

187.13 g/mol
10. STABILITY AND REACTIVITY

**Chemical Stability**
Product is stable under normal conditions of use, storage and temperature.

**Conditions to Avoid**
Heating to decomposition

**Materials to Avoid**
Incompatible with strong oxidisers.

**Hazardous Decomposition**
No Data Available

**Hazardous Polymerisation**
No Data Available

11. TOXICOLOGICAL INFORMATION

**General Information**
Oral LD50 Rat: 16600mg/Kg
Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.
Routes of entry: eyes.

**Eye Irritant**
Slightly irritating to eyes.

**Skin Irritant**
Not a skin sensitizer.

**Carcinogen Category**
0

12. ECOLOGICAL INFORMATION

**Ecotoxicity**
Not toxic for wild animals and plants.

**Persistence/Degradability**
Highly biodegradable.

**Mobility**
No Data Available

**Environmental Fate**
No Data Available

**Bioaccumulation Potential**
No
### 13. DISPOSAL CONSIDERATIONS

**General Information**
Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.

**Special Precautions for Land Fill**
Contact a specialist disposal company or the local waste regulator for advice.

### 14. TRANSPORT INFORMATION

**ADG Code**
Non-Dangerous Goods according to the criteria of the Australian Dangerous Goods Code (ADG Code).

**Air**

**IATA**

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**Land**

**Australia: ADG Code**

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**United States of America: US DOT**

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15. REGULATORY INFORMATION

General Information: No Data Available

Poisons Schedule (Aust): No Data Available

AICS Name: L-GLUTAMIC ACID, MONOSODIUM SALT

16. OTHER INFORMATION

Related Product Codes: MOGLUT0100, MOGLUT0200, MOGLUT0300, MOGLUT0400, MOGLUT0500, MOGLUT1000, MOGLUT1001, MOGLUT1002, MOGLUT1003, MOGLUT1004, MOGLUT1005, MOGLUT1006, MOGLUT1007, MOGLUT1008, MOGLUT1009, MOGLUT1500, MOGLUT2000, MOGLUT2100, MOGLUT2500, MOGLUT2501, MOGLUT2502, MOGLUT2503, MOGLUT2504, MOGLUT2505, MOGLUT2506, MOGLUT2507, MOGLUT3000, MOGLUT3100, MOGLUT4000, MOGLUT5000, MOGLUT5100, MOGLUT5200, MOGLUT5201, MOGLUT5300, MOGLUT5500, MOGLUT5501, MOGLUT5600, MOGLUT5601, MOGLUT5700, MOGLUT5800, MOGLUT5900, MOGLUT6000, MOGLUT6100, MOGLUT6200, MOGLUT6200, MOGLUT6300, MOGLUT6400, MOGLUT6500, MOGLUT6600, MOGLUT6700, MOGLUT6800, MOGLUT7000, MOGLUT7500, MOGLUT8000, MOGLUT8100, MOGLUT8200, MOGLUT8300, MOGLUT8400, MOGLUT9000, MOGLUT9000, MOGLUT9500, MOGLUT9800, MOGLUT9801, MOGLUT9800, MOGLUT9900, MOGLUT9901, MOGLUT4130, MOGLUT4150, MOGLUT4170, MOGLUT4180, MOGLUT4190, MOGLUT4182, MOGLUT4130, MOGLUT4173, MOGLUT5203, MOGLUT4152, MOGLUT4154, MOGLUT4156, MOGLUT4131, MOGLUT4171, MOGLUT4181

Revision: 2

Revision Date: 21 Nov 2013

Key/Legend:

< Less Than
> Greater Than
AICS Australian Inventory of Chemical Substances
atm Atmosphere
CAS Chemical Abstracts Service (Registry Number)
cm² Square Centimetres
CO2 Carbon Dioxide
COD Chemical Oxygen Demand
deg C (°C) Degrees Celcius
EPA (New Zealand) Environmental Protection Authority of New Zealand
deg F (°F) Degrees Farenheit
g Grams
g/cm³ Grams per Cubic Centimetre
g/l Grams per Litre
HSNO Hazardous Substance and New Organism
IDLH Immediately Dangerous to Life and Health
Immiscible Liquids are insoluable in each other.
inHg Inch of Mercury
inH2O Inch of Water
K Kelvin
kg Kilogram
kg/m³ Kilograms per Cubic Metre
lb Pound
LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours. LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
ltr or L Litre
m³ Cubic Metre
mbar Millibar
mg Milligram
mg/24H Milligrams per 24 Hours
mg/kg Milligrams per Kilogram
mg/m³ Milligrams per Cubic Metre
Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.
mm Millimetre
mmH2O Millimetres of Water
mPa.s Millipascals per Second
N/A Not Applicable
NIOSH National Institute for Occupational Safety and Health
NOHSC National Occupational Heath and Safety Commission
OECD Organisation for Economic Co-operation and Development
Oz Ounce
PEL Permissible Exposure Limit
Pa Pascal
ppb Parts per Billion
ppm Parts per Million
ppm/2h Parts per Million per 2 Hours
ppm/6h Parts per Million per 6 Hours
psi Pounds per Square Inch
R Rankine
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value
tne Tonne
torr Millimetre of Mercury
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight