

## 1. IDENTIFICATION

<b>Product Name</b>	<b>Monosodium Glutamate</b>			
<b>Other Names</b>	L-Glutamic Acid, Monosodium Salt; MSG; Sodium Hydrogen L-(-)-Amino Glutarate			
<b>Uses</b>	Flavour enhancer in foods.			
<b>Chemical Family</b>	Amino Acid ( Essential )			
<b>Chemical Formula</b>	C5H8NNaO4.H2O			
<b>Chemical Name</b>	Monosodium Glutamate			
<b>Product Description</b>	Made from corn.			
<b>Contact Information</b>	<b>Organisation</b>	<b>Location</b>	<b>Telephone</b>	<b>Ask For</b>
	Redox Pty Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000	MSDS Officer
		11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222	
	Poisons Information Centre	Westmead NSW	1800-251525 131126	
	Chemcall	Australia New Zealand	1800-127406 0800-243622 +64-3-3530199	
	National Poisons Centre	New Zealand	0800-764766	

## 2. HAZARD IDENTIFICATION

<b>ADG Code</b>	Non-Dangerous Goods according to the criteria of the Australian Dangerous Goods Code (ADG Code).
<b>ASCC Hazard Classification</b>	NOT Hazardous according to the criteria of ASCC [NOHSC:1008(2004)]
<b>Categories</b>	
<b>Risk Phrases</b>	
<b>Safety Phrases</b>	
<b>HSNO Hazard Classification</b>	
<b>Poisons Schedule (Aust)</b>	No Data Available

This Material Safety Data Sheet may not provide exhaustive guidance for all HSNO Controls assigned to this substance. The [EPA \(New Zealand\) web site](#) should be consulted for a full list of triggered controls and cited regulations.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Monosodium Glutamate, Monohydrate	No Data Available	6106-04-3	100.0 %

**4. FIRST AID MEASURES**

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

<b>Swallowed</b>	Rinse mouth with water. Give water to drink. Do NOT induce vomiting. If vomiting occurs, give further water. Seek medical advice.
<b>Eye</b>	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.
<b>Skin</b>	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.
<b>Inhaled</b>	Remove victim from exposure to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.
<b>Advice to Doctor</b>	Treat symptomatically based on judgement of doctor and individual reactions of patient.
<b>Medical Conditions Aggravated by Exposure</b>	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**

<b>General Measures</b>	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.
<b>Flammability Conditions</b>	No Data Available
<b>Extinguishing Media</b>	In case of fire, appropriate extinguishing media include water.
<b>Fire and Explosion Hazard</b>	Non-Flammable. Not a fire hazard.
<b>Hazardous Products of Combustion</b>	No information available.
<b>Special Fire Fighting Instructions</b>	Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.
<b>Personal Protective Equipment</b>	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).
<b>Flash Point</b>	No Data Available
<b>Lower Explosion Limit</b>	No Data Available
<b>Upper Explosion Limit</b>	No Data Available
<b>Auto Ignition Temperature</b>	No Data Available
<b>Hazchem Code</b>	No Data Available

**6. ACCIDENTAL RELEASE MEASURES**

<b>General Response Procedure</b>	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.
<b>Clean Up Procedures</b>	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.
<b>Containment</b>	Stop leak if safe to do so. Isolate the danger area.
<b>Decontamination</b>	Wash area with water. Avoid high pressure rinsing.
<b>Environmental Precautionary Measures</b>	Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management.
<b>Evacuation Criteria</b>	Evacuate all unnecessary personnel.
<b>Personal Precautionary Measures</b>	Personnel involved in the clean up should wear full protective clothing as listed in section 8.

**7. HANDLING AND STORAGE**

<b>Handling</b>	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.
<b>Storage</b>	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.
<b>Container</b>	Store in original packaging as approved by manufacturer.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

<b>General</b>	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/m <sup>3</sup> (for inspirable dust) and 3mg/m <sup>3</sup> (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.
<b>Exposure Limits</b>	No Data Available
<b>Biological Limits</b>	No information available on biological limit values for this product.
<b>Engineering Measures</b>	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.
<b>Personal Protection Equipment</b>	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.
<b>Work Hygienic Practices</b>	No Data Available

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State</b>	Solid
<b>Appearance</b>	Free flowing Crystals
<b>Odour</b>	Odourless
<b>Colour</b>	White or Colourless
<b>pH</b>	6.7 - 7.5
<b>Vapour Pressure</b>	No Data Available
<b>Relative Vapour Density</b>	No Data Available
<b>Boiling/Melting Point</b>	No Data Available
<b>Solubility</b>	Very soluble in water, sparingly soluble in alcohol
<b>Freezing Point</b>	No Data Available
<b>Specific Gravity</b>	No Data Available
<b>Flash Point</b>	No Data Available
<b>Auto Ignition Temp</b>	No Data Available
<b>Evaporation Rate</b>	No Data Available
<b>Bulk Density</b>	0.793 - 0.854 g/mL
<b>Corrosion Rate</b>	No Data Available
<b>Decomposition Temperature</b>	No Data Available
<b>Density</b>	No Data Available
<b>Specific Heat</b>	No Data Available
<b>Molecular Weight</b>	187.13 g/mol

<b>Net Propellant Weight</b>	No Data Available
<b>Octanol Water Coefficient</b>	No Data Available
<b>Particle Size</b>	No Data Available
<b>Partition Coefficient</b>	No Data Available
<b>Saturated Vapour Concentration</b>	No Data Available
<b>Vapour Temperature</b>	No Data Available
<b>Viscosity</b>	No Data Available
<b>Volatile Percent</b>	0%
<b>VOC Volume</b>	No Data Available
<b>Additional Characteristics</b>	No Data Available
<b>Potential for Dust Explosion</b>	No Data Available
<b>Fast or Intensely Burning Characteristics</b>	No Data Available
<b>Flame Propagation or Burning Rate of Solid Materials</b>	No Data Available
<b>Non-Flammables That Could Contribute Unusual Hazards to a Fire</b>	No Data Available
<b>Properties That May Initiate or Contribute to Fire Intensity</b>	No Data Available
<b>Reactions That Release Gases or Vapours</b>	No Data Available
<b>Release of Invisible Flammable Vapours and Gases</b>	No Data Available

**10. STABILITY AND REACTIVITY**

<b>Chemical Stability</b>	Product is stable under normal conditions of use, storage and temperature.
<b>Conditions to Avoid</b>	Heating to decomposition
<b>Materials to Avoid</b>	Incompatible with strong oxidisers.
<b>Hazardous Decomposition Products</b>	No Data Available
<b>Hazardous Polymerisation</b>	No Data Available

**11. TOXICOLOGICAL INFORMATION**

<b>General Information</b>	Oral LD50 Rat: 16600mg/Kg Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation. Routes of entry: eyes.
<b>EyeIrritant</b>	Slightly irritating to eyes.
<b>SkinIrritant</b>	Not a skin sensitiser.
<b>Carcinogen Category</b>	0

**12. ECOLOGICAL INFORMATION**

<b>Ecotoxicity</b>	Not toxic for wild animals and plants.
<b>Persistence/Degradability</b>	Highly biodegradable.
<b>Mobility</b>	No Data Available
<b>Environmental Fate</b>	No Data Available
<b>Bioaccumulation Potential</b>	No

**Environmental Impact** No Data Available

**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**

**Proper Shipping Name** MONOSODIUM GLUTAMATE  
**Class** No Data Available  
**Subsidiary Risk(s)** No Data Available  
**UN Number** No Data Available  
**Hazchem** No Data Available  
**Pack Group** No Data Available  
**Special Provision** No Data Available

*Land*

**Australia: ADG Code**

**Proper Shipping Name** MONOSODIUM GLUTAMATE  
**Class** No Data Available  
**Subsidiary Risk(s)** No Data Available  
**UN Number** No Data Available  
**Hazchem** No Data Available  
**Pack Group** No Data Available  
**Special Provision** No Data Available

**New Zealand: NZS5433**

**Proper Shipping Name** MONOSODIUM GLUTAMATE  
**Class** No Data Available  
**Subsidiary Risk(s)** No Data Available  
**UN Number** No Data Available  
**Hazchem** No Data Available  
**Pack Group** No Data Available  
**Special Provision** No Data Available

**United States of America: US DOT**

**Proper Shipping Name** MONOSODIUM GLUTAMATE

<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available

**Sea**

**IMDG Code**

<b>Proper Shipping Name</b>	MONOSODIUM GLUTAMATE
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available
<b>EMS</b>	No Data Available
<b>Marine Pollutant</b>	No

**15. REGULATORY INFORMATION**

<b>General Information</b>	No Data Available
<b>Poisons Schedule (Aust)</b>	No Data Available
<b>AICS Name</b>	L-GLUTAMIC ACID, MONOSODIUM SALT

**16. OTHER INFORMATION**

<b>Related Product Codes</b>	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, MOGLUT5101, MOGLUT5200, MOGLUT5201, MOGLUT5300, MOGLUT5301, MOGLUT5400, MOGLUT5401, MOGLUT5500, MOGLUT5501, MOGLUT5600, MOGLUT5601, MOGLUT5700, MOGLUT5800, MOGLUT5900, MOGLUT6000, MOGLUT6100, MOGLUT6200, MOGLUT6300, MOGLUT6400, MOGLUT6500, MOGLUT6600, MOGLUT6700, MOGLUT6800, MOGLUT7000, MOGLUT7500, MOGLUT8000, MOGLUT8100, MOGLUT8200, MOGLUT8300, MOGLUT8400, MOGLUT9000, MOGLUT9001, MOGLUT9500, MOGLUT9600, MOGLUT9601, MOGLUT9700, MOGLUT9701, MOGLUT9702, MOGLUT9800, MOGLUT9801, MOGLUT9900, MOGLUT9901, MOGLUT4130, MOGLUT4150, MOGLUT4170, MOGLUT4180, MOGLUT4190, MOGLUT4182, MOGLUT5803, MOGLUT4173, MOGLUT5203, MOGLUT4152, MOGLUT4154, MOGLUT4156, MOGLUT4131, MOGLUT4171, MOGLUT4181
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<b>Revision</b>	2
<b>Revision Date</b>	21 Nov 2013

<b>Key/Legend</b>	<p>&lt; Less Than                  &gt; Greater Than  <b>AICS</b> Australian Inventory of Chemical Substances  <b>atm</b> Atmosphere  <b>CAS</b> Chemical Abstracts Service (Registry Number)  <b>cm<sup>2</sup></b> Square Centimetres  <b>CO<sub>2</sub></b> Carbon Dioxide  <b>COD</b> Chemical Oxygen Demand</p>
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**deg C (°C)** Degrees Celcius  
**EPA (New Zealand)** Environmental Protection Authority of New Zealand  
**deg F (°F)** Degrees Farenheit  
**g** Grams  
**g/cm<sup>3</sup>** 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  
**inH<sub>2</sub>O** Inch of Water  
**K** Kelvin  
**kg** Kilogram  
**kg/m<sup>3</sup>** 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  
**m<sup>3</sup>** Cubic Metre  
**mbar** Millibar  
**mg** Milligram  
**mg/24H** Milligrams per 24 Hours  
**mg/kg** Milligrams per Kilogram  
**mg/m<sup>3</sup>** Milligrams per Cubic Metre  
**Misc** or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.  
**mm** Millimetre  
**mmH<sub>2</sub>O** Millimetres of Water  
**mPa.s** Millipascals per Second  
**N/A** Not Applicable  
**NIOSH** National Institute for Occupational Safety and Health  
**NOHSC** National Occupational Health 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