

1. Product and Company Identification

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Product Name Monosodium glutamate

Part Number RXSOL-19-1339-027

Company Details:....

RX MARINE INTERNATIONAL
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2. Composition / Information on ingredients

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Substances

Synonyms L-Glutamic acid, sodium salt (1:1)
Monosodium glutamate, MSG

Formula $C_5H_8NO_4 \cdot Na$

Molecular weight 169.11 g/mol

CAS-No. 142-47-2

3. Hazards Identification

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Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Acute toxicity, Oral (Category 4), H302

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 1), H410

Label elements

Hazard Statements

H302 Harmful if swallowed.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P264 Wash skin thoroughly after handling

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.

P230 Rinse mouth.

P291 Collect spillage.

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards None

4. First Aid Measures

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Description of first aid measures

Eye contact	Remove any contact lenses, locate eye-wash station, and flush eyes immediately with large amounts of water. Separate eyelids with fingers to ensure adequate flushing. Promptly call a physician.
Skin contact	Rinse skin thoroughly with large amounts of water. Remove contaminated clothing and shoes and call a physician.
Inhalation	Immediately relocate self or casualty to fresh air. If breathing is difficult, give cardiopulmonary resuscitation (CPR). Avoid mouth-to-mouth resuscitation.
Ingestion	Wash out mouth with water; Do NOT induce vomiting; call a physician.
Most important symptoms and effects, both acute and delayed	The most important known symptoms and effects are described in the labelling (see section 2.2).
Indication of any immediate medical attention and special treatment needed	Treat symptomatically.

5. Fire-fighting Measures

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Extinguishing media

Suitable extinguishing media	Use water spray, dry chemical, foam, and carbon dioxide fire extinguisher.
Special hazards arising from the substance or mixture	Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will

spread along

the ground. Vapors may accumulate in low or confined areas or travel a considerable

distance to a source of ignition and flash back.

During combustion, may emit irritant fumes.

Wear self-contained breathing apparatus and protective clothing.

spray to keep fire-exposed containers cool. Promptly isolate the scene by removing all persons from the vicinity of the incident if

there is a fire. No action shall be taken involving any personal risk or without suitable

training. Move containers from fire area if this can be done without risk. Use water

spray to keep fire-exposed containers cool.

Advice for firefighters

6. Accidental Release Measures

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Personal precautions, protective equipment and emergency procedures

Use full personal protective equipment. Avoid breathing vapors, mist, dust or gas. Ensure adequate

ventilation. Evacuate personnel to safe areas.

Environmental precautions

Refer to protective measures listed in sections 8.

Try to prevent further leakage or spillage. Keep the product away from drains or water courses.

Methods and materials for containment and cleaning up

Absorb solutions with finely-powdered liquid-binding material (diatomite, universal binders); Decontaminate surfaces and equipment by scrubbing with alcohol; Dispose of contaminated material according to Section 13.

7. Handling and Storage

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Precautions for safe handling

Avoid inhalation, contact with eyes and skin. Avoid dust and aerosol formation. Use only in areas with appropriate exhaust ventilation.

Conditions for safe storage, including any incompatibilities

Keep container tightly sealed in cool, well-ventilated area. Keep away from direct sunlight and sources of

ignition.

Store at -20°C (powder) or -80°C (in solvent)

Specific end use(s)

No data available.

8. Exposure controls and personal protection

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Control parameters

Ingredients with workplace control parameters

Exposure controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

Skin protection

This recommendation applies only to the product stated in the safety data sheet,

supplied by us and for the designated use. When dissolving in or mixing with other

substances and under conditions deviating from those stated in EN 16523-1 please

contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de).

Full contact

Material: Chloroprene

Minimum layer thickness: 0,65 mm

Break through time: 480 min

Material tested:KCL 720 Camapren®

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supplied by us and for the designated use. When dissolving in or mixing with other

substances and under conditions deviating from those stated in EN 16523-1 please

contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de).

Splash contact

Material: Latex gloves

Minimum layer thickness: 0,6 mm

Break through time: 60 min

Material tested:Lapren® (KCL 706 / Aldrich Z677558, Size M).

Flame retardant antistatic protective clothing.

Recommended Filter type: Filter A-(P3)

Body Protection**Respiratory protection**

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory

protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains.

9. Physical and chemical properties

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Appearance	solid
Colour	No data available
Odor	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Flash point	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
pH	No data available

materials. Extremely flammable in the presence of the following materials or conditions: oxidizing

Viscosity	No data available
Water solubility	33 mg/mL
Partition coefficient: n-octanol/water	No data available
Vapor pressure	No data available
Density	No data available
Relative density	No data available
Relative vapor density	No data available
Particle characteristics	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Other safety information	No data available

materials.

10. Stability and reactivity

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Reactivity	The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
Chemical stability	The product is chemically stable under standard ambient conditions (room temperature)
Possibility of hazardous reactions	Violent reactions possible with: Oxidizing agents Bases Reducing agents
Conditions to avoid	No information available
Incompatible materials	No data available
Hazardous decomposition products	In the event of fire: see section 5

11. Toxicological information

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Information on toxicological effects

Acute toxicity	LD50 Oral - Rat - male - 207,0 mg/kg
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Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Olfaction:Other

changes.

Behavioral:Convulsions or effect on seizure threshold.

Gastrointestinal:Ulceration or bleeding from stomach.

(ECHA)

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of

perforation of the esophagus and the stomach.

Acute toxicity estimate Oral - 207 mg/kg

(ATE value derived from LD50/LC50 value)

LC50 Inhalation - Rat - 1 h - > 710 mg/m³

Remarks: (RTECS)

LD50 Dermal - Rabbit - 301,0 mg/kg

Remarks: Behavioral:Tremor.

Gastrointestinal:Changes in structure or function of salivary glands.

Kidney, Ureter, Bladder:Other changes.

(ECHA)

Acute toxicity estimate Dermal - 301 mg/kg

(ATE value derived from LD50/LC50 value)

Skin - Rabbit

Result: Causes burns.

Remarks: (ECHA)

Not available

Not available

Not available

Not available

Not available

Not available.

Not available.

Not available.

Not available.

Skin corrosion/irritation

sensitization

mutagenicity

Carcinogenicity

Reproductive toxicity

Teratogenicity

Specific target organ toxicity (single exposure)

Specific target organ toxicity (repeated exposure)

Aspiration hazard

Information on the likely routes of exposure

12. Ecological information

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Persistence and degradability

No data available

Toxicity to fish

Static test LC50 - Oncorhynchus mykiss (rainbow trout) - 75 mg/l - 96 h (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

Static test EC50 - Daphnia magna (Water flea) - 42,81 mg/l - 48 h

Toxicity	(OECD Test Guideline 202) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: maleic acid Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 1.520 mg/l - 96 h
Toxicity to bacteria	EC10 - Bacteria - 14 mg/l - 72 h Remarks: (Lit.) EC5 - E.coli - 15.000 mg/l Remarks: (Lit.) (maximum permissible toxic concentration)
Toxicity to algae	Static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 74,35 mg/l - 72 h (OECD Test Guideline 201) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: maleic acid
Products Biodegradation	The methods for determining the biological degradability are not applicable to inorganic substances.
Mobility in soil	No data available
Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Endocrine disrupting properties	No data available
Other adverse effects	No data available .

13. Disposal considerations

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Product	Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.
Contaminated packaging	Dispose of as unused product.
Waste treatment Method	See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

14. Transport information

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UN number	ADR/RID:2404 IMDG:2404 IATA: 2404
UN proper shipping name	ADR/RID:PROPIONITRILE IMDG:PROPIONITRILE IATA:PROPIONITRILE
Transport hazard class(es)	ADR/RID: 3 (6.1) IMDG: 3 (6.1) IATA:3 (6.1)
Packaging group	ADR/RID: II IMDG: II IATA:II
Environmental hazards	ADR/RID: No IMDG: No IATA: No
Special precautions for user	No data available
Further information	Not classified as dangerous in the meaning of transport regulations.

15. Regulatory information

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Safety, health and environmental regulations/legislation specific for the substance or mixture	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
Other regulations	Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work.
Chemical Safety Assessment	For this product a chemical safety assessment was not carried out

16. Other information

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