

This safety data sheet was created pursuant to the requirements of:
UK REACH Regulations (SI 2019/758 as amended)

Supersedes date 28-Jun-2018

Revision date 29-Feb-2024

Revision Number 2

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

1.1. Product identifier

Product Code(s)	21992
Safety data sheet number	21992
Product Name	MONOSODIUM GLUTAMATE
EC No (EU Index No)	205-538-1
CAS No	142-47-2
Synonyms	MSG, MONOSOD GLUTAMATE 60-140M FG GRAN, MONOSOD GLUTAMATE E621, MONOSOD GLUTAMATE E621 30-80M, MONOSOD GLUTAMATE E621 60-140M, SODIUM HYDROGEN GLUTAMATE, AJI-NO-MOTO MONOSODIUM GLUTAMATE

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Food industry Food / Feed additive Industrial use Professional use

1.3. Details of the supplier of the safety data sheet

Supplier

Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
GBR

For further information, please contact

E-mail address SDS.EMEA@univarsolutions.com
Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

1.4. Emergency telephone number

Emergency Telephone SGS - +32 (0)3 575 55 55 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified

2.2. Label elements

Not classified

Hazard statements

Not classified

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Chemical name	Weight-%	EC No (EU Index No)	UK REACH registration number	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
MONOSODIUM GLUTAMATE 142-47-2	100%	205-538-1	-	-	-	-	-

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (UK REACH Article 59)

SECTION 4: First aid measures**4.1. Description of first aid measures**

Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if symptoms occur.
Skin contact	Wash with plenty of water. Get medical attention if symptoms occur.
Ingestion	Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms	May cause mechanical irritation.
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4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Water spray. Dry chemical. Foam.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	Thermal decomposition can lead to release of irritating and toxic gases and vapours.
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5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Collect contaminated fire extinguishing water separately. Do not allow it to enter drains or surface water.
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SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions	Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protection recommended in Section 8.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions	Avoid release to the environment. Prevent entry into drains. Local authorities should be advised if significant spillages cannot be contained.
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6.3. Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
Methods for cleaning up	Take up mechanically, placing in appropriate containers for disposal. Clean contaminated objects and areas thoroughly observing environmental regulations.
Prevention of secondary hazards	Observe good chemical hygiene practices.

6.4. Reference to other sections

Reference to other sections	See section 8 for more information. See section 13 for more information.
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SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Advice on safe handling	Ensure adequate ventilation. Avoid generation of dust. Avoid contact with eyes, skin and clothing. Use personal protection recommended in Section 8.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using the product. Wash hands before breaks and after work. Take off contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)**Specific use(s)**

See section 1 for more information.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers No information available

Chemical name	Oral	Dermal	Inhalation
MONOSODIUM GLUTAMATE 142-47-2		179 mg/kg bw/day [4] [6]	10 mg/m ³ [4] [6]

Derived No Effect Level (DNEL) - General Public No information available.

Chemical name	Oral	Dermal	Inhalation
MONOSODIUM GLUTAMATE 142-47-2		107 mg/kg bw/day [4] [6]	3 mg/m ³ [4] [6]

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering controls Ensure adequate ventilation. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Use eye protection according to EN 166.

Hand protection Protective gloves. Gloves must conform to standard EN 374. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves.

Skin and body protection	Wear appropriate clothing to prevent reasonably probable skin contact.
Respiratory protection	In case of inadequate ventilation wear respiratory protection. Use respiratory equipment with particle filter, type P2. EN 136/140/141/145/143/149.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using the product. Wash hands before breaks and after work. Take off contaminated clothing and wash it before reuse.
Environmental exposure controls	Keep out of drains, sewers, ditches and waterways. Local authorities should be advised if significant spillages cannot be contained.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	Crystalline powder
Colour	white
Odour	Mild.
Odour threshold	No information available

Property	Values	Remarks • Method
Melting point / freezing point	163 °C	@ 1013.25 hPa.
Initial boiling point and boiling range		No information available.
Flammability		The product is not flammable.
Flammability Limit in Air		Not applicable.
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point		Not applicable.
Autoignition temperature		Not applicable.
Decomposition temperature	> 200 °C	No information available.
pH		No information available.
pH (as aqueous solution)	6.7 - 7.2	solution (10 %).
Kinematic viscosity		Not applicable.
Dynamic viscosity		Not applicable.
Water solubility	> 385 g/l	Soluble in water.
Solubility(ies)		No information available.
Partition coefficient	< 4	No information available.
Vapour pressure	< 0.00147 Pa	@ 20 °C.
Relative density	1.65	@ 20 °C.
Bulk density		No information available
Liquid Density	No information available	No information available
Relative vapour density		No information available.
Particle characteristics		No information available.
Particle Size	No information available	
Particle Size Distribution	No information available	
Explosive properties	No information available	
Oxidising properties	No information available	

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No known effects under normal use conditions.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied. See section 7 for more information.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None under normal use conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Dust contact with the eyes can lead to mechanical irritation.

Acute toxicity

Numerical measures of toxicity

No information available

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
MONOSODIUM GLUTAMATE	-	> 2000 mg/kg bw (Rat)	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation	Based on available data the classification criteria are not met.
Respiratory or skin sensitisation	Based on available data the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data the classification criteria are not met.
Reproductive toxicity	Based on available data the classification criteria are not met.
STOT - single exposure	Based on available data the classification criteria are not met.
STOT - repeated exposure	Based on available data the classification criteria are not met.
Aspiration hazard	Based on available data the classification criteria are not met.
Other adverse effects	No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Based on available data, the classification criteria are not met.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
MONOSODIUM GLUTAMATE	EC50: >2 mg/l (72h, <i>Pseudokirchneriella subcapitata</i>)	LC50: >100 mg/l (<i>Cyprinus carpio</i>)	-	EC50: >100 mg/l (<i>Daphnia magna</i>)

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation Not likely to bioaccumulate.

Chemical name	Partition coefficient
MONOSODIUM GLUTAMATE	< 4

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Waste from residues/unused products	Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.
Contaminated packaging	Empty remaining contents. Do not reuse empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information**IATA**

14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

IMDG

14.1 UN number or ID number	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**Authorisations and/or restrictions on use:**

This product does not contain substances subject to authorisation (UK REACH - Annex XIV).
 This product does not contain substances subject to restriction (UK REACH - Annex XVII).

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Named dangerous substances per COMAH Regulations 2015 (as amended)

Not applicable

The Ozone-Depleting Substances Regulations 2015

Not applicable

The Biocidal Products Regulations 2001 (as amended)

Not applicable

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)

Not applicable

Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)

Not applicable

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDSL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECL	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status

Legend:

TSCA	- United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL	- Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS	- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS	- Japan Existing and New Chemical Substances
IECSC	- China Inventory of Existing Chemical Substances
KECL	- Korean Existing and Evaluated Chemical Substances
PICCS	- Philippines Inventory of Chemicals and Chemical Substances
AIIC	- Australian Inventory of Industrial Chemicals
NZIoC	- New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report A Chemical Safety Assessment is not required for this substance

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet**

Legend

SVHC: Substances of Very High Concern for Authorisation:

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances

vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		

Revision Note [SDS sections updated 1 3 4 5 6 7 8 9 10 11 12 13 15 16](#)**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)

European Chemicals Agency (ECHA) (ECHA_API)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AELG(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Prepared By J Forth**Supersedes date** 28-Jun-2018**Revision date** 29-Feb-2024

This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)
 Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet