

Product Safety Information Sheet

A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis Issue date: 10.01.2023 Version: 15.0

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

1.1. Product identifier

Product form	: Substance
Trade name	: AJI-NO-MOTO® Monosodium Glutamate
Name	: Monosodium glutamate
IUPAC name	: Sodium hydrogen glutamate
EC-No.	: 205-538-1
CAS-No.	: 142-47-2
Other means of identification	: CAS: 6106-04-3
	E 621

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

1.2.1. Relevant identified uses

Main use category Use of the substance/mixture Function or use category : Industrial use,Professional use: Food/feedstuff additives

: Food/feedstuff additives

1.2.2. Uses advised against

Restrictions on use

: Unknown

1.3. Details of the supplier of product safety information sheet

AJINOMOTO FOODS EUROPE SAS 48, rue de Nesle BP 42 80190 Mesnil-Saint-Nicaise France T +33 (0)3 22 88 50 50 <u>REACH_contact@afe.ajinomoto.com</u> - <u>https://www.ajifoodsolutions.eu/</u>

1.4. Emergency telephone number

Emergency number

: +33 (0)3 22 88 50 50 Operating hours 24 hours / 24 hours, 7 days a week

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type

: Mono-constituent

Product Safety Information Sheet

A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Monosodium glutamate	CAS-No.: 142-47-2 EC-No.: 205-538-1	100	Not classified

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation
First-aid measures after skin contact
First-aid measures after eye contact
First-aid measures after ingestion

- : Remove person to fresh air and keep comfortable for breathing.: Wash skin with plenty of water.
- Rinse eyes with water as a precaution.
- : Call a poison center or a doctor if you feel unwell.

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

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media	: Water spray. Dry powder. Foam.	
5.2. Special hazards arising from the substance or mixture		
Hazardous decomposition products in case of fire	: Toxic fumes may be released.	
5.3. Advice for firefighters		
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.	

SECTION 6: Accidental release measures		
6.1. Personal precautions, protective equipment and emergency procedures		
6.1.1. For non-emergency personnel		
Emergency procedures	: Ventilate spillage area.	
6.1.2. For emergency responders		
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".	
6.2. Environmental precautions		
Avoid release to the environment.		
6.3. Methods and material for containment and cleaning up		
Methods for cleaning up	: Mechanically recover the product.	
Other information	: Dispose of materials or solid residues at an authorized site.	

6.4. Reference to other sections

For further information refer to section 13.

Product Safety Information Sheet

A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Hygiene measures

- : Ensure good ventilation of the work station. Wear personal protective equipment.
- : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

AJI-NO-MOTO® Monosodium Glutamate (142-47-2)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	179 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	10 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	3 mg/m³
Long-term - systemic effects, dermal	107 mg/kg bodyweight/day

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

Product Safety Information Sheet

A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: white.
Appearance	: Crystalline powder.
Odour	: Mild odor.
Odour threshold	: Not available
Melting point	: 163 °C Atm. press.: 1013,25 hPa Decomposition: 'yes' Decomp. temp.: 200 °C
Freezing point	Not applicable
Boiling point	Not available
Flammability	: Non flammable.
Explosive limits	: Not applicable
	> 250 g/m³
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: > 200 °C
рН	: 6,7-7,2
pH solution concentration	: 10 %
Viscosity, kinematic	: Not applicable
Solubility	: Water: > 385 g/l
Partition coefficient n-octanol/water (Log Kow)	: <4
Vapour pressure	: < 0,00147 Pa Temp.: 20 °C
Vapour pressure at 50 °C	: Not available
Density	: 1,65 g/cm ³ Type: 'density' Temp.: 20 °C
Relative density	: 1,65 Type: 'relative density' Temp.: 20 °C
Relative vapour density at 20 °C	: Not applicable
Particle size	: Not available
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available
Particle aggregation state	: Not available
Particle agglomeration state	: Not available
Particle specific surface area	: Not available
Particle dustiness	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosion limits	: Not applicable	
	> 250 g/m³	
Dust deflagration index	: 9 bar⋅m/s	
Dust explosion category	: St 1 - Weak explosion	

Product Safety Information Sheet

A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological info	rmation	
11.1. Information on hazard classes	s as defined in Regulation (EC) No 1272/2008	
Acute toxicity (oral)	: Not classified	
Acute toxicity (dermal)	: Not classified	
Acute toxicity (inhalation)	: Not classified	
AJI-NO-MOTO® Monosodium Glutamate (142-47-2)		
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity), Guideline: other:	
Skin corrosion/irritation	: Not classified pH: 6,7 – 7,2	
Serious eye damage/irritation	: Not classified pH: 6,7 – 7,2	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	

AJI-NO-MOTO® Monosodium Glutamate (142-47-2)

Viscosity, kinematic	Not applicable

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Product Safety Information Sheet

A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

Hazardous to the aquatic environment, short-term : (acute)	Not classified	
Hazardous to the aquatic environment, long-term : (chronic)	Not classified	
AJI-NO-MOTO® Monosodium Glutamate (142-47-2)		
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Cyprinus carpio	
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	> 2 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

AJI-NO-MOTO® Monosodium Glutamate (142-47-2)	
Partition coefficient n-octanol/water (Log Kow)	< 4

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

n accordance with ADR / IM	IDG / IATA / ADN / RID				
ADR	IMDG	ΙΑΤΑ	ADN	RID	
14.1. UN number or ID	number		· · ·		
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
14.2. UN proper shippiı	ng name		· · · ·		
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
14.3. Transport hazard	class(es)		· · ·		
Not regulated	Not regulated	Not regulated Not regulated		Not regulated	
14.4. Packing group					
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
14.5. Environmental ha	zards		· · · ·		
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
No supplementary informati	on available		· · ·		

Product Safety Information Sheet

A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

14.6. Special precautions for user

Overland transport Not regulated

Transport by sea Not regulated

Air transport Not regulated

Inland waterway transport

Not regulated

Rail transport Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

No REACH Annex XVII restrictions

REACH Annex XIV (Authorisation List)

AJI-NO-MOTO® Monosodium Glutamate is not on the REACH Annex XIV List

REACH Candidate List (SVHC)

AJI-NO-MOTO® Monosodium Glutamate is not on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

AJI-NO-MOTO® Monosodium Glutamate is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

AJI-NO-MOTO® Monosodium Glutamate is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Monosodium glutamate is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

15.1.2. National regulations

Germany

Employment restrictions	: Observe restrictions according Act on the Protection of Working Mothers (MuSchG).
	Observe restrictions according Act on the Protection of Young People in Employment
	(JArbSchG).
Water hazard class (WGK)	: WGK 2, Significantly hazardous to water (Classification according to AwSV; ID No. 8182).
Storage class (LGK, TRGS 510)	: LGK 13 - Non-combustible solids.

Product Safety Information Sheet

A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

Joint storage table	:	LGK 1	LGK 2A	LGK 2B	LGK 3	LGK 4.1A
		LGK 4.1B	LGK 4.2	LGK 4.3	LGK 5.1A	LGK 5.1B
		LGK 5.1C	LGK 5.2	LGK 6.1A	LGK 6.1B	LGK 6.1C
		LGK 6.1D	LGK 6.2	LGK 7	LGK 8A	LGK 8B
		LGK 10	LGK 11	LGK 12	LGK 13	LGK 10-13
Joint storage not permitted for Joint storage with restrictions permitted for Joint storage permitted for	 LGK 1, LGK 6.2, LGK 7. LGK 4.1A, LGK 5.1C. LGK 2A, LGK 2B, LGK 3, LGK 4.1B, LGK 4.2, LGK 4.3, LGK 5.1A, LGK 5.1B, LGK 5.2 LGK 6.1A, LGK 6.1B, LGK 6.1C, LGK 6.1D, LGK 8A, LGK 8B, LGK 10, LGK 11, LGK LGK 13, LGK 10-13. 					
Hazardous Incident Ordinance (12. BImSchV)	:	Is not subject	ct of the Hazar	dous Incident O	rdinance (12. B	ImSchV)
Netherlands						
ABM category SZW-lijst van kankerverwekkende stoffen SZW-lijst van mutagene stoffen SZW-lijst van reprotoxische stoffen – Borstvoeding SZW-lijst van reprotoxische stoffen – Vruchtbaarheid SZW-lijst van reprotoxische stoffen – Ontwikkeling	:	The substand The substand The substand The substand	zard for aquat ce is not listed ce is not listed ce is not listed ce is not listed ce is not listed	Ū		
Switzerland						
Storage class (LK)	:	NG - Non-ha	zardous			
15.2. Chemical safety assessment						

No chemical safety assessment has been carried out

SECTION 16: Other information

A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

Abbreviations and acronyms:			
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways		
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road		
ATE	Acute Toxicity Estimate		
BCF	Bioconcentration factor		
BLV	Biological limit value		
BOD	Biochemical oxygen demand (BOD)		
COD	Chemical oxygen demand (COD)		
DMEL	Derived Minimal Effect level		
DNEL	Derived-No Effect Level		
EC-No.	European Community number		
EC50	Median effective concentration		
EN	European Standard		
IARC	International Agency for Research on Cancer		
ΙΑΤΑ	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		
LC50	Median lethal concentration		
LD50	Median lethal dose		

Product Safety Information Sheet

A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

Abbreviations and acronyms:				
LOAEL	Lowest Observed Adverse Effect Level			
NOAEC	No-Observed Adverse Effect Concentration			
NOAEL	No-Observed Adverse Effect Level			
NOEC	No-Observed Effect Concentration			
OECD	Organisation for Economic Co-operation and Development			
OEL	Occupational Exposure Limit			
РВТ	Persistent Bioaccumulative Toxic			
PNEC	Predicted No-Effect Concentration			
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail			
SDS	Safety Data Sheet			
STP	Sewage treatment plant			
ThOD	Theoretical oxygen demand (ThOD)			
TLM	Median Tolerance Limit			
VOC	Volatile Organic Compounds			
CAS-No.	Chemical Abstract Service number			
N.O.S.	Not Otherwise Specified			
vPvB	Very Persistent and Very Bioaccumulative			
ED	Endocrine disrupting properties			

Other information

: Supersedes version of. 2018.

The classification complies with

Safety Data Sheet (SDS), EU

: ATP 12