SAFETY DATA SHEET

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

Supercedes date 22-Sep-2022 **Revision date** 10-Mar-2025 **Revision Number** 5

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

1.1. Product identifier

Product Code(s)	195899
Safety data sheet number	195899
Product Name	SODIUM GLUCONATE
EC Number	208-407-7
CAS No	527-07-1
Synonyms	SODIUM GLUCONATE MIN 99%, SODIUM GLUCONATE E576 PDR, SODIUM GLUCONATE FG PDR, SODIUM GLUCONATE FG GRAN, SODIUM GLUCONATE F300 FG FINE GRAN, SOD GLUCONATE 300 FG PDR
Pure substance/mixture	Substance
Formula	C6-H11-O7-Na
Molecular weight	218.14

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

Recommended use	Food/Feed additive Cosmetic additive Industrial use Pharmaceuticals Chelating Agent

1.3. Details of the supplier of the safety data sheet

Supplier
AROMA TRADING LIMITED
Unit 3 Quatro Park, Tanners Drive
Milton Keynes
MK14 5FJ ENGLAND
For further information, please contact

E-mail address	sales@aromatrading.com
Non-Emergency Telephone Number	+ 44 (0) 1908 334100

1.4. Emergency telephone number

Emergency Telephone	Guy's Hospital Poisons (00 44)(1 71) 6 35 91 91 Unit

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

May form combustible dust concentrations in air.

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)
SODIUM GLUCONATE 527-07-1	90 - 100%	208-407-7	-	-	-	-	-

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

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice In case of accident or if you feel unwell, seek medical advice immediately (show safety data sheet if possible). Keep victim under observation.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Get medical attention if symptoms occur.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms occur.

Skin contact IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if symptoms occur.

Ingestion	Rinse mouth thoroughly with water. Keep respiratory tract clear. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

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

Symptoms

Eyes	Solid particles trapped behind the eyelid may cause abrasive damage,.

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

Note to doctors	Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Dry chemical, CO2, alcohol-resistant foam or water spray.
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	When heated and in case of fire, toxic vapours/gases may be formed. Avoid generation of dust. Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
Hazardous combustion products	Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

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. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid generation of dust.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions	See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Use non-sparking tools. Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like. Pick up and transfer to properly labelled containers.

After cleaning, flush away traces with water. Clean contaminated surface thoroughly.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with eyes, skin and clothing. Do not breathe dust. Avoid generation of dust. Dust can form an explosive mixture with air. Do not eat, drink or smoke when using this product.

General hygiene considerations Do not breathe dust. Avoid contact with skin, eyes or clothing. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Take precautionary measures against static discharge. Electrical installations / working materials must comply with the technological safety standard.

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

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

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering controls No information available.

Personal protective equipment

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

Hand protection Wear suitable gloves. Gloves must conform to standard EN 374.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
	Rubber (natural, latex)		< 480 minutes

Skin and body protection Wear appropriate clothing to prevent reasonably probable skin contact.

Respiratory protection Use appropriate respiratory protection.
Particulate filter, type P2. Particulates filter conforming to EN 143.

General hygiene considerations Do not breathe dust. Avoid contact with skin, eyes or clothing. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Solid
Appearance Dusty powder granules Crystalline powder
Colour White/off-white
Odour Slight. To. Odourless.
Odour threshold No information available

Property	Values	Remarks • Method
Melting point / freezing point		Decomposes before melting.
Initial boiling point and boiling range		No information available.
Flammability		No information available.
Flammability Limit in Air		No information available.
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point		Not applicable.
Autoignition temperature	> 550 °C	No information available.
Decomposition temperature	170 - 220 °C	
pH	6.5 - 7.5	solution (10 %).
pH (as aqueous solution)		No information available.
Kinematic viscosity		No information available.
Dynamic viscosity		Not applicable.
Water solubility	Miscible with water ~ 590 g/l @ 25 °C	
Solubility(ies)	slightly soluble Alcohol	
Partition coefficient	log Pow: -5.99	
Vapour pressure		Not applicable.
Relative density		No information available.
Bulk density	600 - 1000 kg/m³	
Liquid Density	No information available	No information available
Relative vapour density		Not applicable.
Particle characteristics		No information available.

Particle Size	0.15 - 1.18 mm
Particle Size Distribution	No information available
Explosive properties	Dust can form an explosive mixture with air
Oxidising properties	Not applicable

9.2. Other information

Molecular weight	218.14
Evaporation rate	Not applicable

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 Dust may form explosive mixture with air.

10.4. Conditions to avoid

Conditions to avoid Protect from moisture.

10.5. Incompatible materials

Incompatible materials Oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation Inhalation of dust in high concentration may cause irritation of respiratory system.

Eye contact Solid particles trapped behind the eyelid may cause abrasive damage,.

Skin contact Non-irritating during normal use.

Ingestion May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

Acute toxicity

Numerical measures of toxicity
No information available

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
SODIUM GLUCONATE	> 2000 mg/kg (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.

SODIUM GLUCONATE (527-07-1)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 404: Acute Dermal Irritation/Corrosion	Rabbit	Dermal			non-irritant Gluconic Acid

Serious eye damage/eye irritation Based on available data the classification criteria are not met.

SODIUM GLUCONATE (527-07-1)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 405: Acute Eye Irritation/Corrosion	Rabbit	eye			non-irritant Gluconic Acid

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.

Component Information
SODIUM GLUCONATE (527-07-1)

Method	Species	Results
OECD Test No. 471: Bacterial Reverse Mutation Test	in vitro	Negative
	in vivo	Negative

Carcinogenicity Based on available data the classification criteria are not met.

Component Information
SODIUM GLUCONATE (527-07-1)

Method	Species	Results
		Did not cause cancer in laboratory animals.

Reproductive toxicity Based on available data the classification criteria are not met.

SODIUM GLUCONATE (527-07-1)

Method	Species	Results
		This product does not contain any known or suspected reproductive hazards

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 The environmental impact of this product has not been fully investigated.

SODIUM GLUCONATE (527-07-1)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test	Oryzias latipes (Ricefish)	LC50	> 100 mg/L	96 hours	No toxicity up to the limit of solubility
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	> 1000 mg/L	48 hours	No toxicity up to the limit of solubility
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Desmodesmus subspicatus	EC50	< 100 mg/L	72 hours	No toxicity up to the limit of solubility
DIN 38 412 Part 8	Pseudomonas putida			16 hours	

12.2. Persistence and degradability

Persistence and degradability Readily biodegradable.

SODIUM GLUCONATE (527-07-1)

Method	Exposure time	Value	Results
OECD Test No. 301D: Ready Biodegradability: Closed Bottle Test (TG 301 D)	28 days	Biodegradation 89 %	Readily biodegradable
OECD 311	35 days	Biodegradation 100 %	Readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation Not likely to bioaccumulate.

Chemical name	Partition coefficient
SODIUM GLUCONATE	-5.99

12.4. Mobility in soil

Mobility in soil Miscible with water.

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 Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

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	No
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	No
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	No
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	No
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

National regulations

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
KECI	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:

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		

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Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

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)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGL(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)
U.S. 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

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 given on this material health and safety sheet is not a warranty as to the performance or suitability of the product. The information must be regarded only as a description of the health, safety and environmental requirements for that product. The information contained herein is true an~d accurate to the best of our knowledge and belief, but does not claim to be all inclusive.
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