

MATERIAL SAFETY DATA SHEET

Sodium Gluconate — Technical/Construction Grade

16-section safety data sheet for GAC-SG-TECH (GHS format)

Product Code	GAC-SG-TECH	CAS No.	527-07-1
Product Grade	Sodium Gluconate — Technical/Construction Grade	Physical Form	White or yellow crystalline powder
Supplier	Green Agrochem	Email	info@greenagrochem.com

SECTION 1: IDENTIFICATION

Product Identifier	Sodium Gluconate — Technical/Construction Grade (GAC-SG-TECH)
Synonyms	Sodium salt of gluconic acid; Sodium 2,3,4,5,6-pentahydroxyhexanoate
Recommended Use	Concrete admixture, industrial chelating agent, electroplating and film manufacturing applications
Supplier	Green Agrochem www.greenagrochem.com info@greenagrochem.com
Source Document	Sodium Gluconate — Technical/Construction Grade (GAC-SG-TECH) Technical Data Sheet

SECTION 2: HAZARD(S) IDENTIFICATION

GHS Classification	This product has no classification under CLP/GHS based on available data
Label Elements	This product has no label elements
Other Hazards	Not identified as a PBT substance

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Main Component	Sodium Gluconate (C ₆ H ₁₁ NaO ₇), CAS 527-07-1
Purity	≥ 98%
pH	6.5 – 7.8
Heavy Metal / Lead / Arsenic	Heavy Metal ≤ 0.002%; Lead ≤ 0.0002%; Arsenic ≤ 0.0002%

SECTION 4: FIRST-AID MEASURES

Skin Contact	Wash thoroughly with soap and water. May cause irritation and redness for susceptible individuals
Eye Contact	Flush immediately with water or physiological saline for 15 minutes. Get prompt medical attention. May cause mild irritation; eyes may water profusely
Ingestion	Get medical attention if adverse effects occur. May cause irritation if large amounts are swallowed — nausea, stomach pain, vomiting or diarrhea may occur
Inhalation	If adverse effects occur, get medical attention. May cause respiratory irritation, shortness of breath, sneezing and coughing in susceptible individuals

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media	Water, carbon dioxide, foam, halogen
Special Hazards	In combustion, emits toxic fumes of carbon dioxide/carbon monoxide. Dust in air can be an explosion hazard
Advice for Firefighters	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions	Wear suitable protective clothing. Do not create dust
Environmental Precautions	Do not discharge into drains or rivers
Clean-up Methods	Collect as much as possible for use or disposal in a properly labeled container. Flush remainder into normal drainage with copious water

SECTION 7: HANDLING AND STORAGE	
Handling	Wear suitable protective clothing. Ensure sufficient ventilation. Avoid generating dust
Storage	Store in a cool, well-ventilated area. Keep away from direct sunlight. Avoid contact with water and humidity
Suitable Packaging	Paper, plastic or poly-lined bags or drums

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION	
Workplace Exposure Limits	Respirable dust: UK 4 mg/m3 (8hr TWA); USA 5 mg/m3 (8hr TWA)
Engineering Controls	Provide sufficient ventilation of the area
Respiratory Protection	Respirator with particle filter
Eye / Skin Protection	Safety goggles and protective gloves/clothing; provide eye wash station and safety shower

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES	
Appearance	Granular to fine crystalline powder, white to tan
Odor	Odorless
pH (10% aq. solution)	6.8 – 7.2
Melting Point	192 – 202°C
Relative Density	945 kg/m3 (granular); 705 kg/m3 (powder)
Solubility in Water	Highly soluble, 5.9 x 10 ⁵ mg/L @ 25°C
Decomposition Temperature	> 210°C
Molecular Weight	218.13 g/mol
Flammability	Not applicable / non-oxidizing

SECTION 10: STABILITY AND REACTIVITY	
Reactivity	Stable under recommended transport and storage conditions
Chemical Stability	Stable under normal conditions
Conditions to Avoid	Direct sunlight, moist air and humidity
Incompatible Materials	Strong oxidizers
Hazardous Decomposition Products	In combustion, emits toxic fumes of carbon dioxide/carbon monoxide

SECTION 11: TOXICOLOGICAL INFORMATION	
Acute Toxicity	Oral (Rat) LD50 > 2000 mg/kg; Intravenous (Rabbit) LD50 7630 mg/kg
Symptoms — Skin/Eyes	May cause irritation and redness for susceptible individuals; eyes may water profusely
Symptoms — Ingestion/Inhalation	Ingestion of large amounts may cause nausea, stomach pain, vomiting, diarrhea; inhalation may cause respiratory irritation, shortness of breath
Carcinogenicity / Mutagenicity / Reproductive Toxicity	Not applicable — no data indicating hazard

SECTION 12: ECOLOGICAL INFORMATION	
Ecotoxicity	Fish 96H LC50 > 1000 mg/L; Daphnid 48H LC50 > 1000 mg/L; Green Algal 96H EC50 > 1000 mg/L; Bacteria EC50 > 5000 mg/L
Persistence and Degradability	Readily and rapidly biodegradable (98% after 2 days)
Bioaccumulative Potential	Product does not bioaccumulate
Mobility in Soil	Soluble in water
PBT Assessment	Not identified as a PBT substance

SECTION 13: DISPOSAL CONSIDERATIONS	
Waste Treatment	In accordance with applicable regulations; normally can be flushed down sewers in accordance with local requirements
Packaging Disposal	Contaminated containers must not be treated as household waste; recycle where practical via a licensed contractor

SECTION 14: TRANSPORT INFORMATION	
Transport Classification	This product does not require classification for transport. Not dangerous, not hazardous, not restricted for transport by air, sea or road

SECTION 15: REGULATORY INFORMATION	
Regulatory Status	Exemption from registration under REACH in accordance with Annex V. Not classified in Europe (Risk/Safety Phrases). No classification under CLP
Chemical Safety Assessment	A formal chemical safety assessment has not been carried out for this substance by the supplier

SECTION 16: OTHER INFORMATION	
Revision No.	1.0
Prepared By	Green Agrochem — Technical Documentation
Disclaimer	The information in this Safety Data Sheet is based on data believed to be accurate at the time of preparation, compiled with reference to industry SDS data for sodium gluconate. Green Agrochem makes no warranty, express or implied, regarding its accuracy or completeness, and assumes no liability for any damage resulting from its use. Users should conduct their own evaluation to determine suitability for a specific purpose.