


SAFETY DATA SHEET	
Tri Sodium Citrate, Anhydrous	MSDS No. Page 1 of 8

Complying with 1907/2006/EEC Regulation of 18 December 2006 ("REACH Regulation") and REGULATION (EC) No 1272/2008 (CLP)

Section 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name: Tri Sodium Citrate, Anhydrous

Trade Name: Tri Sodium Citrate, Anhydrous

Synonyms: Citric acid trisodium salt dehydrate, Sodium citrate tribasic dehydrate, Trisodium citrate Anhydrous

Chemical formula: C₆H₅Na₃O₇·2H₂O

Product type: White crystals

CAS number: 68-04-2

EC number: 200-675-3 (anhydrous)

E-Number: E-331

REACH registration no(s): 01-2119457027-40-0001

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

1. Adjusts pH control (in combination with Citric Acid) in the food, beverage and pharmaceutical industries.
2. Used as an anticoagulant agent in meat industry.
3. Stabilizes emulsified fat, complexes calcium ions in cheese industry.
4. Tri Sodium Citrate Anhydrous is a bio-degradable detergent builder.

1.3 Details of the supplier of the safety data sheet

Company/undertaking identification

Gadot Biochemical Industries LTD.

117 Hahistadrut Ave.

POB 10636

Haifa Bay 26118, Israel

Tel: +972-4-8461-555

Fax: +972-4-8461-560

E-mail address of person responsible for this SDS: N/A

1.4 Emergency telephone number

Emergency telephone number (including hours of operation): +972-4-8461-555


Section 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance to Regulation (EC) No. 1272/2008 (CLP/GHS)

Product name	GHS Classification
Tri Sodium Citrate, Anhydrous	Not classified

Classification according to Directive 67/548/EEC (DSD) or 1999/45/EC

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Product name	EU Classification
Tri Sodium Citrate, Anhydrous	Not classified

2.2 Label elements

Labeling in accordance with Regulation 1272/2008 (CLP)

Hazard pictograms: Not required

Signal word: Not required

Hazard statements: Not classified

Precautionary Statements: Not classified

2.3 Other hazard

N/A

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation:

Product/ Ingredient name	Identifiers	%	EU Classification	GHS Classification
Tri Sodium Citrate, Anhydrous	CAS number: 68-04-2 EC number: 200-675-3 (anhydrous)	100	-	-

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in section 8.

See section 16 for the full text of the H-statements and R-phrases declared above.

Section 4. FIRST AID MEASURES

4.1 Description of first aid measures

Eyes contact: In case of contact with eyes rinse opened eyes under running water for at least 15 minutes and seek medical advice.


Skin contact: In case of contact with skin wash off immediately with mild soap and plenty of water for at least 15 minutes, and seek medical advice.

Inhalation: Remove the casualty into fresh air and keep him calm. Apply artificial respiration if necessary and get medical attention immediately.

Ingestion: If large quantities of this material are swallowed, call a physician immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If victim is conscious give water to drink.

4.2 Most important symptoms and effects, both acute and delayed

Causes irritation of the respiratory tract and nasal mucous membranes. May be harmful if inhaled. May be harmful if swallowed. Causes tingling/irritation of the skin. Causes irritation of eye tissue.

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4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: No specific antidote, contact Poisons Information Center. All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Special treatments: No specific treatment

Section 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable: Dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Not suitable: N/A

5.2 Special hazards arising from the substance or mixture

Under fire emits irritating and toxic fumes.

5.3 Advice for firefighters

Special protective equipment for fire fighters: Fire fighters should wear full protective clothing and self-contained breathing apparatus in positive pressure mode.

Remark: Move containers from fire area if possible to do so without risk.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing. Avoid contact with skin eyes and inhalation of vapors. Remove all sources of ignition. Ventilate area of spill.

6.2 Environmental precautions

Do not let this chemical enter the environment. Keep away from drains, surface and ground water.

6.3 Methods and materials for containment and cleaning up

Mark danger area. Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust. In case of dust production: keep upwind. Clean contaminated surfaces with an excess of water.

6.4 Reference to other sections


See Sections 1 for emergency contact information

Section 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Handling: Avoid contact with eyes, skin and clothing. Do not breathe dust wash thoroughly after handling.

Hygiene Measures: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.

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See also section 8 for additional information measures.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Keep containers tightly closed, in dry, cool and well-ventilated place. Keep away from heat, sparks and open flame. Keep away from combustible and flammable materials. Do not store together with strong acids, reducing agents and strong oxidizing agents.

7.3 Specific end use(s): N/A

Section 8: EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limit values: N/A

Derived effects levels:

Recommended occupational and consumer exposure limit values (following from the preformed CSA):
N/A

8.2 Exposure controls

Engineering Measures

Use process enclosures, local exhaust ventilation, or others engineering controls to keep airborne levels below recommend exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Person Protective measures

Respiratory protection: Dust respirator. Be sure to use an approved/certified or equivalent equipment. Wear appropriate respirator when ventilation is inadequate.

Hand protection: Wear chemically rubber or polyethylene gloves. Do not use PVA gloves.

Eye protection: Wear protective safety glasses.


Skin protection: Wear appropriate long-sleeved clothing to minimize skin contact.

Environmental exposure controls: Not available

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: White crystals
 Odour: Practically odorless
 Odour threshold: N/A
 pH: 7.5-9 at 29.4 g/l at 25°C
 Melting point/Freezing point: >300°C
 Initial boiling point/boiling range: N/A
 Flash point: N/A
 Evaporation rate: N/A
 Flammability: N/A

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Upper/lower flammability or explosive limits: N/A
Vapor pressure: N/A
Vapor density (air=1): N/A
Relative Density: N/A
Solubility(ies): In water: 71 gr/100 ml at 25°C; In ethanol: insoluble.
Partition coefficient Octanol/Water: N/A
Auto-ignition temperature: 345°C
Decomposition temperature: N/A
Viscosity: N/A
Explosive properties: N/A
Oxidizing properties: N/A

9.2 Other information:

Molecular weight: 294.11 gr/mol
Taste: Saline taste

Section 10: STABILITY AND REACTIVITY

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients

10.2 Chemical stability

The product is stable under normal handling and storage conditions described in section 7.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

Keep away from heat, sparks and open flame.

10.5 Incompatible materials

Strong acids, reducing agents and strong oxidizing agents.

10.6 Hazardous Decomposition products:

N/A

Section 11: TOXICOLOGICAL INFORMATION


11.1 Information on toxicological effects

Acute toxicity: N/A

Skin corrosion/irritation: N/A

Serious eye damage/irritation: N/A

Respiratory or skin sensitization: N/A

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Germ cell mutagenicity: Not listed in mutagenicity class (EC, MAK)

Carcinogenicity: This product does not contain any substances that are considered by IARC, EC, TLV, MAK to be “probable” or “suspected” human carcinogens.

Reproductive toxicity: Not listed in teratogenicity class (EC, MAK)

Specific target organ toxicity (single exposure): N/A

Specific target organ toxicity (repeated exposure): N/A

Aspiration hazard: N/A

Other effects: May be harmful if inhaled. May be harmful if swallowed. Causes irritation of eye tissue. Causes tingling/irritation of the skin. Causes irritation of the respiratory tract and nasal mucous membranes.

Section 12: ECOLOGICAL INFORMATION

12.1 Toxicity: N/A

12.2 Persistence and Degradability: N/A

12.3 Bioaccumulative potential: N/A

12.4 Mobility in soil

Soil/water partition coefficient (Koc): N/A

12.5 Results of PBT and vPvB assessment

Not available

12.6 Other adverse effects None

Section 13: DISPOSAL CONSIDERATIONS

Methods of disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations. Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber. Obtain the consent of pollution control authorities before discharging to wastewater treatment plants.

Hazardous waste: Waste material code (Flanders): 213

Section 14: TRANSPORT INFORMATION

International transport regulations


14.1 Un number:

ADR/RID: -

IMDG: -

IATA: -

14.2 Proper shipping name:

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ADR/RID: Not regulated

IMDG: Not regulated

IATA: Not regulated

14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

14.4 Packing group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental hazard

Marine Pollutant: No

14.6 Special precautions for user

Not available

14.7 Transport to bulk according to Annex II of MARPOL 79/78 and the IBC Code

Not available

Section 15: REGULATORY INFORMATION

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

EU Directives 67/548/EEC and 1999/45/EC (including amendments)

EU Regulation(EC) No.1907/2006 (REACH), No 1272/2008 (CLP)

15.2 Chemical safety assessment

No data available

Section 16: OTHER INFORMATION

Training advice: Before using/handling the product one must read carefully present MSDS.

Recommended restriction: N/A

Key Legend Information:

ACGIH- American Conference of Governmental Industrial Hygienists

OSHA- Occupational Safety and Health Administration

NTP- National Toxicology program

IARC- International Agency for Research on Cancer

ND- Not Determined

N/A- Not available


R-phrases- Risk phrases

S-phrases- Safety phrases

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