

SAFETY DATA SHEET

Sodium citrate dihydrate (granular)

This SDS is valid for all grades and catalog #s

1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF SUPPLIER

Product Identifier: High Purity Chemicals
Synonyms: Trisodium citrate dihydrate; sodium citrate; citric acid tridosium salt dihydrate; 2-hydroxy-1,2,3-propanetricarboxylic acid trisodium salt;
Other means of identification: CAS No. 6132-04-3
Recommended use of the chemical and restrictions on use:

Supplier Details:

Pharmco Products, Inc.
58 Vale Road, Brookfield,
CT 06804, USA.
Tel: 203.740.3471
Fax: 203.740.3481
CCN17213

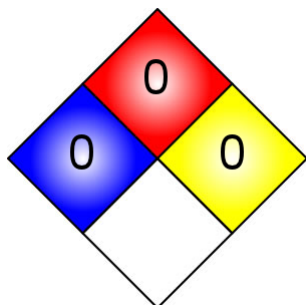
Emergency Contact: CHEMTREC: 1.800.424.9300 (USA) / +1.703.527.3887 (International)

2. HAZARDS IDENTIFICATION

Emergency Overview:

Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

NFPA



GHS Classification(s)

Not a dangerous substance/mixture according to GHS standards.

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+1.703.527.3887 (INT)

Other hazards which do not result in classification:

Potential Health Effects:

Organ	Description
Eyes	May irritate eyes.
Ingestion	May be harmful if ingested.
Inhalation	May be harmful if inhaled. Possible respiratory tract irritation may occur.
Skin	May cause skin irritation if exposed.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical identity: Sodium citrate dihydrate
Common name / Synonym: Trisodium citrate dihydrate; sodium citrate; citric acid trisodium salt dihydrate; 2-hydroxy-1,2,3-propanetricarboxylic acid trisodium salt;
CAS number: 6132-04-3
ICSC number: 1219

% Weight	Material	CAS
100	Sodium citrate dihydrate	6132-04-3

4. FIRST AID MEASURES

General advice

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Skin

Wash skin with soap and copious amounts of water.

Inhalation

Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Eyes

Flush eyes with water as a precaution.

Ingestion

Rinse mouth with plenty of water. Never give anything by mouth to an unconscious person. Contact a physician.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

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Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

No data available.

Special protective equipment and precautions for firefighters:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep unopened containers cool by spraying with water.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Do not inhale vapors, mist, or gas. Avoid dust formation.

Environmental precautions:

Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains.

Methods and materials for containment and cleaning up:

Sweep up and place material in a convenient waste disposal container. Keep container closed.

7. HANDLING AND STORAGE

Precautions for safe handling:

Provide proper exhaust ventilation system in areas where dust forms. Take normal fire prevention measures.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a cool, dry and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters, e.g., occupational exposure limit values or biological limit values:

Occupational Exposure Limits

Component	Source	Type	Value	Note
Sodium citrate dihydrate	/		No exposure limit.	

Individual protection measures, such as personal protective equipment:

Respiratory protection:

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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Hand protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Use equipment approved by appropriate government standards, such as NIOSH (US) or EN166 (EU) Maintain eye wash fountain and quick-drench facilities in work area.

Skin and body protection:

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Solid. (Crystals solid. Crystalline powder. Granular solid.)
pH	8
Freezing point	> 300 °C (> 572 °F)
Initial boiling point and boiling range	165°C (329°F)
Evaporation rate	Specific data not available - expected to be rapid.
Solubility(ies)	completely soluble in water. insoluble in alcohol.
Partition coefficient n-octanol/water(ies)	No Data Available.
Decomposition temperature	165°C (329°F)
Formula (SODIUM CITRATE DIHYDRATE)	C ₆ H ₅ Na ₃ O ₇ · 2H ₂ O
Molecular Weight (SODIUM CITRATE DIHYDRATE)	294.10 g/mol

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No data available
Conditions to avoid (e.g., static discharge, shock or vibration)	Excess heat, dust generation, incompatible materials
Incompatible materials	Strong oxidizing agents
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions - Carbon oxides, Sodium oxides.

11. TOXICOLOGICAL INFORMATION

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Product Summary:

No data available for the teratogenic, mutagenic, or reproductive toxicity effects of the product.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Other Hazards

Organ	Description
Eyes	May irritate eyes.
Ingestion	May be harmful if ingested.
Inhalation	May be harmful if inhaled. Possible respiratory tract irritation may occur.
Skin	May cause skin irritation if exposed.

12. ECOLOGICAL INFORMATION

13. DISPOSAL CONSIDERATIONS

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:

Recycle to process, if possible. Consult your local or regional authorities.

14. TRANSPORT INFORMATION

Description of waste residues and information on their safe handling and methods of disposal:

UN number	Not a dangerous good.
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IMDG

UN-Number: Not a dangerous good.

Marine pollutant: No

IATA

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UN-Number: Not a dangerous good.

15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question:

All ingredients are on the following inventories or are exempted from listing

Country	Notification
Australia	AICS
Canada	DSL
China	IECS
European Union	EINECS
Japan	ENCS/ISHL
Korea	ECL
New Zealand	NZIoC
Philippines	PICCS
United States of America	TSCA

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

CERCLA

No chemicals in this material with known CAS numbers are subject to the reporting requirements of CERCLA

Pennsylvania Right To Know Components

Trisodium citrate CAS-No. 6132-04-3

New Jersey Right To Know Components

Acetone CAS-No. 67-64-1 Revision Date 2007-03-01

16. OTHER INFORMATION:

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INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS

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