SAFETY DATA SHEET FICHE SIGNALÉTIQUE

| ACCOUNT NO NOM DE COMPTE | DATE | PAGES | | | | | |
|---------------------------------|--|-------|--|--|--|--|--|
| 5916400 | 10/20/2022 | 8 | | | | | |
| CATALOG NO. NO. DE CATALOGUE | DESCRIPTION | | | | | | |
| S279500 | SODIUM CITRATE GRAN CERT 500G | | | | | | |
| | CUSTOMER ORDER NO. VOTRE NO. DE COMMANDE | | | | | | |
| CREDIT CARD 10/19 | | | | | | | |

NIPISSING UNIVERSITY 100 COLLEGE DRIVE NORTH BAY ON P1B 8L7 ATTN: SAFETY OFFICER

Fisher Scientific

Customer Service Centre / Service à la clientèle 112 Colonnade Road Ottawa, ON K2E 7L6

Website / Site internet : fishersci.ca Email / Courriel : help@thermofisher.com

Voice / Voix: 800-234-7437

Important Safety Information - DO NOT DISCARD. Renseignements importants pour la securite - NE PAS JETER.

For each chemical, a safety data sheet will be sent only on the first shipment unless there is a revision to the data sheet.

Une fiche signaletique de chaque produit chimique sera envoyee lors de la premiere livraison seulement sauf si elle a ete revisee. If name and/or address have changed contact your Fisher sales representative of your local Fisher branch.

En cas de changement de nom et/ou d'adresse, contracter votre representant des ventes Fisher, ou votre succursale locale Fisher.

Required safety data sheets not included in this mailing will follow under a separate cover.

Toutes fiches signaletiques demandees et non incluses dans cet envoi suivront sous pli separe.





SAFETY DATA SHEET

Creation Date 09-Dec-2009 Revision Date 24-Dec-2021 Revision Number 5

1. Identification

Product Name Sodium Citrate Dihydrate

Cat No.: S279-3; S279-10; S279-10LC; S279-50; S279-50KB; S279-275LB;

S279-500; S279-500LC;

CAS No 6132-04-3

Synonyms 2-Hydroxy-1,2,3-Propanetricarboxylic Acid Trisodium Salt.

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100

Emergency Telephone Number CHEMTREC®, Inside the USA: 800-424-9300

CHEMTREC®, Outside the USA: 001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Combustible dust Yes

Label Elements

Signal Word

Warning

Hazard Statements

May form combustible dust concentrations in air

Precautionary Statements

Storage

Store in a well-ventilated place. Keep container tightly closed

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

| Component | CAS No | Weight % | |
|----------------------------|-----------|----------|--|
| Citrate, sodium, dihydrate | 6132-04-3 | >95 | |
| Sodium citrate | 68-04-2 | - | |

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention if symptoms occur.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur. If not breathing,

give artificial respiration.

Do NOT induce vomiting. Get medical attention immediately if symptoms occur. Ingestion

Most important symptoms and

effects

No information available.

Notes to Physician Treat symptomatically

Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

Flash Point No information available Method -No information available

Autoignition Temperature 500 °C / 932 °F

Explosion Limits

No data available Upper Lower No data available Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. Dust can form an explosive mixture with air. Fine dust dispersed in air may ignite.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO2). Sodium oxides.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health Flammability Instability Physical hazards
1 0 N/A

6. Accidental release measures

Personal Precautions

Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin and eyes. Use

personal protective equipment as required.

Environmental Precautions No special environmental precautions required. See Section 12 for additional Ecological

Information.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Avoid dust formation. **Up**

7. Handling and storage

Handling Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and

inhalation. Avoid dust formation.

Storage. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible

Materials. Strong oxidizing agents. Strong reducing agents. Acids. Bases.

8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure

limitsestablished by the region specific regulatory bodies.

Engineering Measures Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations

and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Skin and body protectionWear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection No protective equipment is needed under normal use conditions.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical StateSolidAppearanceWhiteOdorOdorless

Odor ThresholdNo information availablepH8.4 @ 20°C 5% aq. solution

8.4 @ 20°C 5% aq. solution >300 °C / 572 °F

Melting Point/Range>300 °C / 572 °FBoiling Point/RangeNo information availableFlash PointNo information available

Evaporation Rate Not applicable

Flammability (solid,gas)

No information available

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information available

Vapor Density Not applicable

Specific Gravity

No information available

Sodium Citrate Dihydrate

Soluble in water

Not applicable

> 230°C

No data available 500 °C / 932 °F

Solubility
Partition coefficient; n-octanol/water
Autoignition Temperature

Decomposition Temperature
Viscosity

Molecular Formula C6 H5 Na3 O7 . 2 H2 O

Molecular Weight 294.09

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products. Excess heat. Avoid dust formation.

Incompatible Materials Strong oxidizing agents, Strong reducing agents, Acids, Bases

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Sodium oxides

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Component Information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|----------------------------|---------------------------|---------------------------------|-----------------|
| Citrate, sodium, dihydrate | LD50 = 5400 mg/kg (Mouse) | LD50 = > 2000 mg/kg (Rat) (OECD | Not listed |
| | (OECD 401) | 402) | |
| Sodium citrate | 5400 mg/kg (Mouse) | Not listed | Not listed |

Toxicologically Synergistic No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation May cause skin, eye, and respiratory tract irritation

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS No | IARC | NTP | ACGIH | OSHA | Mexico |
|----------------------------|-----------|------------|------------|------------|------------|------------|
| Citrate, sodium, dihydrate | 6132-04-3 | Not listed |
| Sodium citrate | 68-04-2 | Not listed |

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known
STOT - repeated exposure None known

Aspiration hazard No information available

Sodium Citrate Dihydrate

Symptoms / effects,both acute and No information available

delayed

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

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| | Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|---|----------------|------------------|---------------------------|---------------------------|---------------------|
| Γ | Sodium citrate | Not listed | 0 / | EC50 1800 - 3200 mg/L 8 h | 5 , |
| | | | 96h (Poecilia reticulata) | | 48h (Daphnia magna) |
| ı | | | | | |

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its water solubility.

13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

DOTNot regulatedTDGNot regulatedIATANot regulatedIMDG/IMONot regulated

15. Regulatory information

United States of America Inventory

| Component | CAS No | CAS No TSCA TSCA Inventory notification - Active-Inactive | | TSCA - EPA Regulatory Flags |
|----------------------------|-----------|---|--------|--------------------------------|
| Citrate, sodium, dihydrate | 6132-04-3 | • | - | - |
| Sodium citrate | 68-04-2 | Χ | ACTIVE | - |

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|----------------------------|-----------|-----|------|-----------|-------|------|------|------|-------|----------|
| Citrate, sodium, dihydrate | 6132-04-3 | - | - | - | Х | Х | | Х | Х | - |
| Sodium citrate | 68-04-2 | Х | - | 200-675-3 | Х | Χ | Х | Х | Х | KE-20843 |

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

Sodium Citrate Dihydrate

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

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

| Component | CAS No | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|----------------------------|-----------|----------------|---------------------------------|------------------------------|--|
| Citrate, sodium, dihydrate | 6132-04-3 | Not applicable | Not applicable | Not applicable | Not applicable |
| Sodium citrate | 68-04-2 | Listed | Not applicable | Not applicable | Not applicable |

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|----------------------------|------------------------|---|--|-------------------------------|---------------------------------------|
| Citrate, sodium, dihydrate | 6132-04-3 | Not applicable | Not applicable | Not applicable | Not applicable |
| Sodium citrate | Sodium citrate 68-04-2 | | Not applicable | Not applicable | Not applicable |

16. Other information

Prepared By Regulatory Affairs

Thermo Fisher Scientific

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Creation Date 09-Dec-2009 Revision Date 24-Dec-2021

Revision Date 24-Dec-2021

Sodium Citrate Dihydrate

Print Date

24-Dec-2021

Revision Summary

This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS