

SPI Supplies Division

Structure Probe, Inc.

206 Garfield Ave., West Chester, PA 19380-4512 USA

Phone: 1-(610)-436-5400 Fax: 1-(610)-436-5755

sales@2spi.com

<http://www.2spi.com>

Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: November 13, 2017

SPI Catalog # 02617-AB

SPI-Chem™ Sodium Citrate tribasic dihydrate

Section 1.1: Identification

Chemical Name/Synonyms Sodium Citrate tribasic dihydrate

Product or Trade Name SPI-Chem™ Sodium Citrate tribasic dihydrate

CAS #'s 06132-04-3

Chemical Formula..... $C_6H_5Na_3O_7 \cdot 2H_2O$

Section 1.2: Relevant Uses/Restrictions

Laboratory chemical for synthesis of substances.

Section 1.3: Supplier of the Safety Data Sheet

SPI Supplies Division

Structure Probe, Inc.

206 Garfield Ave., West Chester, PA 19380-4512 USA

Phone: 1-(610)-436-5400 Fax: 1-(610)-436-5755

sales@2spi.com

<http://www.2spi.com>

Manufacturer's CAGE: 1P573

Section 1.4: Emergency telephone number

Emergencies

Contacting CHEMTREC:

24 Hour Emergency Use Only #'s...

Worldwide phone: 1-(703)-741-5970

Toll-free phone: 1-(800)-424-9300 USA + Canada only

Section 2: Hazard Identification

2.1 Classification of the substance

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Not a hazardous substance.

2.3 Other Hazards: None

Hazardous Material Information System USA

Health 0
Fire Hazard 0
Reactivity 0
Personal Protection

NFPA Rating (estimated)

Health 0
Flammability..... 0
Reactivity 0

Section 3: Composition

3.1 Substances:

Sodium Citrate tribasic dehydrate CAS# 06132-04-2 EC# 200-675-3
C₆H₅Na₃O₇·2H₂O
Molecular weight: 294.10

Section 4: First Aid Measures

4.1 Description of first aid measures:

If inhaled:

If inhaled, move person to fresh air. If not breathing, give artificial respiration.

In case of skin contact:

Wash off with soap and plenty of water.

In case of eye contact:

Flush eyes with plenty of water as a precaution.

If swallowed:

Never give anything by mouth to an unconscious person. Rinse mouth with water.

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

The most important known symptoms and effects are described in the labeling (Section 2.2) and/or in Section 11.

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

No data available.

Section 5: Fire Fighting Measures

5.1 Extinguishing media:

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

5.2 Special hazards arising from the substance or mixture:

No data available.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for fire-fighting if necessary.

Section 6: Accidental Release Measures

6.1 Personal precautions:

Avoid dust formation.
Avoid breathing vapors, mist, or gas.

6.2 Environmental precautions:

No special environmental precautions required.

6.3 Methods and material for containment and cleaning up:

Sweep up and shovel.
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections:

See Section 8 for Personal Protection.
See Section 13 for Disposal.

Section 7: Handling and Storage

7.1 Precautions for safe handling:

Protective measures:

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.
For precautions, see Section 2.2.

7.2 Conditions for safe storage, including any incompatibilities:

Deep container tightly closed in a dry and well-ventilated place.

7.3 Specific end uses:

Laboratory chemical for synthesis of substances.
This material is not being offered for clinical or diagnostic applications, agricultural uses or for human or animal consumption.

Section 8: Exposure Controls and Personal Protection

8.1 Control parameter and Personal Protection:

Workplace exposure limits: Contains no substances with occupational exposure limit values.

Biological limit values: No data available.

8.2 Exposure controls:

8.2.1 Appropriate engineering controls: Good general industrial hygiene practice.

8.2.2 Individual protection measures:

Eye/face protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) OR EN 166 (EU).

Skin protection: Handle with gloves. Nitrile rubber recommended. Use proper glove removal techniques to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practice. Wash and dry hands after use.

Body protection: Choose body protection in relation to the type, concentration, and amount of dangerous substances in the specific work-place.

Respiratory protection: Respiratory protection is not required. Where protection from nuisance levels of dusts is desired, use type N95 or type P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards, such as NIOSH (US) OR CEN (EU).

8.2.3 Environmental exposure controls:

No special environmental precautions required.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

Appearance: White powder

Odor: No data available.

Odor threshold: No data available.

pH: 7.5-9 at 29.4 g/l @ 25 °C (77 °F)

Melting point/Freezing point: > 300 °C (.572 °F)

Boiling point/Boiling point range: No data available.

Flash Point: No data available.

Evaporation rate: No data available.

Flammability (solid, gas): No data available.

Upper/lower flammability or explosive limits: No data available.

Vapor Pressure: No data available.

Vapor density: No data available.

Relative density: No data available.

Solubility: 29.4 g/l @ 20 °C (68 °F) – completely soluble.

Partition coefficient (n-octanol/water): No data available.

Auto-ignition temperature: No data available.

Decomposition temperature: No data available.

Viscosity: No data available.

Explosive properties: No data available.

Oxidizing Properties: No data available.

9.2 Other information: No data available.

Section 10: Stability and Reactivity

10.1 Reactivity: No data available.

10.2 Chemical Stability: Stable under recommended storage conditions.

10.3 Possibility of Hazardous Reactions: No data available.

10.4 Conditions to avoid: No data available.

10.5 Incompatible materials: Strong oxidizing agents.

10.6 Hazardous decomposition products:

Hazardous decomposition products formed under fire conditions: Carbon oxides, Sodium oxides.

Other decomposition products: No data available.

In the event of fire: See Section 5.

Section 11: Toxicological Information

Information on the likely routes of exposure

11.1 Information on toxicological effects

A. Acute toxicity:

Inhalation: No data available.

Dermal: No data available.

B. Skin corrosion/irritation:

No data available.

C. Serious eye damage/irritation:

No data available.

D. Respiratory or skin sensitization:

No data available.

E. Germ cell mutagenicity:

No data available.

F. Carcinogenicity:

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

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.

G. Reproductive toxicity:

No data available.

H. STOT-single exposure:

No data available.

I.. STOT-repeated exposure:

No data available.

J. Aspiration hazard:

No data available.

Additional information:

RTECS: Not available.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: Ecological Information

12.1 Toxicity: No data available.

12.2 Persistence and degradability: No data available.

12.3 Bio-accumulative potential: No data available.

12.4 Mobility in soil: No data available.

12.5 Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/ not conducted.

12.6 Other adverse effects: No data available.

Section 13: Disposal Considerations

13.1 Waste treatment methods:

Product: Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging: Dispose of as unused product.

Section 14: Transport Information

DOT: Not dangerous goods.

IATA: Not dangerous goods.

IMDG: Not dangerous goods.

Section 15: Regulatory Information

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

US Regulations:

SARA 302 Components:

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

SARA 311/312 Hazards:

No SARA Hazards.

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.

STATE Regulations:

Massachusetts Right to Know Components: None

Pennsylvania Right to Know Components: Trisodium citrate, CAS No. 6132-04-3

New Jersey Right to Know Components: Trisodium citrate, CAS No. 6132-04-3

California Prop. 65 Components: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

15.2 Chemical Safety Assessment: Chemical safety assessment not required / not conducted.

Date of preparation: 13 November 2017.

Abbreviations and acronyms

IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
CMRG: Chemical Manufacturer's Recommended Guidelines
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
AIHA: American Industrial Hygiene Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bio-accumulative and Toxicological
vPvB: very Persistent and very Bio-accumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety Health
ATE: Acute Toxicity Estimates
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
STEL: Short Term Exposure Limit
CEIL: Ceiling

Section 16: Other Information

Disclaimer of Liability:

Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such medical device use required by US FDA (Food and Drug Administration) regulation or any other statute. SPI Supplies and Structure Probe, Inc. make no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues of fluids.

The information and recommendations set forth above are taken from sources believed to be accurate as of the date hereof, however SPI Supplies and Structure Probe, Inc. make no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assume no liability to any user thereof. The information contained in this sheet does not constitute a hazard assessment and should not be used in place of the user's own assessment of work place risks as required by other health and safety legislation. Be aware of the Structure Probe, Inc. Copyright Policy. Structure Probe, Inc. grants a nonexclusive license to make unlimited copies of this safety sheet for internal use only. Quite obviously, this information would pertain only to this material when purchased from SPI Supplies as product from other sources, with other ingredients and impurity levels could have substantially different properties.