



Trisodium citrate dihydrate

SAFETY DATA SHEET

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 & 453/2010 (CLP)

Version: 1

Date: 25-2-2011

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

- 1.1 Product identifier**
Chemical Name Trisodium citrate dihydrate
Trade name Trisodium citrate dihydrate
CAS No. 6132-04-3
EINECS No. 200-675-3
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
Identified use(s) Personal care products, detergent/cleaning, household products, paper making.
Uses advised against No uses advised against
- 1.3 Details of the supplier of the Safety Data Sheet**
Company Identification Weifang Ensign Industry Co., Ltd.
No. 1567, Changsheng Street, Changle, Weifang, 262400, Shandong Province, China
Telephone 0086- 536-6298198
Fax No: 0086- 536-6234587
E mail sales@ensignworld.com
Contact name: Xiaoming Yi
- 1.4 Emergency telephone number** 0086- 536-6298198

SECTION 2: HAZARDS IDENTIFICATION

2.1 Substances

EC Classification No. 1272/2008: Not classified
EC Classification No. 67/548/EEC: Not classified

- 2.2 Other hazards** Not known
2.3 Additional Information Not known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Composition	%W/W	EC No.	CAS No
Trisodium citrate dihydrate	99.0 – 100.5	200-675-3	6132-04-3

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation	Move to fresh air. Rinse nose and mouth with water. If irritation persists, seek medical assistance.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, seek medical assistance.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and get medical attention if symptoms persist.
Ingestion	Do NOT induce vomiting Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person, seek medical assistance.
4.2 Most important symptoms and effects, both acute and delayed	No adverse effects expected but dust may cause mechanical irritation
4.3 Indication of immediate medical attention and special treatment needed	See 4.1 Eye contact

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media Suitable Extinguishing Media Unsuitable Extinguishing Media	Use alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
5.2 Special hazards arising from the substance or mixture	Oxides of carbon.
5.3 Advice for fire-fighters	In the event of fire, wear self-contained breathing apparatus and wear suitable protective clothing. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
5.4 Additional information	Explosion hazard from the generation of dust.



SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures	Use personal protective equipment.
6.2 Environmental precautions	Do not flush into surface water or sewage system.
6.3 Methods and material for containment and cleaning up	Sweep up or vacuum up spillage and collect in suitable container for disposal.
6.4 Reference to other sections	Section 8
6.5 Additional Information	Not known

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling	Avoid contact with skin and eyes. Use in well-ventilated areas. Do not breathe dust
7.2 Conditions for safe storage, including any incompatibilities Storage	Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.
Incompatible materials	Not known

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters	
8.1.1 Occupational Exposure Limits	No limits assigned
8.1.2 Biological limit value	No values assigned
8.2 PNECs and DNELs DNELs – Health PNEC-Environment	No true DNEL for systemic toxicity can be derived. Not calculated
8.3 Exposure controls	Minimise the risk of dust inhalation.
8.3.1 Appropriate engineering controls	Provide adequate ventilation
8.3.2 Personal protection equipment Eye/face protection	Safety glasses with side-shields
 Skin protection (Hand protection/ Other)	Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of workday. Protective gloves must satisfy the specifications of EU Directive 89/686/EEC and EN 374
 Respiratory protection	Provide adequate ventilation. Wear a respirator where dust level exceeds 10 mg/m3.



Thermal hazards

Not known

Hygiene measures

Do not smoke in the work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

8.3.3 Environmental Exposure Controls

Do not discharge to drain or water courses.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Solid, crystalline
Colour	White
Odour	Odourless
Melting Point	Substance decomposes above 150°C
Boiling point/boiling range:	decomposes without boiling
Flash Point	Not relevant
pH	7.6-9.0
Flammability (solid, gas)	Non flammable
Density (g/ml)	1.86 at 20°C, trisodium citrate pentahydrate
Solubility (Water)	400- 700 g/l at 20-25°C
Partition Coefficient (Log Kow: -n-Octanol/water)	Not known
Decomposition Temperature	Not relevant
Surface tension	Not surface active
Vapour pressure	Vapour pressure: negligible (read-across from citric acid)
Explosive properties	Not explosive
Oxidising properties	Not oxidising

9.2 Other information

Granulometry	Particle size of fine grade trisodium citrate dihydrate below 100 µm =1.7% the D50 of the fraction below 100 µm was at 53.24 µm.
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SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	
10.2 Chemical stability	Stable under normal conditions
10.3 Conditions to avoid	Exposure to heat and moisture.
10.4 Incompatible materials	Sodium nitrite, potassium nitrite
10.5 Hazardous Decomposition Product(s)	Oxides of carbon.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	
Ingestion LD50	5400 mg/kg bw (based on citric acid)
Inhalation	No data
Skin Contact. LD50 (dermal):	>2000 mg/kg bw
Skin corrosion/irritation	Can be an irritant
Eye Contact	Dust can be an irritant
Respiratory or skin sensitization –skin	Not a sensitizer
Mutagenicity	Not a mutagen
Carcinogenicity	Not a carcinogen
Reproductive toxicity	Not a reproductive toxin

11.2 Other information

Not known

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	Not regarded as dangerous for the environment.
12.2 Persistence and degradability	Biodegradable
12.3 Bioaccumulative potential	Not expected to bioaccumulate
12.4 Mobility in soil	Not applicable
12.5 Results of PBT and vPvB assessment	Not a PBT or a vPvB



12.6 Other adverse effects Not known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.
13.2 Additional Information Not known

SECTION 14: TRANSPORT INFORMATION

14.1 Land transport (ADR/RID) Not subject to transport regulations.
14.2 Sea transport (IMDG) Not subject to transport regulations.
14.3 Air transport (ICAO/IATA) Not subject to transport regulations.
14.4 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not subject to transport regulations.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture substance or mixture
15.1.1 EU regulations User to follow EU directives and regulations
Authorisations and/or restrictions on use Not applicable
15.1.2 National regulations User to follow national regulations

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: Version 1

LEGEND

DNEL Derived No Effect Level
PNEC Predicted No Effect Concentration

References:

Chemical Safety Report for citric acid and citrates
Regulations 1907/2006 (REACH), 1272/2008 & 453/2010 (CLP)
Directive 67/548/EEC & Directive 1999/45/EC

Risk Phrases and Safety Phrases

Not classified

Hazard statement(s) and Precautionary statement(s)

Not classified

Training advice: Ensure staff and workers receive adequate training with regular updates in the handling of chemicals

Additional Information

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