



Manufacturer: Weifang Ensign Industry Co., Ltd.
Produced for Niran Europe B.V.



Safety Data Sheet

According to 1907/2006/EC, Article 31

Revision: 15.06.2017

Version number 3

Superseded version: No 2/22.03.2014

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE

1.1 Product identifier

Trade name: Trisodium Citrate Dihydrate
CAS number: 6132-04-3
EC number: 200-675-3
REACH registration number: 01-2119457027-40-0007

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

Application of the substance / the preparation:

Intermediate
Formulation
Detergents and cleaning products
Agricultural applications
Personal care products
Paper industry
Construction products
Polymers and plastics
Oil industry
Textile industry
Paints and coatings
Photography products
Laboratory reagents
Water treatment
Treatment of metal surfaces
Medical devices

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Weifang Ensign Industry Co., Ltd.
No.1567, Changsheng Street, Changle, Weifang, Shandong, China
Tel: +86-536-6298125
Fax: +86-536-6234587 ext. 8125
E-mail: sales@ensignworld.com
www.ensignworld.com

Further information obtainable from:

B-Lands Consulting
WTC, 5 Place Robert Schuman, BP 1516
38025 Grenoble, FRANCE
Tel: +33 476 295 869
Fax: +33 476 295 870
Email: clients@reachteam.eu
www.reachteam.eu

1.4 Emergency telephone number(s):

NHS Direct: 111 (England and Scotland), 0845 46 47 (Wales)
National Poisons Information Service (NPIS): 0344 892 0111 (healthcare professionals only).
Ireland - National Poisons Information Centre: 01 837 9964 or 01 809 2566 (healthcare professionals only).

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SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

The substance is not classified according to the CLP regulation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008: Not applicable.

Hazard pictograms: Not applicable.

Signal word: Not applicable.

Hazard statements: Not applicable.

2.3 Other Hazards

Results of PBT and vPvB assessment

PBT: No PBT.

vPvB: No vPvB.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

CAS Number. Description.

6132-04-3 Trisodium Citrate Dihydrate

Identification number(s)

EC number: 201-069-1

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

After inhalation: Move patient to fresh air, if symptoms persist consult a doctor.

After skin contact: Immediately rinse with water.
If skin irritation continues, consult a doctor.

After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.



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SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents:

Use extinguishing measures appropriate to local circumstances and the environment.
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

Carbon dioxide (CO₂)
Carbon monoxide (CO)

5.3 Advice for firefighters

Protective equipment:

Wear fully protective suit.
Wear self-contained respiratory protective device.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

6.2 Environmental precautions: Do not allow to enter sewers/surface or ground water.

6.3 Methods and material for containment and cleaning up

Send for recovery or disposal in suitable receptacles.
Retrieve the product by mechanical means.

6.4 Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with eyes and skin.
Ensure good ventilation/exhaustion at the workplace.
Provide suction extractors if dust is formed.
Do not inhale dust / smoke / mist.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

Store in cool, dry conditions in well sealed receptacles.
Store only in the original receptacle.

Information about storage in one common storage facility: Not required.

7.3 Specific en use(s): No further relevant information available.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Ingredients with limit values that require monitoring at the workplace: Not required.

PNECs	
PNEC	0.44 mg/L (Water (Freshwater) (Citric acid)) 0.044 mg/L (Water (Marine Water) (Citric acid)) 1000 mg/L (Sewage Treatment Plant (STP)) (Citric acid)
PNEC	3.46 mg/kg sedim. dw (Sediment (Marine Water) (Citric acid)) 34.6 mg/kg sedim. dw (Sediment (Freshwater) (Citric acid))
PNEC	33.1 mg/kg soil dw (Soil) (Citric acid)

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures:

Do not get in eyes, on skin, or on clothing.
Wash hands before breaks and at the end of work.
Do not eat, drink, smoke or sniff while working.

Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.

Protection of hands:



Material of gloves: Rubber, PVC or neoprene gloves recommended.

Eye protection:



Tightly sealed goggles (EN 166).



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

General information

Appearance: Form:	Solid Crystalline
Colour:	White
Odour:	Odourless
Odour Threshold:	Not determined
pH-value (100 g/l):	7.6 - 9
Melting point/freezing point:	Not applicable
Initial boiling point/boiling range:	Not applicable
Flash point:	Not applicable
Flammability (solid, gaseous):	Product is not flammable
Ignition temperature:	Not determined
Decomposition temperature:	150 °C
Explosive properties:	Product does not present an explosion hazard
Explosion limits: Lower: Upper:	Not determined Not determined
Oxidising properties:	Not oxidising
Vapour pressure at 25 °C	2.21*10 ⁻⁶ Pa (Citric Acid)
Density: at 20 °C	1.86 g/cm ³ (trisodium citrate pentahydrate)
Relative density:	Not determined
Vapour density:	Not applicable
Evaporation rate	Not applicable
Solubility in / Mischibility with Water at 20 °C	400-700 g/l
Partition coefficient (n-octanol/water):	-0.2 to -1.8 log Pow (Citric Acid)
Viscosity: Dynamic: Kinematic:	Not applicable No further relevant information available

9.2 Other information No further relevant information available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity No data available

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: Stable at environment temperature.

10.3 Possibility of hazardous reactions No dangerous reactions known.



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10.4 Conditions to avoid:

Keep away from heat and direct sunlight.
Keep away from water/moisture, acids and bases.

10.5 Incompatible materials

Sodium nitrite, potassium nitrite.

10.6 Hazardous decomposition products

Carbon dioxide
Carbon monoxide

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: Based on available data, the classification criteria are not met.

LD/LC50 values:		
Oral	LD50	5400 mg/Kg bw (Mouse) (Citric Acid)
Dermal	LD50	>2000 mg/KG bw (Rat) (Citric Acid)

Primary irritant effect:

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitization: Based on available data, the classification criteria are not met.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity:	
LC50/48h	440 mg/L (Fish) (Citric Acid)
NOEC	425 mg/L (Algae) (Citric Acid)
LC50/24h	1535 mg/L (Daphnia Magna) (Citric Acid)

12.2 Persistence and degradability: Readily biodegradable.

12.3 Bioaccumulative potential: Does not accumulate in organisms.

12.4 Mobility in soil pKa: 3.13, 4.76 and 6.4 at 25 °C



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12.5 Results of PBT and vPvB assessment

PBT: No PBT.

vPvB: No vPvB.

12.6 Other adverse effects: No further relevant information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Recommendation: Must be specially treated adhering to official regulations.

Uncleaned packaging recommendation:

Disposal must be made according to official regulations.

Packaging that may not be cleansed must be disposed of in the same manner as the product.

SECTION 14: TRANSPORT INFORMATION

14.1 UN Number

ADR, ADN, IMDG, IATA Not applicable.

14.2 UN proper shipping name

ADR, ADN, IMDG, IATA Not applicable.

14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA Not applicable.

14.4 Packing group

ADR, ADN, IMDG, IATA Not applicable.

14.5 Environmental hazards

Marine pollutant: No.

14.6 Special precautions for user Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

SECTION 15: REGULATORY INFORMATION

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

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment: A Chemical Safety Assessment has been carried out.

SECTION 16: OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods



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IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

*** Data compared to the previous version altered.**

Classification and labelling according to Directive 67/548/EEC in section 2 has been removed.