



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



Safety Data Sheet

According to 1907/2006/EC, Article 31 and Regulation (EU) No. 2020/878

Revision: 18.09.2023

Version number 5

Superseded version: No 4/11.05.2021

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

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Further information obtainable from:

B-Lands Consulting

WTC, 5 Place Robert Schuman, BP 1516

38025 Grenoble, FRANCE

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Fax: +33 476 295 870

Email: clients@reachteam.eu

www.reachteam.eu

1.4 Emergency telephone number(s):

Nationaal Vergiftigingen Informatie Centrum (NVIC):

030-2748888 (Uitsluitend bestemd om professionele hulpverleners te informeren bij acute vergiftigingen).

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: 200-675-3

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. Then 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



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No further relevant information available.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents:

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.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

Store in a cool and dry place

Store only in the original receptacle.



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

7.3 Specific end use(s):

No further relevant information available.

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

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 inhale dust / smoke / mist.

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: Protective gloves

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

Eye protection: Tightly sealed goggles (EN 166).

Body protection: Protective work clothing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

General information

| | |
|-------------------------------|----------------|
| Appearance: Form: | Crystalline |
| Colour: | White |
| Odour: | Odourless |
| Odour Threshold: | Not determined |
| pH-value (100 g/l): | 7.6 - 9 |
| Melting point/freezing point: | Not applicable |



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| | |
|---|--|
| Boiling point/boiling range: | Decomposes before boiling |
| Flash point: | Not applicable |
| Flammability (solid, gaseous): | Product is not flammable |
| Ignition temperature: | Not applicable |
| Decomposition temperature: | 150 °C |
| Explosive properties: | Product does not present an explosion hazard |
| Explosion limits: Lower: | Not determined |
| Upper: | Not determined |
| Oxidising properties: | None |
| Vapour pressure at 25 °C | 2.21*10 ⁻⁶ Pa (Citric Acid) |
| Density: | 1.86 g/cm ³ |
| Relative density at 20 °C | Not determined |
| Vapour density: | Not applicable |
| Evaporation rate | Not applicable |
| Solubility in Water at 20 °C | 400-700 g/l |
| Partition coefficient (n-octanol/water) | -0.2 to -1.8 log Pow (Citric Acid) |
| Viscosity: Dynamic: | Not applicable |
| Kinematic: | 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

Stable at environment temperature.

10.3 Possibility of hazardous reactions:

No dangerous reactions known.

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



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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) (OECD 401) |
| Dermal | LD50 | >2000 mg/KG bw (Rat) (OECD 402) |

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

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitisation: 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) (OECD 203) |
| NOEC | 425 mg/L (Algae) |
| LC50/24h | 1535 mg/L (Daphnia Magna) |

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

12.5 Results of PBT and vPvB assessment

PBT: No PBT.

vPvB: No vPvB.

12.6 Endocrine disrupting properties

No further relevant information available.

12.7 Other adverse effects

No further relevant information available.



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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

IATA: International Air Transport Association



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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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent