

1 Identification of substance

- Product details

- Trade name Trisodium Citrate Dihydrate

- Article number: 193298

- Application of the substance / the preparation Food industry

- Manufacturer/Supplier:

IMCD UK Ltd.

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- Informing department:

HSEQ Department

sds@imcdgroup.com

- Emergency information:

+44 (0)1865 407 333 NCEC (National Chemical Emergency Centre)
(24 hours)

2 Hazards identification

- Hazard designation:

Not classified within the meaning of the Dangerous Substances Directive 67/548/EEC and amendments.

- Information pertaining to particular dangers for man and environment

No hazards to be particularly mentioned.

- Classification system

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

- Additional information: Risk of dust explosion.

3 Composition/information on ingredients

- Chemical characterization: -

- CAS No. Designation:

6132-04-3 TriSodium citrate Dihydrate

- Identification number(s):

- EINECS Number (EC-Number): 200-675-3

- Chemical characterization

- Description:

Food Additive

E 331

4 First aid measures

- **General information** No special measures required.

- **After inhalation** Supply fresh air; consult doctor in case of complaints.

- **After skin contact** Instantly wash with water and soap and rinse thoroughly.

- 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.

If large quantities of this material are swallowed, call a physician immediately.

Do not induce vomiting unless directed to do so by medical personnel.

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5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **For safety reasons unsuitable extinguishing agents** None
- **Protective equipment:**
Fire fighters should wear full protective clothing, incl. self-contained breathing equipment.
- **Additional information** Collect contaminated fire fighting water separately. It must not enter drains.

6 Accidental release measures

- **Person-related safety precautions:**
Wear protective equipment. Keep unprotected persons away.
Avoid causing dust.
Do not inhale dust.
Avoid contact with the eyes and skin.
- **Measures for environmental protection:**
Do not allow product to reach sewage system or water bodies.
Cover any spilled material in accordance with regulations to prevent dispersal by wind.
- **Measures for cleaning/collecting:**
Collect mechanically.
Send for recovery or disposal in suitable containers.
Clean up with plenty of water.
Dispose contaminated material as waste according to item 13.

7 Handling and storage

- **Handling**
 - **Information for safe handling:**
Avoid contact with skin and eyes.
Prevent formation of dust.
Ensure good ventilation/exhaustion at the workplace.
 - **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage**
 - **Requirements to be met by storerooms and containers:** Keep containers tightly closed.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Store container in a well ventilated position.
 - **Maximum storage temperature:** 30 deg C

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Components with critical values that require monitoring at the workplace:**
Keep organic dust levels below 4 mg/m³ for respirable fraction and 10 mg/m³ for total dust (HSE/TWA).
 - **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
 - **General protective and hygienic measures**
The usual precautionary measures should be adhered to in handling the chemicals.
Do not eat, drink or smoke while working.
Avoid contact with the eyes and skin.
Do not breathe dust.

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Ensure good ventilation.
Wash hands during breaks and at the end of the work.

- Breathing equipment:



Dust mask

- Protection of hands:



Protective gloves.

- Material of gloves

Rubber gloves

PVC gloves

- Penetration time of glove material

The exact break-through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Eye protection:



Safety glasses recommended for dusty conditions.

- Body protection: Light weight protective clothing

9 Physical and chemical properties:

- General Information

- **Form:** Crystalline powder
- **Colour:** Colourless
- **Smell:** Odourless

- Change in condition

- **Melting point/Melting range:** 150°C
- **Boiling point/Boiling range:** Not determined

- **Flash point:** Not applicable

- **Inflammability (solid, gaseous)** Product is not inflammable.

- **Danger of explosion:** Dust can form an explosive mixture with air.

- **Density at 20°C** 1.76 g/cm³

- **Settled apparent density at 20°C** 920-1100 kg/m³

- Solubility in / Miscibility with

- **Water at 25°C:** 425 g/l

- **pH-value (50 g/l) at 25°C:** 7.5-9

- **Additional information** Explosive class (dust): ST 1
Kst value: 33 bar*m/s

10 Stability and reactivity

- Conditions to be avoided:

- **Decomposition will begin at:** > 230 °C
- **Materials to be avoided:** Strong oxidizing agents
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:**
No decomposition under normal storage and handling conditions.

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In case of fire or thermal decomposition, the following substances may be formed:
 Carbon monoxide and carbon dioxide

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11 Toxicological information
- Acute toxicity:
- LD/LC50 values that are relevant for classification:

Oral	LD50	7150 mg/kg (mouse)
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- Primary irritant effect:

- **on the skin:** May cause irritation.

- **on the eye:**

May cause irritation.

Dust can lead to mechanical eye irritations.

- **Sensitization:** No sensitizing effect known.

- Additional toxicological information:

Inhalation: Dust may cause irritation of the respiratory tract.

The material is not subject to classification according to EC lists in the last version.

12 Ecological information:
- Information about elimination (persistence and degradability):
- Other information:

The product is biodegradable.

COD: 455-505 mg O₂/g

- **General notes:** Do not allow product to reach ground water, water bodies or sewage system.

13 Disposal considerations
- Product:

- **Recommendation** Observe local/state/federal regulations.

- European waste catalogue

According to the EWC decree, the specification of the waste disposal key code shall be specific to the respective industrial section and the application process.

- Uncleaned packagings:
- Recommendation:

Disposal must be made according to official regulations.

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

14 Transport information
- Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)

- ADR/RID-GGVS/E Class: -

- Maritime transport IMDG/GGVSea:

- IMDG/GGVSea Class: -

- Marine pollutant: No

- Air transport ICAO-TI and IATA-DGR:

- ICAO/IATA Class: -

- **Transport/Additional information:** Not dangerous according to the above specifications.

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15 Regulatory information**- Designation according to EC guidelines:**

The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (GefStoffV).

The material is not subject to classification according to EC lists and other sources of literature known to us.

Observe the normal safety regulations when handling chemicals

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing data specification sheet: HSEQ Department**- Contact:**

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

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

EINECS: European Inventory of Existing Commercial Chemical Substances

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

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent