# Safety Data Sheet

## according to Regulations REACh 1907/2006/EC



## SECTION 1: Identification of the substance/mixture and of the company

### 1.1 Product identifier

REF 814029
Product name Natriumcitrat 2.5 g

REACH Registration number(s): see SECTION 3.1/3.2 or
A registration number for the substance(s) does not exist because the annual tonnage does not require registration or the substance or its use is excluded from registration.

1 x 2.5 g Sodium citrate, solid

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

**Relevant identified uses**
Product for analytical use.
Exposure Scenario Classification according REACh, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0
The exposure scenario is integrated into sections 1-16.
**Uses advised against**
not described

### 1.3 Details of the supplier of the safety data sheet

**Manufactured by:**
MACHEREY-NAGEL GmbH & Co. KG
Valencienner Str. 11, 52355 Düren, Germany
Phone: +49 2421 969 0 E-mail: sds@mn-net.com (msds@mn-net.com)

### 1.4 Emergency telephone number

Information not necessary.

You find our current versions of SDS in Internet: **<http://www.mn-net.com/SDS>**

## SECTION 2: Hazard identification

### 2.0 Classification of the complete product according to Regulation (EC) 1272/2008

### 2.1 Classification of the substance or mixture according to Regulation (EC) 1272/2008

**2.5 g Sodium citrate, solid**

Do not need labelling as hazardous
Signal word -

No hazard class

List of H phrases: see section 16.2

### 2.2 Label elements according regulation (EC) 1272/2008

**2.5 g Sodium citrate, solid**
Do not need labelling as hazardous
Signal word: -

**Label elements of the complete product**

### 2.3 Other hazards

**Possible hazards from physicochemical properties**
According to our current status of knowledge and experience we state, that this product does not contain any substances, which - in accordance with EC regulations 1272/2008/EC, 1907/2006/EC and German Regulations for Hazardous goods - have to be declared as dangerous goods, either because of their applied concentration or because of their total amount in anyone kit.
An individual package has considerably less hazardous potential.

**Information pertaining to particular risks to human and possible symptoms**

**Information pertaining to particular risks to the environment**

**Possible endocrine disrupting effects**
no data available

## SECTION 3: Composition / information on ingredients

### 3.1 Substances or 3.2 Mixtures

**2.5 g Sodium citrate, solid**

| | |
|---|---|
| Substance name: | *tri-sodium citrate* |
| CAS No.: | 6132-04-3 |
| Substance rating: | No criteria for classification or naming of chemical not required. |
| Formula: | $C_6H_5Na_3O_7 \cdot 2H_2O$ |
| Pseudonym (de): | Na-citrat, E331 |
| REACH Reg. No.: | 01-2119457027-40-xxxx |
| EC No.: | 200-675-3 |
| Concentration: | 80 - <100 % |
| acc. CLP (GHS): | The criteria for classification are not fulfilled. |

### 3.3 Remarks

When not listed, mixtures are added with water [CAS No. 7732-18-5] to 100%.List of H and P phrases: see section 16.2.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately.

**4.1.1 After SKIN Contact**
Not necessary.

**4.1.2 After EYE Contact**
Not necessary.

**4.1.3 After INHALATION of vapours**
Not necessary. ---

**4.1.4 After ORAL Intake**
Not necessary.

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

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

No additionally recommendations. ---

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**5.1.1 Suitable extinguishing media**
Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.

**5.1.2 Unsuitable extinguishing media**
no data available

### 5.2 Special hazards arising from the substance or mixture

None.

### 5.3 Advice for firefighters

No, for listed product.Product package burns like paper or plastic.

### 5.4 Additional information

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapours. Not necessary.

### 6.2 Environmental precautions

not necessary

### 6.3 Methods and material for containment and cleaning up

Clean working area with water. Flush used water into drains.

### 6.4 Reference to other sections

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product.

### 7.2 Conditions for safe storage, including any incompatibilities

Safe storage is guaranteed in the original packaging . Storage class (German chemical industry): see chapter 12.1

**Storage class (VCI):** 12
**Water hazard class (DE):** 1

#### 7.2.1 Requirements for stock rooms and containers

Keep original product packages tightly closed during handling and storage.

### 7.3 Specific end use(s)

Product for analytical use.

## SECTION 8: Exposure controls /personal protection

### 8.1 Control parameters

**2.5 g Sodium citrate, solid**
Chemical: *tri-sodium citrate* CAS No.: 6132-04-3

### 8.2 Exposure controls

Not necessary.Good ventilation and extraction system in the room, floor resistant to chemicals with floor drainage and washing facilities.

#### 8.2.1 Respiratory protection

Not necessary.

#### 8.2.2 Skin protection / Hand protection

Not necessary.

#### 8.2.3 Eye / Face Protection

Not necessary.

#### 8.2.4 Skin protection

Not necessary.

#### 8.2.5 Personal hygiene

Information not necessary.

#### 8.2.6 Thermal hazards

no data available

### 8.3 Limitation and monitoring of environmental exposure

Information not necessary.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**2.5 g Sodium citrate, solid**

| | |
|---|---|
| a) State of aggregation: | liquid |
| b) Colour: | colourless |
| c) Odor: | odorless |
| d) Melting point: | no data available |
| e) Boiling point: | no data available |
| f) Flammability: | no data available |
| g) Explosive limits (lower / upper): | no data available |
| h) Flash point: | no data available |
| i) Flashing temperature: | no data available |
| j) Decomposition temperature: | no data available |
| k) pH value: | no data available |
| l) Kinematic viscosity: | no data available |
| m) Solubility in water: | no data available |
| n) Dispersion coefficient $_{(o/w)}$ : | no data available |
| o) Vapour pressure (20°C): | no data available |
| p) Specific gravity: | no data available |
| q) Relative vapour density $_{(air=1)}$ : | no data available |
| r) Particle size: | no data available |

### 9.2 Other information

No data is available for the other parameters for the mixtures, since no registration and no chemical safety report is required.

**Properties relevant to substance groups**

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

None

### 10.2 Chemical stability

no known instability.

### 10.3 Possibility of hazardous reactions

None.

### 10.4 Conditions to avoid

Not known.

### 10.5 Incompatible materials

Not known.

### 10.6 Hazardous decomposition products

In the original package all parts/all reagents are safety and separated stored. Decompositions are not observed during the expiration period under recommended conditions.

## SECTION 11: Toxicological information

### 11.1 Information on the hazard classes according regulation (EC) 1272/2008

**Following information is valid for pure substances.** Quantitative data on the toxicity of this product are not available.

**2.5 g Sodium citrate, solid**

| | | |
|---|---|---|
| Chemical: | *tri-sodium citrate* | CAS No.: 6132-04-3 |
| TSCA Inventory: | listed (CAS 68-04-2) | |
| Korea Exist.Chem.Inventory: | KE-20843 | |
| LD50 $_{orl\ rat}$ : | > 8000 mg/kg | |

### 11.2 Other hazards

**Possible endocrine disrupting effects**
no data available

**Other information**
no additional data available

## SECTION 12: Ecological information

### 12.1 Toxicity

**Following information is valid for pure substances.**

**2.5 g Sodium citrate, solid**

| | | |
|---|---|---|
| Chemical: | *tri-sodium citrate* | CAS No.: 6132-04-3 |
| LC50 $_{fish/96h}$ : | 18-32 g/L | |
| EC50 $_{daphnia/48h}$ : | 5.6-10 g/L | |
| EC50 $_{chlorella\ vulgaris/5d}$ : | >18-32 g/L | |
| EC10 $_{pseudomonas\ putita/16h}$ : | EC50 $_{ps.\ fluorescens/8h}$ : >1.8-3.2 g/L | |
| Water hazard class (DE): | 1 | |
| Storage class (VCI): | 12-13 | |

### 12.2 Persistence and degradability

not necessary

### 12.3 Bioaccumulative potential

not necessary

### 12.4 Mobility in soil

not necessary

### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

### 12.6 Endocrine disrupting properties

no data available

### 12.7 Other adverse effects

no additional data available

## SECTION 13: Disposal considerations

Not necessary.

### 13.1 Waste treatment methods

GENERAL: Empty solids into municipal waste, empty liquids diluted into drains. Normally it is possible to empty small amounts (diluted!) into drains.

## SECTION 14: Transport information

**14.1 - 14.4** Not necessary

### 14.5 Environmental hazards

none

### 14.6 Special precautions for user

not necessary

### 14.7 Carriage in bulk by sea in accordance with IMO instruments

Not applicable.

## SECTION 15: Regulatory information

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

Dangerous Substances Protection Act (DE: Chemikaliengesetz - ChemG), Aug 2013, Stand: Okt 2020
Ordinance on protection against dangerous substances (E: Gefahrstoffverordnung - GefStoffV), Nov 2010, Stand: Mrz 2017
MN leaflet/instructions for use, also at www.mn-net.com
If necessary, observe other country-specific regulations.

### 15.2 Chemical safety assessment

## SECTION 16: Other information

### 16.1 Changes compared to the last version

in preparation

### 16.2 List of H and P phrases

#### 16.2.1 List of relevant H phrases

#### 16.2.2 List of relevant P phrases

### 16.3 Recommended restriction on use

None

### 16.4 Sources of key data

KÜHN, BIRETT, Leaflets on hazardous materials, 2021
Directive 1999/92/EG Minimum requirements to improve the safety and health protection of workers at risk from potentially explosive atmospheres
SUVA .CH, limit values in the air at work 2009, revised on 01/2009
Regulation 790/2009/EU, adaptation of Regulation 1272/2008/EU to technical and scientific progress (1st ATP)
Regulation 453/2010/EU, adaptation of the REACH regulation 1907/2006/EG
Regulation 487/2013/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (4th ATP)
Regulation 1221/2015/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (7th ATP)
Regulation 776/2017/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (10th ATP)

Regulation 669/2018/EU, adaptation of Regulation 1272/2008/EC to technical and scientific progressText (11th ATP)
Regulation 1480/2018/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (13th ATP)
Regulation 521/2019/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (12th ATP)
TRGS 900, German rules of technology on limit values in the air at work, as of 03/2019
Regulation 217/2020/EU, adaptation of Annex VI, Part 3, of Regulation 1272/2008/EC to technical and scientific progress (14th ATP)
Regulation 878/2020/EU, adaptation of Annex II of the REACH regulation 1907/2006/EG
Regulation 1182/2020/EU, adaptation of Annex VI, Part 3, of Regulation 1272/2008/EC to technical and scientific progress (15th ATP)
Regulation 643/2021/EU, adaptation of Annex VI, Part 1, of Regulation 1272/2008/EC to technical and scientific progress (16th ATP)
Regulation 849/2021/EU, adaptation of Annex VI, Part 3, of Regulation 1272/2008/EC to technical and scientific progress (17th ATP)

**revisions/updates**

*Reason for revision:* *2014-02 Corrected structure of the sections according to Regulation 453/2010/EU, if necessary*
*2014-04 adjustment according Regulation 487/2013/EU*
*2016-03 adjustment according Regulation 1221/2015/EU*

*2017-11 adjustment according the ECHA registration dossier*
*2022-11 adjustment according Regulation 878/2020/EU*

### 16.5 Further information

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### 16.6 Legend / Abbreviations

| | |
|---|---|
| acc: | according |
| ADR: | Convention concerning the International Carriage of Dangerous Goods by Road |
| Act: | acute |
| BAT: | biological workplace tolerance value |
| CAO: | Cargo Aircraft Only |
| Carc: | carcinogen |
| CAS: | Chemical Abstracts Service |
| CLP: | Classification, Labelling and Packaging regulation |
| CMR: | carcinogen, mutagen, reproduction toxic |
| Corr: | corrosive |
| COD: | chemical oxigen demand |
| CSCL: | Chemical Substance Control Law (Jp) |
| Dam: | damage |
| DNEL: | Derived No-Effect Level (for workers) |
| derm: | dermal |
| dog: | dog |
| EC10: | Concentration causing a toxic effect in 10% of the test organisms |
| EC: | European Community |
| EC-Nr: | Substance number of the EC substance inventory |
| EmS: | Guide to accident management measures on ships |
| EU: | European Union |
| fish: | fish (not spezified) |
| GHS: | Global Harmonized System of Classification and Labeling of Chemicals |
| gpg: | guinea pig |
| ICAO: | International Civil Aviation Organization |
| ihl: | inhaled |
| IMDG: | International Maritime Dangerous Goods Code |
| intrav: | intravenous |
| ipt: | intraperitonaeal |
| ISHL: | Industrial Safety and Health Law (Jp) |
| LC50: | letale concentration 50% |
| LD50: | letale dosis 50% |
| leuciscus idus: | fisch, ide, orfe |
| MAK: | maximum workplace concentration |
| Met: | Metall |
| mus: | mouse |
| Muta: | mutagen |
| NIOSH: | National Institute for Occupational Safety and Health (US) |
| NRD: | Non-rapidly degradable |
| onchorhynchus mykiss: | fish, rainbow trout |
| orl: | oral |
| OSHA: | Occupational Safety and Health Administration |
| PAX: | transport on passenger planes allowed |
| PBT: | persistent, bioaccumulating, toxic substance |
| pH: | pH value |
| pimephales promelas: | fish, fathead minnow |
| PNEC: | Predicted No Effected Concentration |
| PROC 15: | Process category 'for laboratory use' |
| PRTR: | Law for PRTR and Promotion of Chemical Management (Jp) |
| PVC: | polyvinyl chloride |
| quail: | bird, quail |
| rat: | rat |
| rbt: | rabbit |
| RD: | rapidly degradable |
| RE: | repeated |
| REACh: | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| REF: | item number, reference number |
| Reg.No.: | rRegistration number |
| Repr: | harmful to reproduction |
| Resp: | respiratory |
| RIP: | REACH Implementations Projects |
| scu: | sub cutan |
| SDS: | safety data sheet |
| Sens: | sensitisation |
| STEL: | short term exposure limit |
| STOT: | Specific Target Organ Toxicity |
| SVHC: | Substance of Very High Concern |
| t/a: | tons per year |

| | |
|---|---|
| TCCA: | Toxic Chemicals Control Act (S. Korea) |
| Tox: | toxic |
| TSCA: | The Toxic Substances Control Act (US) |
| TWA: | time weighted average |
| TRGS: | technical regulations (DE) |
| vPvB: | very persistent, very bioaccumulating substance |

### 16.7 Training advice

Regular safety training. Multiple safety training of staffs about danger and protection by using hazards in working area. Additionally training and introduction of staffs for using these products.