

# Safety data sheet

acc. to Safe Work Australia - Code of Practice



## ROTI®Stock 100x TE BioScience-Grade, for molecular biology, steam sterilized

article number: **1052**  
Version: **GHS 2.0 en**  
Replaces version of: 2019-08-30  
Version: (GHS 1)

date of compilation: 2019-08-30  
Revision: 2022-09-12

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

#### 1.1 Product identifier

Identification of the substance **ROTI®Stock 100x TE BioScience-Grade, for molecular biology, steam sterilized**

Article number 1052

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

Relevant identified uses: Laboratory chemical  
Laboratory and analytical use

Uses advised against: Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household).

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

Carl Roth GmbH + Co KG  
Schoemperlenstr. 3-5  
D-76185 Karlsruhe  
Germany

**Telephone:**+49 (0) 721 - 56 06 0  
**Telefax:** +49 (0) 721 - 56 06 149  
**e-mail:** sicherheit@carlroth.de  
**Website:** www.carlroth.de

Competent person responsible for the safety data sheet: :Department Health, Safety and Environment

**e-mail (competent person):** **sicherheit@carlroth.de**

#### 1.4 Emergency telephone number

| Name   | Street          | Postal code/city   | Telephone | Website |
|--|-----------------|--------------------|-----------|---------|
| NSW Poisons Information Centre<br>Childrens Hospital | Hawkesbury Road | 2145 Westmead, NSW | 131126    |         |

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification acc. to GHS

This mixture does not meet the criteria for classification.

#### 2.2 Label elements

##### Labelling

not required

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### 2.3 Other hazards

#### Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

not relevant (mixture)

### 3.2 Mixtures

#### Description of the mixture

| Name of substance                | Identifier     | Wt%   | Classification acc. to GHS | Pictograms | Notes |
|----------------------------------|----------------|-------|----------------------------|------------|-------|
| Ethylenediamine tetraacetic acid | CAS No 60-00-4 | 1 - 5 | Eye Irrit. 2 / H319        |            |       |

For full text of abbreviations: see SECTION 16

## SECTION 4: First aid measures

### 4.1 Description of first aid measures



#### General notes

Take off contaminated clothing.

#### Following inhalation

Provide fresh air.

#### Following skin contact

In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following eye contact

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

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

Irritant effects

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

none

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media



#### Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings  
water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

water jet

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

Ingredients of the mixture combustible. The product itself does not burn.

#### Hazardous combustion products

In case of fire may be liberated: Nitrogen oxides (NO<sub>x</sub>), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

## SECTION 6: Accidental release measures

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



#### For non-emergency personnel

No special measures are necessary.

### 6.2 Environmental precautions

Keep away from drains, surface and ground water.

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

#### Advice on how to contain a spill

Covering of drains.

#### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

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### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

No special measures are necessary.

#### Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs.

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

Keep container tightly closed.

#### Incompatible substances or mixtures

Observe hints for combined storage.

#### Consideration of other advice:

#### Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °C

#### 7.3 Specific end use(s)

No information available.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### National limit values

##### Occupational exposure limit values (Workplace Exposure Limits)

This information is not available.

| Relevant DNELs of components of the mixture |         |           |                       |                                    |                   |                         |
|---|---------|-----------|-----------------------|------------------------------------|-------------------|-------------------------|
| Name of substance                           | CAS No  | End-point | Threshold level       | Protection goal, route of exposure | Used in           | Exposure time           |
| Ethylenediamine tetraacetic acid            | 60-00-4 | DNEL      | 1.5 mg/m <sup>3</sup> | human, inhalatory                  | worker (industry) | chronic - local effects |
| Ethylenediamine tetraacetic acid            | 60-00-4 | DNEL      | 3 mg/m <sup>3</sup>   | human, inhalatory                  | worker (industry) | acute - local effects   |

| Relevant PNECs of components of the mixture |         |           |                 |                       |                              |                              |
|---|---------|-----------|-----------------|-----------------------|------------------------------|------------------------------|
| Name of substance                           | CAS No  | End-point | Threshold level | Organism              | Environmental compartment    | Exposure time                |
| Ethylenediamine tetraacetic acid            | 60-00-4 | PNEC      | 2.2 mg/l        | aquatic organisms     | freshwater                   | short-term (single instance) |
| Ethylenediamine tetraacetic acid            | 60-00-4 | PNEC      | 0.22 mg/l       | aquatic organisms     | marine water                 | short-term (single instance) |
| Ethylenediamine tetraacetic acid            | 60-00-4 | PNEC      | 43 mg/l         | aquatic organisms     | sewage treatment plant (STP) | short-term (single instance) |
| Ethylenediamine tetraacetic acid            | 60-00-4 | PNEC      | 0.72 mg/kg      | terrestrial organisms | soil                         | short-term (single instance) |

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### 8.2 Exposure controls

#### Individual protection measures (personal protective equipment)

##### Eye/face protection



Use safety goggle with side protection.

##### Skin protection



- **hand protection**

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.

- **type of material**

NBR (Nitrile rubber)

- **material thickness**

>0,11 mm

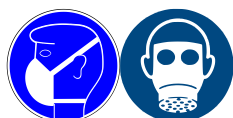
- **breakthrough times of the glove material**

>480 minutes (permeation: level 6)

- **other protection measures**

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

##### Respiratory protection



Respiratory protection necessary at: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

##### Environmental exposure controls

Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|  |                      |
|--|----------------------|
| Physical state   | liquid               |
| Colour   | colourless           |
| Odour  | characteristic       |
| Melting point/freezing point                             | not determined       |
| Boiling point or initial boiling point and boiling range | ~100 °C at 1,013 hPa |

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|   |   |
|---|---|
| Flammability  | non-combustible   |
| Lower and upper explosion limit                     | not determined  |
| Flash point   | not determined  |
| Auto-ignition temperature                           | not determined  |
| Decomposition temperature                           | not relevant  |
| pH (value)  | 7.75 – 8.25 (neutral)                                       |
| Kinematic viscosity                                 | not determined  |
| <u>Solubility(ies)</u>                              |   |
| Water solubility                                    | miscible in any proportion                                  |
| <u>Partition coefficient</u>                        |   |
| Partition coefficient n-octanol/water (log value):  | this information is not available                           |
| Vapour pressure                                     | ~23 hPa at 20 °C  |
| <u>Density and/or relative density</u>              |   |
| Density   | 1.025 g/cm <sup>3</sup>                                     |
| Relative vapour density                             | information on this property is not available               |
| Particle characteristics                            | not relevant (liquid)                                       |
| <u>Other safety parameters</u>                      |   |
| Oxidising properties                                | none  |
| <b>9.2 Other information</b>                        |   |
| Information with regard to physical hazard classes: | hazard classes acc. to GHS (physical hazards): not relevant |
| Other safety characteristics:                       |   |
| Miscibility   | completely miscible with water                              |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

This material is not reactive under normal ambient conditions.

### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

### 10.3 Possibility of hazardous reactions

**Violent reaction with:** strong oxidiser

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### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

### 10.5 Incompatible materials

There is no additional information.

### 10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

#### Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Classification acc. to GHS

This mixture does not meet the criteria for classification.

#### Acute toxicity

Shall not be classified as acutely toxic.

| Acute toxicity of components of the mixture |         |                |          |             |         |
|---|---------|----------------|----------|-------------|---------|
| Name of substance                           | CAS No  | Exposure route | Endpoint | Value       | Species |
| Ethylenediamine tetraacetic acid            | 60-00-4 | oral           | LD50     | 4,500 mg/kg | rat     |

#### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

#### Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

#### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

#### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

#### Carcinogenicity

Shall not be classified as carcinogenic.

#### Reproductive toxicity

Shall not be classified as a reproductive toxicant.

#### Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

#### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

#### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

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### Symptoms related to the physical, chemical and toxicological characteristics

- **If swallowed**

Data are not available.

- **If in eyes**

essentially non-irritating

- **If inhaled**

Data are not available.

- **If on skin**

Frequently or prolonged contact with skin may cause dermal irritation

- **Other information**

none

### 11.2 Endocrine disrupting properties

None of the ingredients are listed.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Aquatic toxicity (acute) of components of the mixture

| Name of substance                | CAS No  | Endpoint | Value    | Species               | Exposure time |
|----------------------------------|---------|----------|----------|-----------------------|---------------|
| Ethylenediamine tetraacetic acid | 60-00-4 | LC50     | 41 mg/l  | fish                  | 96 h          |
| Ethylenediamine tetraacetic acid | 60-00-4 | EC50     | 140 mg/l | aquatic invertebrates | 48 h          |

#### Biodegradation

Data are not available.

### 12.2 Process of degradability

#### Degradability of components of the mixture

| Name of substance                | CAS No  | Process        | Degradation rate | Time | Method | Source |
|----------------------------------|---------|----------------|------------------|------|--------|--------|
| Ethylenediamine tetraacetic acid | 60-00-4 | biotic/abiotic | <20 %            | 28 d |        |        |

### 12.3 Bioaccumulative potential

Data are not available.

#### Bioaccumulative potential of components of the mixture

| Name of substance                | CAS No  | BCF | Log KOW       | BOD5/COD |
|----------------------------------|---------|-----|---------------|----------|
| Ethylenediamine tetraacetic acid | 60-00-4 | 1.8 | -3.86 (25 °C) |          |



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### 12.4 Mobility in soil

Data are not available.

### 12.5 Results of PBT and vPvB assessment

Data are not available.

### 12.6 Endocrine disrupting properties

None of the ingredients are listed.

### 12.7 Other adverse effects

Data are not available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods



Consult the appropriate local waste disposal expert about waste disposal.

#### Sewage disposal-relevant information

Do not empty into drains.

### 13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

## SECTION 14: Transport information

- |   |   |
|---|---|
| 14.1 UN number  | not subject to transport regulations                                  |
| 14.2 UN proper shipping name  | not assigned  |
| 14.3 Transport hazard class(es)   | not assigned  |
| 14.4 Packing group  | not assigned  |
| 14.5 Environmental hazards  | non-environmentally hazardous acc. to the dangerous goods regulations |
| 14.6 Special precautions for user   | There is no additional information.                                   |
| 14.7 Transport in bulk according to IMO instruments                                       | The cargo is not intended to be carried in bulk.                      |
| 14.8 <u>Information for each of the UN Model Regulations</u>                              |   |
| <b>Transport information</b>  | <b>National regulations</b>   |
| Additional information(UN RTDG)   | Not subject to transport regulations. UN RTDG                         |
| <b>International Maritime Dangerous Goods Code (IMDG) - Additional information</b>        | Not subject to IMDG.  |
| <b>International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information</b> | Not subject to ICAO-IATA.   |

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### SECTION 15: Regulatory information

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

There is no additional information.

##### National regulations(Australia)

##### Australian Inventory of Chemical Substances(AICS)

All ingredients are listed or exempt from listing.

##### Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

##### National inventories

| Country | Inventory  | Status                         |
|---------|------------|--------------------------------|
| AU      | AIIC       | all ingredients are listed     |
| CA      | DSL        | all ingredients are listed     |
| CN      | IECSC      | all ingredients are listed     |
| EU      | ECSI       | all ingredients are listed     |
| EU      | REACH Reg. | all ingredients are listed     |
| JP      | CSCL-ENCS  | all ingredients are listed     |
| KR      | KECI       | all ingredients are listed     |
| MX      | INSQ       | all ingredients are listed     |
| NZ      | NZIoC      | all ingredients are listed     |
| PH      | PICCS      | all ingredients are listed     |
| TR      | CICR       | not all ingredients are listed |
| TW      | TCSI       | all ingredients are listed     |
| US      | TSCA       | all ingredients are listed     |

##### Legend

|            |   |
|------------|---|
| AIIC       | Australian Inventory of Industrial Chemicals                            |
| CICR       | Chemical Inventory and Control Regulation                               |
| CSCL-ENCS  | List of Existing and New Chemical Substances (CSCL-ENCS)                |
| DSL        | Domestic Substances List (DSL)  |
| ECSI       | EC Substance Inventory (EINECS, ELINCS, NLP)                            |
| IECSC      | Inventory of Existing Chemical Substances Produced or Imported in China |
| INSQ       | National Inventory of Chemical Substances                               |
| KECI       | Korea Existing Chemicals Inventory                                      |
| NZIoC      | New Zealand Inventory of Chemicals                                      |
| PICCS      | Philippine Inventory of Chemicals and Chemical Substances (PICCS)       |
| REACH Reg. | REACH registered substances   |
| TCSI       | Taiwan Chemical Substance Inventory                                     |
| TSCA       | Toxic Substance Control Act   |

#### 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

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### SECTION 16: Other information

#### Indication of changes (revised safety data sheet)

Alignment to regulation: Globally Harmonized System of Classification and Labelling of Chemicals ("Purple book").

Restructuring: section 9, section 14

| Section | Former entry (text/value)  | Actual entry (text/value)  | Safety-relevant |
|---------|--|--|-----------------|
| 2.1     | Classification acc. to GHS:<br>This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC. This mixture does not meet the criteria for classification. | Classification acc. to GHS:<br>This mixture does not meet the criteria for classification.                                   | yes             |
| 2.2     | Signal word:<br>not required   |  | yes             |
| 2.3     | Other hazards:<br>There is no additional information.  | Other hazards  | yes             |
| 2.3     |  | Results of PBT and vPvB assessment:<br>This mixture does not contain any substances that are assessed to be a PBT or a vPvB. | yes             |

#### Abbreviations and acronyms

| Abbr.      | Descriptions of used abbreviations   |
|------------|--|
| BCF        | Bioconcentration factor  |
| BOD        | Biochemical Oxygen Demand  |
| CAS        | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)   |
| COD        | Chemical oxygen demand   |
| DGR        | Dangerous Goods Regulations (see IATA/DGR)   |
| DNEL       | Derived No-Effect Level  |
| EC50       | Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval |
| EINECS     | European Inventory of Existing Commercial Chemical Substances  |
| ELINCS     | European List of Notified Chemical Substances  |
| Eye Dam.   | Seriously damaging to the eye  |
| Eye Irrit. | Irritant to the eye  |
| GHS        | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations  |
| IATA       | International Air Transport Association  |
| IATA/DGR   | Dangerous Goods Regulations (DGR) for the air transport (IATA)   |
| ICAO       | International Civil Aviation Organization  |
| IMDG       | International Maritime Dangerous Goods Code  |
| LC50       | Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval                                |

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| Abbr.   | Descriptions of used abbreviations   |
|---------|--|
| LD50    | Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval |
| log KOW | n-Octanol/water  |
| NLP     | No-Longer Polymer  |
| PBT     | Persistent, Bioaccumulative and Toxic  |
| PNEC    | Predicted No-Effect Concentration  |
| UN RTDG | UN Recommendations on the Transport of Dangerous Good  |
| vPvB    | Very Persistent and very Bioaccumulative   |

### Key literature references and sources for data

Safe Work Australia's Code of Practice for Labelling of Workplace Hazardous Chemicals (under WHS Regulations).

UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### Classification procedure

Physical and chemical properties. The classification is based on tested mixture.

Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### List of relevant phrases (code and full text as stated in section 2 and 3)

| Code | Text                           |
|------|--------------------------------|
| H319 | Causes serious eye irritation. |

### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.