

# Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



## Tropine ≥99 % pure

article number: **4049**  
Version: **3.0 en**  
Replaces version of: 19.08.2022  
Version: (2)

date of compilation: 08.08.2019  
Revision: 01.03.2024

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

### 1.1 Product identifier

|                                 |   |
|---------------------------------|---|
| Identification of the substance | <b>Tropine</b> ≥99 % pure   |
| Article number                  | 4049  |
| Registration number (REACH)     | It is not required to list the identified uses because the substance is not subject to registration according to REACH (< 1 t/a). |
| EC number                       | 204-384-2   |
| CAS number                      | 120-29-6  |

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

|                           |   |
|---------------------------|---|
| Relevant identified uses: | Laboratory chemical<br>Laboratory and analytical use                                  |
| Uses advised against:     | Do not use for private purposes (household).<br>Food, drink and animal feedingstuffs. |

### 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

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**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](mailto:sicherheit@carlroth.de)

### 1.4 Emergency telephone number

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

| Section | Hazard class            | Cat-egory | Hazard class and category | Hazard statement |
|---------|-------------------------|-----------|---------------------------|------------------|
| 3.1O    | Acute toxicity (oral)   | 4         | Acute Tox. 4              | H302             |
| 3.1D    | Acute toxicity (dermal) | 4         | Acute Tox. 4              | H312             |
| 3.1I    | Acute toxicity (inhal.) | 4         | Acute Tox. 4              | H332             |

For full text of abbreviations: see SECTION 16

### 2.2 Label elements

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## Labelling according to Regulation (EC) No 1272/2008 (CLP)

### Signal word

**Warning**

### Pictograms

GHS07



### Hazard statements

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled

### Precautionary statements

#### **Precautionary statements - prevention**

P261 Avoid breathing dust  
P280 Wear protective gloves/eye protection

#### **Precautionary statements - response**

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell  
P302+P352 IF ON SKIN: Wash with plenty of soap and water

#### **Labelling of packages where the contents do not exceed 125 ml**

Signal word: **Warning**

Symbol(s)



## 2.3 Other hazards

### **Results of PBT and vPvB assessment**

According to the results of its assessment, this substance is not a PBT or a vPvB.

### **Endocrine disrupting properties**

Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

|                   |                                   |
|-------------------|-----------------------------------|
| Name of substance | Tropine                           |
| Molecular formula | C <sub>8</sub> H <sub>15</sub> NO |
| Molar mass        | 141,2 g/mol                       |
| CAS No            | 120-29-6                          |
| EC No             | 204-384-2                         |

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| Substance, Specific Conc. Limits, M-factors, ATE |           |  |   |
|--|-----------|--|---|
| Specific Conc. Limits                            | M-Factors | ATE  | Exposure route                              |
| -  | -         | 1.050 mg/kg<br>≤2.000 mg/kg<br>≤1,25 mg/l/4h | oral<br>dermal<br>inhalation: dust/<br>mist |

## SECTION 4: First aid measures

### 4.1 Description of first aid measures



#### General notes

Take off contaminated clothing.

#### Following inhalation

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

#### Following skin contact

Rinse skin with water/shower. 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 with water (only if the person is conscious). Call a doctor.

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

Vomiting, Cough

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

none

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media



#### Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings!  
water, foam, alcohol resistant foam, dry extinguishing powder, ABC-powder

#### Unsuitable extinguishing media

water jet

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

Combustible.

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## **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**

Avoid contact with skin, eyes and clothes. Do not breathe dust.

### **6.2 Environmental precautions**

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

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

#### **Advice on how to contain a spill**

Covering of drains. Take up mechanically.

#### **Advice on how to clean up a spill**

Take up mechanically. Control of dust.

#### **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.

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

Avoid dust formation.

#### **Measures to prevent fire as well as aerosol and dust generation**

Removal of dust deposits.

#### **Advice on general occupational hygiene**

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

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

Store in a dry place. Keep in a cool place. Hygroscopic solid.

#### **Incompatible substances or mixtures**

Observe hints for combined storage.

#### **Consideration of other advice:**

#### **Ventilation requirements**

Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted. Use local and general ventilation.

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## Specific designs for storage rooms or vessels

Recommended storage temperature: 2 – 8 °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.

### 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. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

#### • type of material

Butyl caoutchouc (butyl rubber)

#### • material thickness

0,7mm

#### • 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.

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## Respiratory protection



Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P2 (filters at least 94 % of airborne particles, colour code: White).

## 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   | solid   |
| Form   | powder, crystalline                                       |
| Colour   | white - whitish   |
| Odour  | characteristic - amine                                    |
| Melting point/freezing point                             | 62 – 64 °C  |
| Boiling point or initial boiling point and boiling range | 232 – 234 °C  |
| Flammability   | this material is combustible, but will not ignite readily |
| Lower and upper explosion limit                          | not determined  |
| Flash point  | not applicable  |
| Auto-ignition temperature                                | not determined  |
| Decomposition temperature                                | not relevant  |
| pH (value)   | 12 (in aqueous solution: 100 g/l, 20 °C) (alkaline)       |
| Kinematic viscosity                                      | not relevant  |
| <u>Solubility(ies)</u>                                   |   |
| Water solubility   | ~100 g/l at 20 °C   |
| <u>Partition coefficient</u>                             |   |
| Partition coefficient n-octanol/water (log value):       | 0,24 (TOXNET)   |
| Vapour pressure  | not determined  |
| <u>Density and/or relative density</u>                   |   |
| Density  | 1,045 g/cm <sup>3</sup> at 25 °C                          |
| Relative vapour density                                  | Information on this property is not available.            |
| Bulk density   | ~350 kg/m <sup>3</sup>                                    |

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Particle characteristics No data available.

## Other safety parameters

Oxidising properties none

## 9.2 Other information

Information with regard to physical hazard classes: hazard classes acc. to GHS (physical hazards): not relevant

Other safety characteristics: There is no additional information.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

### 10.2 Chemical stability

Hygroscopic solid.

### 10.3 Possibility of hazardous reactions

**Violent reaction with:** strong oxidiser, Strong acid

### 10.4 Conditions to avoid

Protect from moisture. Oxygen.

### 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 hazard classes as defined in Regulation (EC) No 1272/2008

**Classification according to GHS (1272/2008/EC, CLP)**

#### Acute toxicity

Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled.

| Acute toxicity |          |             |         |        |        |
|----------------|----------|-------------|---------|--------|--------|
| Exposure route | Endpoint | Value       | Species | Method | Source |
| oral           | LD50     | 1.050 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.

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## **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.

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

### **• If swallowed**

harmful if swallowed

### **• If in eyes**

Data are not available.

### **• If inhaled**

harmful if inhaled

### **• If on skin**

harmful in contact with skin

### **• Other information**

Vomiting, Nausea

## **11.2 Endocrine disrupting properties**

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

## **11.3 Information on other hazards**

There is no additional information.

## **SECTION 12: Ecological information**

### **12.1 Toxicity**

Shall not be classified as hazardous to the aquatic environment.

| <b>Aquatic toxicity (acute)</b> |              |                |               |                      |
|---------------------------------|--------------|----------------|---------------|----------------------|
| <b>Endpoint</b>                 | <b>Value</b> | <b>Species</b> | <b>Source</b> | <b>Exposure time</b> |
| EC50                            | 54,7 mg/l    | daphnia magna  |               | 48 h                 |

### **12.2 Persistence and degradability**

Theoretical Oxygen Demand (without nitrification): 2,379 mg/mg

Theoretical Oxygen Demand (with nitrification): 2,832 mg/mg

Theoretical Carbon Dioxide: 2,493 mg/mg



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## 12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

|                           |               |
|---------------------------|---------------|
| n-octanol/water (log KOW) | 0,24 (TOXNET) |
|---------------------------|---------------|

## 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

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

## 12.7 Other adverse effects

Data are not available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Sewage disposal-relevant information

Do not empty into drains.

#### Waste treatment of containers/packagings

Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

### 13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

#### Properties of waste which render it hazardous

**HP 6** acute toxicity

### 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. Non-contaminated packages may be recycled.

## SECTION 14: Transport information

|                                 |   |
|---------------------------------|---|
| 14.1 UN number or ID number     | not subject to transport regulations                                  |
| 14.2 UN proper shipping name    | not assigned  |
| 14.3 Transport hazard class(es) | none  |
| 14.4 Packing group              | not assigned  |
| 14.5 Environmental hazards      | non-environmentally hazardous acc. to the dangerous goods regulations |

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## 14.6 Special precautions for user

There is no additional information.

## 14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

## 14.8 Information for each of the UN Model Regulations

### International Maritime Dangerous Goods Code (IMDG) - Additional information

Not subject to IMDG.

### International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Not subject to ICAO-IATA.

## SECTION 15: Regulatory information

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

#### Relevant provisions of the European Union (EU)

#### Restrictions according to REACH, Annex XVII

not listed

#### List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list

Not listed.

#### Seveso Directive

| 2012/18/EU (Seveso III) |                                       |   |       |
|-------------------------|---------------------------------------|---|-------|
| No                      | Dangerous substance/hazard categories | Qualifying quantity (tonnes) for the application of lower and upper-tier requirements | Notes |
|                         | not assigned                          |   |       |

#### Deco-Paint Directive

|             |           |
|-------------|-----------|
| VOC content | 100 %     |
| VOC content | 1.045 g/l |

#### Industrial Emissions Directive (IED)

|             |       |
|-------------|-------|
| VOC content | 0 %   |
| VOC content | 0 g/l |

#### Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

#### Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

#### Water Framework Directive (WFD)

not listed

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### Regulation on the marketing and use of explosives precursors

not listed

### Regulation on drug precursors

not listed

### Regulation on substances that deplete the ozone layer (ODS)

not listed

### Regulation concerning the export and import of hazardous chemicals (PIC)

not listed

### Regulation on persistent organic pollutants (POP)

not listed

### 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       | substance is listed            |
| CA      | NDSL       | substance is listed            |
| EU      | ECSI       | substance is listed            |
| EU      | REACH Reg. | substance is listed            |
| NZ      | NZIoC      | substance is listed            |
| PH      | PICCS      | substance is listed            |
| TW      | TCSI       | substance is listed            |
| US      | TSCA       | substance is listed (INACTIVE) |
| VN      | NCI        | substance is listed            |

#### Legend

|            |   |
|------------|---|
| AIIC       | Australian Inventory of Industrial Chemicals                      |
| ECSI       | EC Substance Inventory (EINECS, ELINCS, NLP)                      |
| NCI        | National Chemical Inventory                                       |
| NDSL       | Non-domestic Substances List (NDSL)                               |
| 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

No Chemical Safety Assessment has been carried out for this substance.

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## SECTION 16: Other information

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

| Section | Former entry (text/value)  | Actual entry (text/value)  | Safety-relevant |
|---------|--|--|-----------------|
| 2.3     |  | Endocrine disrupting properties:<br>Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%. | yes             |
| 14.8    | Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information:<br>Not subject to ADR, RID and ADN. |  | yes             |
| 15.1    | VOC content:<br>100 %<br>1.045 g/l   | VOC content:<br>100 %  | yes             |
| 15.1    |  | VOC content:<br>1.045 g/l  | yes             |
| 15.1    |  | National inventories:<br>change in the listing (table)   | yes             |

### Abbreviations and acronyms

| Abbr.    | Descriptions of used abbreviations  |
|----------|---|
| ADR      | Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)                     |
| ATE      | Acute Toxicity Estimate   |
| CAS      | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)  |
| CLP      | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures  |
| DGR      | Dangerous Goods Regulations (see IATA/DGR)  |
| 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  |
| EC No    | The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union) |
| ED       | Endocrine disruptor   |
| EINECS   | European Inventory of Existing Commercial Chemical Substances   |
| ELINCS   | European List of Notified Chemical Substances   |
| 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   |
| LD50     | Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval  |
| NLP      | No-Longer Polymer   |
| PBT      | Persistent, Bioaccumulative and Toxic   |

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| Abbr. | Descriptions of used abbreviations                                   |
|-------|--|
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| SVHC  | Substance of Very High Concern                                       |
| VOC   | Volatile Organic Compounds   |
| vPvB  | Very Persistent and very Bioaccumulative                             |

### Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

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

| Code | Text                          |
|------|-------------------------------|
| H302 | Harmful if swallowed.         |
| H312 | Harmful in contact with skin. |
| H332 | Harmful if inhaled.           |

### Disclaimer

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