

#### Buffer solution pH 6,865 ±0,01 (25 °C) ROTI®Calipure, ready-for-use product

article number: **4284** Version: **3.0 en** Replaces version of: 2022-06-02 Version: (2) date of compilation: 2018-07-30 Revision: 2023-07-03

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

#### 1.1 Product identifier

Identification of the substance

Article number

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Registration number (REACH)

not relevant (mixture)

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

Relevant identified uses:

Uses advised against:

Laboratory chemical Laboratory and analytical use

Do not use for private purposes (household). 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 **Telefax:** +49 (0) 721 - 56 06 149 **e-mail:** sicherheit@carlroth.de **Website:** www.carlroth.de

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

#### e-mail (competent person):

#### sicherheit@carlroth.de

#### 1.4 Emergency telephone number

| Name  | Street        | Postal<br>code/city | Telephone       | Website                     |
|---|---------------|---------------------|-----------------|-----------------------------|
| National Poisons Information<br>Centre<br>Beaumont Hospital | Beaumont Road | Dublin 9            | +353 1 809 2166 | https://<br>www.poisons.ie/ |

# **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

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

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/ EC.

#### 2.2 Label elements

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

not required



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#### 2.3 Other hazards

# **Results of PBT and vPvB assessment** Does not contain a PBT-/vPvB-substance in a concentration of $\ge$ 0,1%.

#### **Endocrine disrupting properties**

Does not contain an endocrine disruptor (EDC) in a concentration of  $\ge 0,1\%$ .

# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

not relevant (mixture)

3.2 Mixtures

#### Description of the mixture

This product does not meet the criteria for classification in any hazard class according to GHS

# **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures



# General notes

No special measures are necessary.

**Following inhalation** Provide fresh air.

#### Following skin contact

Rinse skin with water/shower.

#### Following eye contact

Rinse cautiously with water for several minutes.

#### **Following ingestion**

Rinse mouth. Call a doctor if you feel unwell.

- **4.2** Most important symptoms and effects, both acute and delayed Symptoms and effects are not known to date.
- **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 Non-combustible.

#### 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. 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.

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

Wipe up with absorbent material (e.g. cloth, fleece).

#### Other information relating to spills and releases

Place in appropriate containers for disposal.

#### 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.

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



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#### • 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**



Usually no personal respirative protection necessary.

#### 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  | odourless                                 |
| Melting point/freezing point                             | not determined                            |
| Boiling point or initial boiling point and boiling range | 100 °C at 1.013 hPa                       |
| 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)   | 6,845 – 6,885 (20 °C)                     |
| Kinematic viscosity                                      | not determined                            |
| Solubility(ies)  |   |
| Water solubility   | miscible in any proportion                |
| Partition coefficient                                    |   |
| Partition coefficient n-octanol/water (log value):       | not relevant (inorganic)                  |
|  |   |
| Vapour pressure  | 23 hPa at 20 °C                           |
| Density and/or relative density                          |   |
| Density  | ~1 <sup>g</sup> / <sub>cm³</sub> at 20 °C |
|  |   |



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Relative vapour densityinformation on this property is not availableParticle characteristicsnot relevant (liquid)Other safety parametersoneOxidising propertiesnoneOther informationhazard classes acc. to GHS<br/>(physical hazards): not relevantOther safety characteristics:hazard classes acc. to GHS<br/>(physical hazards): not relevant

Miscibility

completely miscible with water

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

9.2

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

No known hazardous reactions.

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

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

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/ EC.

#### Acute toxicity

Shall not be classified as acutely toxic.

#### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.



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#### 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.

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

#### • If swallowed

Data are not available.

• If in eyes

Data are not available.

#### • If inhaled

Data are not available.

#### • If on skin

Data are not available.

#### Other information

Health effects are not known.

#### **11.2** Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of  $\ge 0,1\%$ .

#### 11.3 Information on other hazards

There is no additional information.



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# **SECTION 12: Ecological information**

#### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

# 12.2 Persistence and degradability

Data are not available.

**12.3 Bioaccumulative potential** Data are not available.

#### 12.4 Mobility in soil

Data are not available.

#### 12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB. Does not contain a PBT-/vPvB-substance in a concentration of  $\geq$  0,1%.

#### 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of  $\ge 0,1\%$ .

#### 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.

#### 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.

#### 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.



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# **SECTION 14: Transport information**

- 14.1 UN number or ID number
- 14.2 UN proper shipping name
- 14.3 Transport hazard class(es)
- 14.4 Packing group
- 14.5 Environmental hazards

not subject to transport regulations

not assigned

none

not assigned

non-environmentally hazardous acc. to the dangerous goods regulations

- 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**

none of the ingredients are listed

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

None of the ingredients are listed.

#### **Seveso Directive**

| 2012/18/EU (Seveso III) |                                       |   |       |  |
|-------------------------|---------------------------------------|---|-------|--|
| Νο                      | Dangerous substance/hazard categories | Qualifying quantity (tonnes) for the ap-<br>plication of lower and upper-tier re-<br>quirements | Notes |  |
|                         | not assigned                          |   |       |  |

#### **Deco-Paint Directive**

| VOC content                                | 0 %                           |
|--|-------------------------------|
| VOC content (Water content was discounted) | 0 <sup>g</sup> / <sub>l</sub> |



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# Industrial Emissions Directive (IED) VOC content 0 %

| VOC content (Water content was discounted) | 0 g/l |
|--|-------|

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

none of the ingredients are listed

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

none of the ingredients are listed

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

none of the ingredients are listed

#### **Regulation on drug precursors**

none of the ingredients are listed

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

none of the ingredients are listed

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

none of the ingredients are listed

#### **Regulation on persistent organic pollutants (POP)**

none of the ingredients are 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       | 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     |
| JP      | ISHA-ENCS  | not 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     |
|         |            |                                |



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| Country   | Inventory  | Status                              |
|---|--|-------------------------------------|
| US  | TSCA   | all ingredients are listed (ACTIVE) |
| DSL<br>ECSI<br>IECSC<br>INSQ<br>ISHA-ENCS<br>KECI<br>NZIOC<br>PICCS | Australian Inventory of Industrial Chemicals<br>Chemical Inventory and Control Regulation<br>List of Existing and New Chemical Substances (CSCL-ENCS)<br>Domestic Substances List (DSL)<br>EC Substance Inventory (EINECS, ELINCS, NLP)<br>Inventory of Existing Chemical Substances Produced or Imported in China<br>National Inventory of Chemical Substances<br>Inventory of Existing and New Chemical Substances (ISHA-ENCS)<br>Korea Existing Chemicals Inventory<br>New Zealand Inventory of Chemicals<br>Philippine Inventory of Chemicals and Chemical Substances (PICCS)<br>REACH registered substances<br>Taiwan Chemical Substance Inventory<br>Toxic Substance Control Act |                                     |

#### 15.2 Chemical safety assessment

According to REACH, Article 14 (1) a chemical safety assessment has been carried out for this substance or components of this mixture when the substance has been registered in quantities of 10 tonnes or more per year per registrant.

# **SECTION 16: Other information**

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

| Section | Former entry (text/value)  | Actual entry (text/value)   | Safety-<br>relev-<br>ant |
|---------|--|---|--------------------------|
| 2.3     | Results of PBT and vPvB assessment:<br>This mixture does not contain any substances<br>that are assessed to be a PBT or a vPvB.                    | Results of PBT and vPvB assessment:<br>Does not contain a PBT-/vPvB-substance in a<br>concentration of ≥ 0,1%.  | yes                      |
| 2.3     |  | Endocrine disrupting properties:<br>Does not contain an endocrine disruptor (EDC)<br>in a concentration of ≥ 0,1%.  | yes                      |
| 14.8    | Transport of dangerous goods by road, rail and<br>inland waterway (ADR/RID/ADN) - Additional in-<br>formation:<br>Not subject to ADR, RID and ADN. |   | yes                      |
| 15.1    | VOC content:<br>0 %<br>0 <sup>g</sup> / <sub>l</sub>   | VOC content:<br>0 %   | yes                      |
| 15.1    |  | VOC content (Water content was discounted):<br>0 <sup>g</sup> / <sub>l</sub>  | yes                      |
| 15.1    |  | National inventories:<br>change in the listing (table)  | yes                      |
| 15.2    | Chemical Safety Assessment:<br>Chemical safety assessments for substances in<br>this mixture were not carried out.                                 | Chemical safety assessment:<br>According to REACH, Article 14 (1) a chemical<br>safety assessment has been carried out for this<br>substance or components of this mixture when<br>the substance has been registered in quantities<br>of 10 tonnes or more per year per registrant. | yes                      |



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| Abbreviations and acronyms |  |  |
|----------------------------|--|--|
| Abbr.                      | Descriptions of used abbreviations   |  |
| ADR                        | Accord relatif au transport international des marchandises dangereuses par route (Agreement concern-<br>ing the International Carriage of Dangerous Goods by Road)           |  |
| CLP                        | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures   |  |
| DGR                        | Dangerous Goods Regulations (see IATA/DGR)   |  |
| 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 Na-<br>tions   |  |
| 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  |  |
| NLP                        | No-Longer Polymer  |  |
| PBT                        | Persistent, Bioaccumulative and Toxic  |  |
| REACH                      | Registration, Evaluation, Authorisation and Restriction of Chemicals   |  |
| RID                        | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula-<br>tions concerning the International carriage of Dangerous goods by Rail) |  |
| 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). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). 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).

#### Disclaimer

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