| United | Kingdom (en) | |
|--------|--------------|--|

acc. to Regulation (EC) No. 1907/2006 (REACH)

Acide glycyrrhétinique ROTICHROM® HPLC

article number: 7469 Version: 3.0 en Replaces version of: 2022-08-08 Version: (2)

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

Product identifier 1.1

| Identification of the substance | Acide glycyrrhétinique ROTICHROM® HPLC | | |
|---------------------------------|--|--|--|
| Article number | 7469 | | |
| EC number | 207-444-6 | | |
| CAS number | 471-53-4 | | |
| | | | |

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

Relevant identified uses:

Uses advised against:

Laboratory chemical Laboratory and analytical use

Do not use for private purposes (household). Food, drink and animal feedingstuffs.

Details of the supplier of the safety data sheet 1.3

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 code/city | Telephone | Website |
|--|-----------|----------------------|--------------|---------|
| National Poisons Information Service City Hospital | Dudley Rd | B187QH Birmingham | 844 892 0111 | |

SECTION 2: Hazards identification

Classification of the substance or mixture 2.1

Classification acc. to GHS

| Section | Hazard class | Cat- egory | Hazard class and category | Hazard statement |
|---------|---------------------------------------|---------------|---------------------------|---------------------|
| 3.3 | 3.3 Serious eye damage/eye irritation | | Eye Irrit. 2 | H319 |

For full text of abbreviations: see SECTION 16

2.2 Label elements



date of compilation: 2019-07-18 Revision: 2024-03-03

acc. to Regulation (EC) No. 1907/2006 (REACH)

Acide glycyrrhétinique ROTICHROM® HPLC



article number: 7469

| artici | e number. 7409 | | | |
|--------|---------------------|---|--|--|
| | Labelling | | | |
| | Signal word | Warning | | |
| | Pictograms | | | |
| | GHS07 | | | |
| | Hazard statemen | ts | | |
| | H319 | Causes serious eye irritation | | |
| | Precautionary sta | atements | | |
| | Precautionary sta | atements - prevention | | |
| | P280 | Wear protective gloves/eye protection | | |
| | Precautionary sta | atements - response | | |
| | P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing | | |
| 2.3 | Other hazards | | | |
| | Results of PBT and | d vPvB assessment | | |
| | According to the re | esults of its assessment, this substance is not a PBT or a vPvB. | | |
| | Endocrine disrupt | ting properties | | |
| | Does not contain a | an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$. | | |
| SEC | CTION 3: Compo | osition/information on ingredients | | |
| 3.1 | Substances | | | |
| | Name of substance | e Acide glycyrrhétinique | | |
| | | | | |

| Name of substance | Acide giycynneuniqu |
|-------------------|-------------------------------------|
| Molecular formula | $C_{30}H_{46}O_{4}$ |
| Molar mass | 470,7 ^g / _{mol} |
| CAS No | 471-53-4 |
| EC No | 207-444-6 |

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off contaminated clothing.

acc. to Regulation (EC) No. 1907/2006 (REACH)

® Foth

Acide glycyrrhétinique ROTICHROM® HPLC

article number: 7469

Following inhalation

Provide fresh air.

Following skin contact

Rinse skin with water/shower.

Following eye contact

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Irritation, Conjunctivitis (pink eye)

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, dry extinguishing powder, ABC-powder

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible.

Hazardous combustion products

In case of fire may be liberated: Carbon monoxide (CO), Carbon dioxide (CO₂)

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.

acc. to Regulation (EC) No. 1907/2006 (REACH)

Acide glycyrrhétinique ROTICHROM® HPLC



article number: 7469

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.

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.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice:

Ventilation requirements

Use local and general ventilation.

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)

| Coun try | Name of agent | CAS No | Identifi- er | TWA [mg/ m³] | STEL [mg/ m³] | Ceil- ing-C [mg/ m ³] | Nota- tion | Source |
|-------------|---------------|--------|-----------------|--------------------|---------------------|--|---------------|-----------|
| GB | dust | | WEL | 10 | | | i | EH40/2005 |
| GB | dust | | WEL | 4 | | | r | EH40/2005 |

Notation

Ceiling-C Ceiling value is a limit value above which exposure should not occur

acc. to Regulation (EC) No. 1907/2006 (REACH)

Acide glycyrrhétinique ROTICHROM® HPLC



article number: 7469

| Notation | |
|---------------|--|
| i | Inhalable fraction |
| r | Respirable fraction |
| STEL | Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15- |
| T 14/4 | minute period (unless otherwise specified) |
| TWA | Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified) |

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 consider-able 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

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: Dust formation. Particulate filter device (EN 143). P1 (filters at least 80 % of airborne particles, colour code: White).

Environmental exposure controls

Keep away from drains, surface and ground water.

acc. to Regulation (EC) No. 1907/2006 (REACH)

Acide glycyrrhétinique ROTICHROM® HPLC



article number: 7469

SECTION 9: Physical and chemical properties

| 9.1 | Information on basic physical and chemical pro | operties |
|-----|--|--|
| | Physical state | solid |
| | Form | powder |
| | Colour | whitish |
| | Odour | odourless |
| | Melting point/freezing point | 288,4 – 292,2 °C at 1.013 hPa (ECHA) |
| | Boiling point or initial boiling point and boiling range | not determined |
| | 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 | 20 °C at 1.013 hPa (ECHA) |
| | pH (value) | not applicable |
| | Kinematic viscosity | not relevant |
| | Solubility(ies) | |
| | Water solubility | not determined |
| | Solubility in ethanol | soluble |
| | Partition coefficient | |
| | Partition coefficient n-octanol/water (log value): | 4,5 (20 °C) (ECHA) |
| | Vapour pressure | 0,1 hPa at 20 °C |
| | Density and/or relative density | |
| | Density | 1,202 ^g / _{cm³} at 20 °C (ECHA) |
| | Relative vapour density | Information on this property is not available. |
| | 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. |

acc. to Regulation (EC) No. 1907/2006 (REACH)

® §ROTH

Acide glycyrrhétinique ROTICHROM® HPLC

article number: 7469

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

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

10.4 Conditions to avoid

Keep away from heat. Decompostion takes place from temperatures above: 20 °C at 1.013 hPa.

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

Classification acc. to GHS

Acute toxicity

Shall not be classified as acutely toxic. GHS of the United Nations, annex 4. May be harmful if swallowed.

Acute toxicity

| Exposure route | Endpoint | Value | Species | Method | Source |
|----------------|----------|--------------------------------------|---------|--------|--------|
| oral | LD50 | >2.000 ^{mg} / _{kg} | rat | | ECHA |

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

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.

acc. to Regulation (EC) No. 1907/2006 (REACH)

Acide glycyrrhétinique ROTICHROM® HPLC



article number: 7469

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

Causes serious eye irritation, conjunctivitis (pink eye)

• If inhaled

Data are not available.

• If on skin

Data are not available.

Other information

none

11.2 Endocrine disrupting properties

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

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.

| Aquatic toxicity (acute) | | | | | |
|--------------------------|------------------------------------|-----------------------|--------|------------------|--|
| Endpoint | Value | Species | Source | Exposure time | |
| EC50 | 3,492 ^{mg} / _l | aquatic invertebrates | ECHA | 48 h | |

12.2 Persistence and degradability

Theoretical Oxygen Demand: 2,685 ^{mg}/_{mg} Theoretical Carbon Dioxide: 2,805 ^{mg}/_{mg}

Biodegradation

The substance is readily biodegradable.

| Process of degradability | | | | |
|---------------------------|------------------|------|--|--|
| Process | Degradation rate | Time | | |
| carbon dioxide generation | 73 % | 10 d | | |

acc. to Regulation (EC) No. 1907/2006 (REACH)

® ROTH

Acide glycyrrhétinique ROTICHROM® HPLC

article number: 7469

12.3 Bioaccumulative potential Does not significantly accumulate in organisms. n-octanol/water (log KOW) 4,5 (20 °C) (ECHA)

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 $\ge 0,1\%$.

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 4 irritant - skin irritation and eye damage

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
- 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

acc. to Regulation (EC) No. 1907/2006 (REACH)



Acide glycyrrhétinique ROTICHROM® HPLC

article number: 7469

- **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)

Seveso Directive

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

Deco-Paint Directive

| VOC content | 0 % |
|-------------|-------------------------------|
| VOC content | 0 ^g / _l |

Industrial Emissions Directive (IED)

| VOC content | 100 % |
|-------------|-----------------------------------|
| VOC content | 1.202 ^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

Regulation on the marketing and use of explosives precursors

not listed

Regulation on drug precursors

not listed

acc. to Regulation (EC) No. 1907/2006 (REACH)

Acide glycyrrhétinique ROTICHROM® HPLC



article number: 7469

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

National regulations(GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list not listed

Restrictions according to GB REACH, Annex 17

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 | DSL | substance is listed |
| CN | IECSC | substance is listed |
| EU | ECSI | substance is listed |
| EU | REACH Reg. | substance is listed |
| JP | CSCL-ENCS | substance is listed |
| KR | KECI | substance is listed |
| MX | INSQ | substance is listed |
| NZ | NZIoC | substance is listed |
| TW | TCSI | substance is listed |
| US | TSCA | substance is listed (ACTIVE) |
| VN | NCI | substance is listed |

Legend

 AIIC
 Australian Inventory of Industrial Chemicals

 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

 INSQ
 National Inventory of Chemical Substances

 VECI
 Koroa Evicting Chemical Substances

 KECI Korea Existing Chemicals Inventory NCI National Chemical Inventory NZIOC New Zealand Inventory of Chemicals REACH Reg. REACH registered substances Taiwan Chemical Substance Inventory TCSI TSCA **Toxic Substance Control Act**

15.2 Chemical safety assessment

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

acc. to Regulation (EC) No. 1907/2006 (REACH)



Acide glycyrrhétinique ROTICHROM® HPLC

article number: 7469

SECTION 16: Other information

Indication of changes (revised safety data sheet)

| Section | Former entry (text/value) | Actual entry (text/value) | Safety- relev- ant |
|---------|--|---|--------------------------|
| 2.3 | | Endocrine disrupting properties: 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 in- formation: Not subject to ADR, RID and ADN. | | yes |
| 15.1 | VOC content: 0 % 0 ^g / _l | VOC content: 0 % | yes |
| 15.1 | | VOC content: 0 ^g / _l | yes |
| 15.1 | | National inventories: 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 concern- ing the International Carriage of Dangerous Goods by Road) |
| CAS | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances) |
| Ceiling-C | Ceiling value |
| 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 identi fier of substances commercially available within the EU (European Union) |
| ED | Endocrine disruptor |
| EH40/2005 | EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-li- cence/) |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| ELINCS | European List of Notified Chemical Substances |
| GB REACH | The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended) |
| GHS | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na- tions |
| ΙΑΤΑ | 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 specified time interval |

acc. to Regulation (EC) No. 1907/2006 (REACH)



Acide glycyrrhétinique ROTICHROM® HPLC

article number: 7469

| Abbr. | Descriptions of used abbreviations |
|-------|--|
| 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- tions concerning the International carriage of Dangerous goods by Rail) |
| STEL | Short-term exposure limit |
| TWA | Time-weighted average |
| VOC | Volatile Organic Compounds |
| vPvB | Very Persistent and very Bioaccumulative |
| WEL | Workplace exposure limit |

Key literature references and sources for data

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).

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.