

# SAFETY DATA SHEETS

## According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS) - Sixth revised edition

Version: 1.0

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### 1. Identification

#### 1.1 GHS Product identifier

Product name glycyrrhizinic acid

#### 1.2 Other means of identification

Product number -

Other names Glycyrrhizin

#### 1.3 Recommended use of the chemical and restrictions on use

Identified uses For industry use only. Food additives -> Flavoring Agents

Uses advised against no data available

#### 1.4 Supplier's details

#### 1.5 Emergency phone number

Emergency phone number -

Service hours Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

### 2. Hazard identification

#### 2.1 Classification of the substance or mixture

Not classified.

#### 2.2 GHS label elements, including precautionary statements

Pictogram(s) No symbol.

Signal word No signal word.

Hazard statement(s) none

Precautionary statement(s)

Prevention none

Response none

Storage none

Disposal none

### 2.3 Other hazards which do not result in classification

none

## 3. Composition/information on ingredients

### 3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
glycyrrhizinic acid	glycyrrhizinic acid	<a href="#">1405-86-3</a>	none	100%

## 4. First-aid measures

### 4.1 Description of necessary first-aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

no data available

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

Absorption, Distribution and Excretion

GLYCYRRHIZIN WAS ABSORBED IN RAT SMALL INTESTINE; THERE WAS NO DETECTABLE AMT OF GLYCYRRHETINIC ACID IN BLOOD AFTER BOLUS INJECTION OF GLYCYRRHIZIN INTO PORTAL VEIN;

GLYCYRRHETINIC ACID WAS PRESENT IN DETECTABLE AMT IN BLOOD AFTER ORAL ADMIN.

## **5.Fire-fighting measures**

### **5.1 Extinguishing media**

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### **5.2 Specific hazards arising from the chemical**

no data available

### **5.3 Special protective actions for fire-fighters**

Wear self-contained breathing apparatus for firefighting if necessary.

## **6.Accidental release measures**

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

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## **7.Handling and storage**

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

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

## **8.Exposure controls/personal protection**

### **8.1 Control parameters**

Occupational Exposure limit values

no data available

Biological limit values

no data available

### **8.2 Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### **8.3 Individual protection measures, such as personal protective equipment (PPE)**

#### Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique(without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### Respiratory protection

Wear dust mask when handling large quantities.

#### Thermal hazards

no data available

### **9.Physical and chemical properties**

Physical state	Crystals from glacial acetic acid. Obtained from licorice.
Colour	Crystals from glacial acetic acid
Odour	no data available
Melting point/ freezing point	300° C(dec.)(lit.)
Boiling point or initial boiling point and boiling range	82° C/5mmHg(lit.)
Flammability	no data available

Lower and upper explosion limit / flammability limit	no data available
Flash point	90° C(lit.)
Auto-ignition temperature	no data available
Decomposition temperature	no data available
pH	no data available
Kinematic viscosity	no data available
Solubility	Freely sol in hot water, alcohol; practically insol in ether
Partition coefficient n-octanol/water (log value)	log Kow = 2.80
Vapour pressure	0mmHg at 25° C
Density and/or relative density	1.43g/cm <sup>3</sup>
Relative vapour density	no data available
Particle characteristics	no data available

## **10.Stability and reactivity**

### **10.1 Reactivity**

no data available

### **10.2 Chemical stability**

Stable under recommended storage conditions.

### **10.3 Possibility of hazardous reactions**

no data available

### **10.4 Conditions to avoid**

no data available

### **10.5 Incompatible materials**

no data available

### **10.6 Hazardous decomposition products**

no data available

## **11.Toxicological information**

### Acute toxicity

- Oral: no data available
- Inhalation: no data available
- Dermal: no data available

Skin corrosion/irritation

no data available  
Serious eye damage/irritation

no data available  
Respiratory or skin sensitization

no data available  
Germ cell mutagenicity

no data available  
Carcinogenicity

no data available  
Reproductive toxicity

no data available  
STOT-single exposure

no data available  
STOT-repeated exposure

no data available  
Aspiration hazard

no data available

## **12. Ecological information**

### **12.1 Toxicity**

- Toxicity to fish: no data available
- Toxicity to daphnia and other aquatic invertebrates: no data available
- Toxicity to algae: no data available
- Toxicity to microorganisms: no data available

### **12.2 Persistence and degradability**

no data available

### **12.3 Bioaccumulative potential**

no data available

### **12.4 Mobility in soil**

no data available

### **12.5 Other adverse effects**

no data available

## **13. Disposal considerations**

### **13.1 Disposal methods**

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

#### 14. Transport information

##### 14.1 UN Number

ADR/RID: UN3439IMDG: UN3439IATA: UN3439

##### 14.2 UN Proper Shipping Name

ADR/RID: NITRILES, SOLID, TOXIC, N. O. S.

IMDG: NITRILES, SOLID, TOXIC, N. O. S.

IATA: NITRILES, SOLID, TOXIC, N. O. S.

##### 14.3 Transport hazard class(es)

ADR/RID: 6.1IMDG: 6.1IATA: 6.1

##### 14.4 Packing group, if applicable

ADR/RID: IIIIMDG: IIIIATA: III

##### 14.5 Environmental hazards

ADR/RID: noIMDG: noIATA: no

##### 14.6 Special precautions for user

no data available

##### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

#### 15. Regulatory information

##### 15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
glycyrrhizinic acid	glycyrrhizinic acid	<a href="#">1405-86-3</a>	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.

China Catalog of Hazardous chemicals 2015	Not Listed.
New Zealand Inventory of Chemicals (NZIoC)	Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Listed.
Vietnam National Chemical Inventory	Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)	Listed.

## 16. Other information

### Information on revision

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### Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

### References

- IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>
- HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
- IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)
- CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>
- ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>



- Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>
  - ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>
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