

# SAFETY DATA SHEETS

According to the UN GHS revision 9

Version: 1.0  
Creation Date: July 15, 2019  
Revision Date: July 15, 2019

## SECTION 1: Identification

### 1.1 GHS Product identifier

**Product name** Griseofulvin

### 1.2 Other means of identification

**Product number** -

**Other names** Griseofulvin Permeability Diameter; (1'S,6'R)-7-chloro-2',4,6-trimethoxy-6'-methylspiro[benzofuran-2(3H),1'-[2]cyclohexene]-3,4'-dione; Spiro[benzofuran-2(3H),1'-[2]cyclohexene]-3,4'-dione, 7-chloro-2',4,6-trimethoxy-6'-methyl-, (1'S-trans)-

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

**Identified uses** Industrial and scientific research use.

**Uses advised against** no data available

### 1.4 Supplier's details

**Company** Shanghai Baishun Biotechnology Co., Ltd  
**Address** No. 26, Lane 918, Lianye Road, Zhelin Town, Fengxian District, Shanghai, 201400, China  
**Telephone** +86-21-37581181

### 1.5 Emergency phone number

**Emergency phone number** +86-21-37581181

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

## SECTION 2: Hazard identification

### 2.1 Classification of the substance or mixture

Skin sensitization, Category 1  
Carcinogenicity, Category 2  
Reproductive toxicity, Category 1B

### 2.2 GHS label elements, including precautionary statements

**Pictogram(s)**



**Signal word** Danger

|                                   |  |
|-----------------------------------|--|
| <b>Hazard statement(s)</b>        | H317 May cause an allergic skin reaction<br>H351 Suspected of causing cancer<br>H360 May damage fertility or the unborn child  |
| <b>Precautionary statement(s)</b> |  |
| <b>Prevention</b>                 | P261 Avoid breathing dust/fume/gas/mist/vapours/spray.<br>P272 Contaminated work clothing should not be allowed out of the workplace.<br>P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...   |
| <b>Response</b>                   | P203 Obtain, read and follow all safety instructions before use.<br>P302+P352 IF ON SKIN: Wash with plenty of water/...<br>P333+P317 If skin irritation or rash occurs: Get medical help.<br>P321 Specific treatment (see ... on this label).<br>P362+P364 Take off contaminated clothing and wash it before reuse.<br>P318 IF exposed or concerned, get medical advice. |
| <b>Storage</b>                    | P405 Store locked up.  |
| <b>Disposal</b>                   | P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.  |

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

no data available

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## SECTION 3: Composition/information on ingredients

### 3.1 Substances

| Chemical name | Common names and synonyms | CAS number | EC number | Concentration |
|---------------|---------------------------|------------|-----------|---------------|
| Griseofulvin  | Griseofulvin              | 126-07-8   | 204-767-4 | 100%          |

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## SECTION 4: First-aid measures

### 4.1 Description of necessary first-aid measures

#### If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

#### Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

#### Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

#### Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

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

**SYMPTOMS:** Symptoms of exposure to this compound may include urticaria, headaches, confusion, dizziness, nausea, diarrhea, photosensitivity and leukopenia. Other symptoms may include epigastric distress, fever and arthralgia. It may cause renal damage and porphyria. It may also cause peripheral neuritis, syncope and blurred vision. Exposure has caused skin rashes, fatigue, proteinuria and, rarely, angioneurotic edema, paresthesia and lupus erythematosus. Symptoms may include dryness of the mouth, an altered sensation of taste, gastrointestinal disturbances, severe allergic reactions, erythema multiforme, exfoliative dermatitis, candidiasis, depression, irritability and, rarely, hepatitis. Other symptoms reported are oral thrush, vomiting, insomnia, impairment of the performance of routine activities and, rarely, lupus-like syndromes and granulocytopenia. Skin irritation may occur. Exposure can lead to lethargy, vertigo, transient macular edema, augmentation

of the effects of alcohol, heartburn, flatulence, angular stomatitis, neutropenia, punctate basophilia, monocytosis, albuminuria, cylindruria and hepatotoxicity. Abnormalities of the sexual organs and breasts have occurred, especially in children. It is contra-indicated in persons with porphyria and liver failure. A case of blurred vision with greenish tint, and papilledema have been reported. ACUTE/CHRONIC HAZARDS: This compound may cause irritation of and be absorbed through the skin. When heated to decomposition it emits toxic fumes of carbon monoxide, carbon dioxide and hydrogen chloride gas. (NTP, 1992)

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

#### **Absorption, Distribution and Excretion**

Poorly absorbed from GI ranging from 25 to 70% of an oral dose. Absorption is significantly enhanced by administration with or after a fatty meal.

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## **SECTION 5: Fire-fighting measures**

### **5.1 Suitable extinguishing media**

Fires involving this material can be controlled with a dry chemical, carbon dioxide or Halon extinguisher. (NTP, 1992)

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

Flash point data for this chemical are not available. It is probably combustible. (NTP, 1992)

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

Wear self-contained breathing apparatus for firefighting if necessary.

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## **SECTION 6: Accidental release measures**

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

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### **6.2 Environmental precautions**

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

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

PRECAUTIONS FOR "CARCINOGENS": A high-efficiency particulate arrester (HEPA) or charcoal filters can be used to minimize amt of carcinogen in exhausted air ventilated safety cabinets, lab hoods, glove boxes or animal rooms ... Filter housing that is designed so that used filters can be transferred into plastic bag without contaminating maintenance staff is avail commercially. Filters should be placed in plastic bags immediately after removal ... The plastic bag should be sealed immediately ... The sealed bag should be labelled properly ... Waste liquids ... should be placed or collected in proper containers for disposal. The lid should be secured & the bottles properly labelled. Once filled, bottles should be placed in plastic bag, so that outer surface ... is not contaminated ... The plastic bag should also be sealed & labelled. ... Broken glassware ... should be decontaminated by solvent extraction, by chemical destruction, or in specially designed incinerators. Chemical Carcinogens

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

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

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

## 7.2 Conditions for safe storage, including any incompatibilities

PRECAUTIONS FOR "CARCINOGENS": Storage site should be as close as practical to lab in which carcinogens are to be used, so that only small quantities required for ... expt need to be carried. Carcinogens should be kept in only one section of cupboard, an explosion-proof refrigerator or freezer (depending on chemico-physical properties ...) that bears appropriate label. An inventory ... should be kept, showing quantity of carcinogen & date it was acquired ... Facilities for dispensing ... should be contiguous to storage area.  
Chemical Carcinogens

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## SECTION 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

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

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

#### Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

#### Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. 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

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

#### Thermal hazards

no data available

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## SECTION 9: Physical and chemical properties and safety characteristics

|   |  |
|---|--|
| <b>Physical state</b>   | PHYSICAL DESCRIPTION: White to pale cream-colored crystalline powder. Odorless or almost odorless. Tasteless. Sublimes without decomposition at 410°F. (NTP, 1992) |
| <b>Colour</b>   | STOUT OCTAHEDRA OR RHOMBS FROM BENZENE   |
| <b>Odour</b>  | ODORLESS   |
| <b>Melting point/freezing point</b>                             | 217-224°C  |
| <b>Boiling point or initial boiling point and boiling range</b> | 570.4°C at 760mmHg   |
| <b>Flammability</b>   | no data available  |
| <b>Lower and upper explosion limit/flammability limit</b>       | no data available  |
| <b>Flash point</b>  | 228°C  |
| <b>Auto-ignition temperature</b>                                | no data available  |

|  |  |
|--|--|
| <b>Decomposition temperature</b>             | no data available                      |
| <b>pH</b>                                    | no data available                      |
| <b>Kinematic viscosity</b>                   | no data available                      |
| <b>Solubility</b>                            | less than 1 mg/mL at 70° F (NTP, 1992) |
| <b>Partition coefficient n-octanol/water</b> | no data available                      |
| <b>Vapour pressure</b>                       | 3.11E-11mmHg at 25°C                   |
| <b>Density and/or relative density</b>       | 1.38g/cm <sup>3</sup>                  |
| <b>Relative vapour density</b>               | no data available                      |
| <b>Particle characteristics</b>              | no data available                      |

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## **SECTION 10: Stability and reactivity**

### **10.1 Reactivity**

no data available

### **10.2 Chemical stability**

Preparations of griseofulvin have expiration dates of 2-5 yr following the date of mfr ...

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

GRISEOFULVIN is incompatible with strong oxidizing agents. (NTP, 1992).

### **10.4 Conditions to avoid**

no data available

### **10.5 Incompatible materials**

no data available

### **10.6 Hazardous decomposition products**

no data available

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## **SECTION 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**

Evaluation: There is inadequate evidence in humans for the carcinogenicity of griseofulvin. There is sufficient evidence in experimental animals for the carcinogenicity of griseofulvin. Overall evaluation: Griseofulvin is possibly carcinogenic to humans (Group 2B).

### **Reproductive toxicity**

no data available

**STOT-single exposure**

no data available

**STOT-repeated exposure**

no data available

**Aspiration hazard**

no data available

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## **SECTION 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

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## **SECTION 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.

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## **SECTION 14: Transport information**

### **14.1 UN Number**

|   |  |  |
|---|--|--|
| ADR/RID: Not dangerous goods. (For reference only, please check.) | IMDG: Not dangerous goods. (For reference only, please check.) | IATA: Not dangerous goods. (For reference only, please check.) |
|---|--|--|

### **14.2 UN Proper Shipping Name**

|   |  |  |
|---|--|--|
| ADR/RID: Not dangerous goods. (For reference only, please check.) | IMDG: Not dangerous goods. (For reference only, please check.) | IATA: Not dangerous goods. (For reference only, please check.) |
|---|--|--|

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

ADR/RID: Not dangerous goods. (For reference only, please check.)      IMDG: Not dangerous goods. (For reference only, please check.)      IATA: Not dangerous goods. (For reference only, please check.)

#### 14.4 Packing group, if applicable

ADR/RID: Not dangerous goods. (For reference only, please check.)      IMDG: Not dangerous goods. (For reference only, please check.)      IATA: Not dangerous goods. (For reference only, please check.)

#### 14.5 Environmental hazards

ADR/RID: No      IMDG: No      IATA: No

#### 14.6 Special precautions for user

no data available

#### 14.7 Transport in bulk according to IMO instruments

no data available

### SECTION 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   |
|--|---------------------------|------------|-------------|
| Griseofulvin   | Griseofulvin              | 126-07-8   | 204-767-4   |
| European Inventory of Existing Commercial Chemical Substances (EINECS)   |                           |            | Listed.     |
| EC Inventory   |                           |            | Listed.     |
| United States Toxic Substances Control Act (TSCA) Inventory              |                           |            | Not 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) |                           |            | Not Listed. |
| Korea Existing Chemicals List (KECL)                                     |                           |            | Listed.     |

### SECTION 16: Other information

#### Information on revision

**Creation Date**      July 15, 2019  
**Revision Date**      July 15, 2019

#### 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/>

**Any questions regarding this SDS, Please send your inquiry to [sds@xixisys.com](mailto:sds@xixisys.com)**

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