

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## SPIROGALBANONE PURE

Version 2.0

Revision Date 05 DEC 2012

Print Date 06 DEC 2012

### 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Sales No. : SPIROGALBANONE PURE

Substance name : 1-spiro(4.5)-7-decen-7-yl-4-penten-1-one and 1-spiro(4.5)-6-decen-7-yl-4-penten-1-one

Identifier

CAS : 224031-70-3  
CAS : 224031-71-4  
ELINCS : 438-060-9

REACH Registration Number : 01-0000018304-76-0001

If this is a flavouring for foodstuffs, then the exemption from REACH registration applies.

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

Intended Use Fragrances : Perfumery ingredient

#### 1.3 Details of the supplier of the safety data sheet

Company : Givaudan Suisse SA  
Chemin de la Parfumerie 5  
CH-1214 VERNIER

Telephone : +41227809111  
Telefax : +41227809150  
E-mail address : global.msds\_fragrances\_raps@givaudan.com  
Responsible/issuing person

#### 1.4 Emergency telephone number

+33172110003

### 2. Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Skin sensitization, Category 1	H317: May cause an allergic skin reaction.
Acute aquatic toxicity, Category 1	H400: Very toxic to aquatic life.
Chronic aquatic toxicity, Category 1	H410: Very toxic to aquatic life with long lasting effects.

##### Classification (67/548/EEC, 1999/45/EC)

Dangerous for the environment	R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic
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Administrative information:

Report Information: SDS\_GB/EN/GHS\_SDS\_EU\_CNTRY/09

Sales & Distribution Information: VE01/FR/CH12/01/0010003798/0001159009/000020

Shipping Order Information: 5220486/1744965

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

# Givaudan<sup>®</sup>

## SPIROGALBANONE PURE

Version 2.0

Revision Date 05 DEC 2012

Print Date 06 DEC 2012

Irritant

environment.

R43: May cause sensitization by skin contact.

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



Signal word

: Warning

Hazard statements

: H317  
H410

May cause an allergic skin reaction.  
Very toxic to aquatic life with long lasting effects.

Precautionary statements

: **Prevention:**  
P261  
  
P273  
P280  
**Response:**  
P333 + P313  
  
P363  
P391

Avoid breathing dust/ fume/ gas/ mist/  
vapours/ spray.

Avoid release to the environment.

Wear protective gloves.

If skin irritation or rash occurs: Get medical  
advice/ attention.

Wash contaminated clothing before reuse.

Collect spillage.

Hazardous components which must be listed on the label:

- 1-spiro(4.5)-7-decen-7-yl-4-penten- 224031-70-3  
1-one and 1-spiro(4.5)-6-decen-7-yl-  
4-penten-1-one

#### Labelling according to EC Directives (67/548/EEC, 1999/45/EC)

Hazard pictograms



Dangerous  
for the  
environment

Irritant

R-phrases(s)

: R43  
R50/53

May cause sensitization by skin contact.  
Very toxic to aquatic organisms, may cause  
long-term adverse effects in the aquatic  
environment.

Administrative information:

Report Information: SDS\_GB/EN/GHS\_SDS\_EU\_CNTRY/09

Sales & Distribution Information: VE01/FR/CH12/01/0010003798/0001159009/000020

Shipping Order Information: 5220486/1744965

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## SPIROGALBANONE PURE

Version 2.0

Revision Date 05 DEC 2012

Print Date 06 DEC 2012

S-phrase(s) : S24 Avoid contact with skin.  
S37 Wear suitable gloves.  
S60 This material and its container must be  
disposed of as hazardous waste.  
S61 Avoid release to the environment. Refer to  
special instructions/ Safety data sheets.

Hazardous components which must be listed on the label:

- 1-spiro(4.5)-7-decen-7-yl-4-penten-1-one and 1-spiro(4.5)-6-decen-7-yl-4-penten-1-one 224031-70-3

### 2.3 Other hazards

no data available

## 3. Composition/information on ingredients

### 3.1 Substances

Chemical Name	CAS-No. EINECS-No. / ELINCS No.	Concentration [%]
1-spiro(4.5)-7-decen-7-yl-4-penten-1-one and 1-spiro(4.5)-6-decen-7-yl-4-penten-1-one	224031-70-3 438-060-9	>= 50 - <= 100

Hydrocarbons : 0 %

## 4. First aid measures

### 4.1 Description of first aid measures

General advice : Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.

If inhaled : If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.

In case of skin contact : If on skin, rinse well with water.

Administrative information:

Report Information: SDS\_GB/EN/GHS\_SDS\_EU\_CNTRY/09

Sales & Distribution Information: VE01/FR/CH12/01/0010003798/0001159009/000020

Shipping Order Information: 5220486/1744965

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## SPIROGALBANONE PURE

Version 2.0

Revision Date 05 DEC 2012

Print Date 06 DEC 2012

- In case of eye contact : Flush eyes with water as a precaution.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.

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

Symptoms : no data available

Risks : no data available

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

Treatment : no data available

## 5. Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media : Dry chemical  
Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Water spray

Unsuitable extinguishing media : High volume water jet

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

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

### 5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self contained breathing apparatus for fire fighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

## 6. Accidental release measures

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

Administrative information:

Report Information: SDS\_GB/EN/GHS\_SDS\_EU\_CNTRY/09

Sales & Distribution Information: VE01/FR/CH12/01/0010003798/0001159009/000020

Shipping Order Information: 5220486/1744965

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## SPIROGALBANONE PURE

Version 2.0

Revision Date 05 DEC 2012

Print Date 06 DEC 2012

Personal precautions : Use personal protective equipment.

### 6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

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

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

not applicable

## 7. Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours/dust.  
Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Temperature class : no data available

Fire-fighting class : no data available

Dust explosion class : no data available

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

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions : no data available

Advice on common storage : no data available

German storage class : no data available

Administrative information:

Report Information: SDS\_GB/EN/GHS\_SDS\_EU\_CNTRY/09

Sales & Distribution Information: VE01/FR/CH12/01/0010003798/0001159009/000020

Shipping Order Information: 5220486/1744965

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## SPIROGALBANONE PURE

Version 2.0

Revision Date 05 DEC 2012

Print Date 06 DEC 2012

Other data : No decomposition if stored and applied as directed.

### 7.3 Specific end uses

Specific use(s) : no data available

## 8. Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Personal protective equipment

Hand protection : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water  
Tightly fitting safety goggles

Skin and body protection : impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : Wash hands before breaks and at the end of workday.

#### Environmental exposure controls

General advice : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state : liquid  
Form : liquid  
Colour : yellow  
Taste : not determined  
Odour : green, fruity, Allylic, Earthy  
Odour Threshold : 0,0233 ng/l  
Flash point : 144 °C Method: Pensky-Martens closed cup  
Lower explosion limit : not determined  
Upper explosion limit : not determined

Administrative information:

Report Information: SDS\_GB/EN/GHS\_SDS\_EU\_CNTRY/09

Sales & Distribution Information: VE01/FR/CH12/01/0010003798/0001159009/000020

Shipping Order Information: 5220486/1744965

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## SPIROGALBANONE PURE

Version 2.0

Revision Date 05 DEC 2012

Print Date 06 DEC 2012

Flammability (solid, gas)	: no data available
Oxidizing properties	: no data available
Autoignition temperature	: 265 °C Method: DIN 51794
Decomposition temperature	: no data available
Molecular Weight	: 218,30 g/mol
pH	: no data available
Melting point	: < -50 °C
Boiling point	: 296 °C at 1 013 hPa
Vapour pressure	: 0,0044 hPa at 20 °C Method: OECD Test Guideline 104
Density	: 980,97 kg/m <sup>3</sup> at 20 °C
Bulk density	: not applicable
Water solubility	: 9 mg/l at 20 °C
Solubility/qualitative	: practically insoluble
Partition coefficient: n-octanol/water	: log Pow: 5,2 Method: OECD Test Guideline 117
Viscosity, kinematic	: no data available
Relative vapour density	: no data available
Surface tension	: 67,3 mN/m at 20 °C Method: OECD Test Guideline 115
Evaporation rate	: no data available
Explosive properties	: no data available

### 10. Stability and reactivity

#### 10.1 Reactivity

none

#### 10.2 Chemical stability

The product is chemically stable.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.

#### 10.4 Conditions to avoid

Conditions to avoid : no data available

#### 10.5 Incompatible materials

Materials to avoid : no data available

#### 10.6 Hazardous decomposition products

Hazardous decomposition products : no data available  
Thermal decomposition : no data available

Administrative information:

Report Information: SDS\_GB/EN/GHS\_SDS\_EU\_CNTRY/09

Sales & Distribution Information: VE01/FR/CH12/01/0010003798/0001159009/000020

Shipping Order Information: 5220486/1744965

**SPIROGALBANONE PURE**

Version 2.0

Revision Date 05 DEC 2012

Print Date 06 DEC 2012

**11. Toxicological information**

**11.1 Information on toxicological effects**

**Acute toxicity**

**Acute oral toxicity** : LD50 rat  
Dose: > 2 000 mg/kg  
Method: OECD Test Guideline 423

**Acute inhalation toxicity** : This information is not available.

**Acute dermal toxicity** : LD50 rat  
Dose: > 2 000 mg/kg  
Method: OECD Test Guideline 402

**Acute toxicity (other routes of administration)** : No data is available on the product itself.

**Skin corrosion/irritation**

Skin irritation : Species: rabbit  
No skin irritation  
Method: OECD Test Guideline 404

**Serious eye damage/eye irritation**

Eye irritation : Species: rabbit  
No eye irritation  
Method: OECD Test Guideline 405

**Respiratory or skin sensitization**

Sensitisation : HRIPT Human  
Result: Not sensitizing  
at 0,1 % in Dimethyl phthalate  
Maximisation Test guinea pig  
Result: Causes sensitization.

**Germ cell mutagenicity**

Administrative information:

Report Information: SDS\_GB/EN/GHS\_SDS\_EU\_CNTRY/09

Sales & Distribution Information: VE01/FR/CH12/01/0010003798/0001159009/000020

Shipping Order Information: 5220486/1744965



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## SPIROGALBANONE PURE

Version 2.0

Revision Date 05 DEC 2012

Print Date 06 DEC 2012

Genotoxicity in vitro : Ames test  
negative  
Method: Mutagenicity (Escherichia coli - reverse mutation assay)

Chromosome aberration test in vitro  
negative  
Method: Mutagenicity (in vitro mammalian cytogenetic test)

Ames test  
negative  
Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay)

Ames test  
negative  
Method: Mutagenicity (Escherichia coli - reverse mutation assay)

### **Carcinogenicity**

Carcinogenicity : No data is available on the product itself.

### **Reproductive toxicity**

Reproductive toxicity : No data is available on the product itself.

### **Target Organ Systemic Toxicant - Single exposure**

Target Organ Systemic Toxicant - Single exposure : No data is available on the product itself.

### **Target Organ Systemic Toxicant - Repeated exposure**

Target Organ Systemic Toxicant - Repeated exposure : Species: rat  
NOAEL: 50 mg/kg  
Method: OECD Test Guideline 407  
Repeated dose (28 days) toxicity (oral)

### **Target Organ Systemic Toxicant - Repeated exposure Aspiration hazard**

Aspiration toxicity : No data is available on the product itself.

### **Phototoxicity**

Phototoxicity : Phototoxicity guinea pig  
Result:negative

**Further information** : no data available

Administrative information:

Report Information: SDS\_GB/EN/GHS\_SDS\_EU\_CNTRY/09

Sales & Distribution Information: VE01/FR/CH12/01/0010003798/0001159009/000020

Shipping Order Information: 5220486/1744965

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## SPIROGALBANONE PURE

Version 2.0

Revision Date 05 DEC 2012

Print Date 06 DEC 2012

### 12. Ecological information

#### 12.1 Toxicity

- Toxicity to fish : LC50: 1,5 mg/l  
Exposure time: 96 h  
  
Species: *Cyprinus carpio* (Carp)  
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50: 0,26 mg/l  
Exposure time: 48 h  
Species: *Daphnia magna* (Water flea)  
Method: OECD Test Guideline 202
- Toxicity to algae : EC50: 0,48 mg/l  
Exposure time: 72 h  
Species: *Selenastrum capricornutum* (green algae)  
Method: OECD Test Guideline 201
- M-Factor  
1-spiro(4.5)-7-decen-7-yl-4-penten-1-one and 1-spiro(4.5)-6-decen-7-yl-4-penten-1-one : 1
- Toxicity to bacteria : no data available  
Toxicity to fish (Chronic toxicity) : no data available  
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : no data available
- Acute aquatic toxicity : no data available  
Chronic aquatic toxicity : no data available  
Toxicity Data on Soil : no data available  
Other organisms relevant to the environment : no data available

#### 12.2 Persistence and degradability

- Biodegradability : Result: Not readily biodegradable.  
6 %  
Method: OECD Test Guideline 301 F  
Result: Not inherently biodegradable.  
21 %

Administrative information:

Report Information: SDS\_GB/EN/GHS\_SDS\_EU\_CNTRY/09

Sales & Distribution Information: VE01/FR/CH12/01/0010003798/0001159009/000020

Shipping Order Information: 5220486/1744965

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## SPIROGALBANONE PURE

Version 2.0

Revision Date 05 DEC 2012

Print Date 06 DEC 2012

Method: OECD Test Guideline 302 C

### 12.3 Bioaccumulative potential

Bioaccumulation : no data available

### 12.4 Mobility in soil

Mobility : no data available

Distribution among environmental compartments : no data available

Additional advice : no data available

Environmental fate and pathways

Physico-chemical removability : no data available

### 12.5 Results of PBT and vPvB assessment

no data available

### 12.6 Other adverse effects

Biochemical Oxygen Demand (BOD) : no data available

Dissolved organic carbon (DOC) : no data available

Chemical Oxygen Demand (COD) : no data available

Adsorbed organic bound halogens (AOX) : no data available

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

## 13. Disposal considerations

### 13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.

Dispose of in accordance with local regulations.

Administrative information:

Report Information: SDS\_GB/EN/GHS\_SDS\_EU\_CNTRY/09

Sales & Distribution Information: VE01/FR/CH12/01/0010003798/0001159009/000020

Shipping Order Information: 5220486/1744965

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## SPIROGALBANONE PURE

Version 2.0

Revision Date 05 DEC 2012

Print Date 06 DEC 2012

### 14. Transport information

#### ADR/RID/ADN

UN number : 3082  
Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S.  
(Spirogalbanone)  
Transport hazard class(es) : 9  
Packing group : III  
Hazard identification No : 90  
Labels : 9  
Tunnel restriction code : (E)  
Environmentally hazardous : yes

#### IATA/ICAO

UN number : 3082  
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.  
(Spirogalbanone)  
Class : 9  
Packing group : III  
Labels : 9  
Environmentally hazardous : yes  
  
Packing instruction (CAO) : 964  
Packing instruction (PAX) : 964  
Packing instruction (Ltd. Qty.) : Y964

#### IMDG

UN number : 3082  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S.  
(Spirogalbanone)  
Class : 9  
Packing group : III  
Labels : 9  
EmS Fire : F-A  
EmS Spillage : S-F  
  
Marine pollutant : yes  
Spirogalbanone

### 15. Regulatory information

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

Administrative information:

Report Information: SDS\_GB/EN/GHS\_SDS\_EU\_CNTRY/09

Sales & Distribution Information: VE01/FR/CH12/01/0010003798/0001159009/000020

Shipping Order Information: 5220486/1744965

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## SPIROGALBANONE PURE

Version 2.0

Revision Date 05 DEC 2012

Print Date 06 DEC 2012

Water contaminating class : WGK 2 water endangering  
(Germany)

### 15.2 Chemical Safety Assessment

no data available

### 16. Other information

#### Full text of R-phrases referred to under sections 2 and 3

R43	May cause sensitization by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Full text of H-Statements referred to under sections 2 and 3.

H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Administrative information:

Report Information: SDS\_GB/EN/GHS\_SDS\_EU\_CNTRY/09

Sales & Distribution Information: VE01/FR/CH12/01/0010003798/0001159009/000020

Shipping Order Information: 5220486/1744965