# SAFETY DATA SHEET

according to regulation (EC) 1907/2006
according to regulation (EU) 2020/878

## 2479 Petitgrain Mandarin

## 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

### 1.1 Product identifier

| | |
|---|---|
| Product form: | Substance (UVCB – substance with unknown or variable composition) |
| Trade Name: | Petitgrain Mandarin |
| Botanical Name: | Citrus reticulata |
| INCI: | Citrus reticulata Leaf Oil |
| CAS TSCA-No: | 8014-17-3 |
| CAS-No: | 84929-38-4 |
| EINECS-No: | 284-521-0 |
| FEMA-No: | - |
| REACH registration No: | A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration. |

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

| | |
|---|---|
| 1.2.1 Substance use: | Perfumery and/or aromatic uses |
| 1.2.2 Uses advised against: | No additional information available |

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

| | |
|---|---|
| Supplier name: | AYUS GmbH |
| Address: | Am Dreschschopf 1, 77815 Bühl, Deutschland |
| Phone: | +49 7227 600 99-0 |
| Fax: | +49 7227 600 99-99 |
| E-mail: | info@ayus.team |

### 1.4 Emergency telephone number

Poison emergency number: +49 89-19240

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance according to regulation (EG) 1272/2008 (CLP)

| Hazard class and Hazard category | Code | Hazard statement |
|---|---|---|
| Flammable liquids, category 3 | H226 | Flammable liquid and vapour. |
| Aspiration hazard, category 1 | H304 | May be fatal if swallowed and enters airways. |
| Skin corrosion/irritation, category 2 | H315 | Causes skin irritation. |
| Respiratory/skin sensitisation, skin sensitisation category 1 | H317 | May cause an allergic skin reaction. |
| Hazardous to the aquatic environment, chronic category 2 | H411 | Toxic to aquatic life with long lasting effects. |

### 2.2 Label elements

Hazard pictogram and signal word

**WARNING**

**H-Statements:**

| | |
|---|---|
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H411 | Toxic to aquatic life with long lasting effects. |

**P-Statements:**

**Prevention:**

| | |
|---|---|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical /ventilating /lighting equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P261 | Avoid breathing dust /fume /gas /mist /vapours /spray. |
| P262 | Do not get in eyes, on skin, or on clothing. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/... |

**Response:**

| | |
|---|---|
| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor /physician. |
| P302+P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P321 | Specific treatment (see on this label). |
| P331 | Do NOT induce vomiting. |
| P332+P313 | If skin irritation occurs: Get medical advice /attention. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice /attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P363 | Wash contaminated clothing before reuse. |
| P370+P378 | In case of fire: Use CO2 for extinction. |
| P391 | Collect spillage. |

**Storage:**

| | |
|---|---|
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |

**Disposal:**

P501 Dispose of contents/container in accordance with local regulation.

### 2.3 Other Hazards

Allergens (according to regulation (EC) No 1223/2009 on cosmetic products)

| Allergens | Concentration |
|---|---|
| Limonene | 6 - 11 % |
| Linalool | < 1 % |
| Citral | < 0,2 % |

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 Substances

**Chemical Identification:** Citrus reticulata
(100% natural essential oil)

**Hazardous constituent: according to EG-Regulation 1272/2008 (CLP)**

| Ingredient | Concentration | Registration-N. | CLP-Classification |
|---|---|---|---|
| alpha-Pinene | 1 - 4 % | CAS-No: 80-56-8<br>EINECS-No: 201-291-9 | Flam. Liq. 3 - H226<br>Skin Irrit. 2 - H315<br>Skin Sens. 1 - H317<br>Asp. Tox. 1 - H304<br>Aquatic Acute 1 - H400<br>Aquatic Chronic 1 - H410 |
| beta-Pinene | 1 - 3 % | CAS-No: 127-91-3<br>EINECS-No: 204-872-5 | Flam. Liq. 3 - H226<br>Asp. Tox. 1 - H304<br>Skin Irrit. 2 - H315<br>Skin Sens. 1 - H317<br>Aquatic Acute 1 - H400 |
| Citral (Neral + Geranial) | < 0,2 % | CAS-No: 5392-40-5<br>EINECS-No: 226-394-6 | Skin Irrit. 2 - H315<br>Skin Sens. 1 - H317 |
| gamma-Terpinene | 20 - 27 % | CAS-No: 99-85-4<br>EINECS-No: 202-794-6 | Flam. Liq. 3 - H226<br>Repr. 2 - H361<br>Aquatic Chronic 2 - H411 |
| Limonene | 6 - 11 % | CAS-No: 138-86-3<br>EINECS-No: 205-341-0 | Flam. Liq. 3 - H226<br>Skin Irrit. 2 - H315<br>Skin Sens. 1 - H317<br>Aquatic Chronic 1 - H410<br>Aquatic Acute 1 - H400 |
| Linalool | < 1 % | CAS-No: 78-70-6<br>EINECS-No: 201-134-4 | Skin Sens. 1 - H317 |
| Methyl anthranilate | < 0,5 % | CAS-No: 134-20-3<br>EINECS-No: 205-132-4 | Skin Irrit. 2 - H315<br>Eye Irrit. 2 - H319 |
| Methyl-N-Methylanthranylate | 40 - 60 % | CAS-No: 85-91-6<br>EINECS-No: 201-642-6 | Skin Irrit. 2 - H315<br>Eye Irrit. 2 - H319 |
| p-Cymene | 2 - 10 % | CAS-No: 99-87-6<br>EINECS-No: 202-796-7 | Flam. Liq. 3 - H226<br>Acute Tox. 3 - H331<br>Asp. Tox. 1 - H304<br>Aquatic Chronic 2 - H411 |

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**Excessive inhalation:** Remove to fresh air environment – summon a physician immediately.

**Skin contact:** Wash contaminated skin with copious amounts of water and soap. Remove contaminated clothes and wash them before reuse. Summon a physician, if an irritation appears.

**Eye contact:** Wash contaminated skin with copious amounts of water for at least 10 minutes – open eyelids forcibly. Summon a physician immediately.

**Ingestion:** Dilute with water. Do not induce vomiting. Contact physician.

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

No further details.

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

Contact a poison specialist immediately if large quantities have been ingested or inhaled.

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Advised extinguisher:** Use $CO_2$, dry powder, fire extinguisher or foam.

**Unadvisable extinguisher:** Direct jet of water.

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

Burning will cause strong smoke and soot.

Avoid breathing vapours and smokes produced by fire.

**5.3 Advice for firefighters**
Do not attempt to fight the fire with water, which tends to feed rather than smother the flames. Essential oils have the ability to float on water and this causes the fire to propagate more quickly.
Small fires can be smothered by covering with earth, sand or a blanket.

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Avoid skin, eye and clothes contact. There is a risk of sliding caused by the leaked product. Ventilate well spilling area. Keep away from sources of ignition.

**6.2 Environmental precautions**
Avoid dispose into drainage, sewer system or in any natural environment. Dispose binding material, cloths and sponges according to the national law.

**6.3 Methods and material for containment and cleaning up**
Use of absorbent material (e.g. sand, diatomaceous earth).

**6.4 Reference to other sections**
Please see section 8 and 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Ventilate the storage and preparation warehouse/laboratory. Avoid eating, drinking and smoking in the places where products are stored and treated. Manipulate with caution to avoid any projection particularly in eyes and on mucous membranes. Do not expose vapors to the flame or quite other source of ignition. Do not inhale warm vapors.

**7.2 Conditions for safe storage, including any incompatibilities**
It is recommended to keep the product in a water-tight and air-tight container. Keep away from heat and sunlight. Store in a cool and good ventilated area.

**7.3 Specific end uses**
No specific.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**8.1. Control parameters**
Please pay attention to the usual precautionary measures with the contact of essential oils. Use good hygiene practice: Please wash before contact, before eating and at the end of the working day.

**8.2 Exposure controls**
**Personal protective equipment:**

| | |
|---|---|
| **Breathing protection:** | Use in well aired areas. |
| **Eye protection:** | Safety glasses. |
| **Hand protection:** | Protecting gloves. |
| **Skin protection:** | Avoid skin contact. Protective suit should be worn. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**9.1 Information on basic physical and chemical properties**

| | |
|---|---|
| Color: | yellowish to greenish |
| Appearance: | oily liquid |
| Odor: | fruity, floral |
| pH-value: | 4 |
| Flash point: | 60°C |
| Water solubility: | Insoluble |
| Steam pressure: | Unavailable |
| Initial boiling point and boiling range: | Unavailable |
| Density at 20 °C: | 0,934 - 1,044 |
| Refractive index at 20 °C: | 1,498 - 1,547 |
| Optical rotation at 20 °C: | + 2° to + 13° |

**9.2 Other information:**
Main components: Citrus reticulata Leaf Oil

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
This product is stable under normal usage conditions.

**10.2. Chemical stability**
This product is stable under normal usage conditions.

**10.3 Possibility of hazardous reactions**
None according to our knowledge.

**10.4 Conditions to avoid**
Do not expose to high temperature or ignition.

**10.5 Incompatible materials**
Avoid flammable materials, PVC.

**10.6 Hazardous decompositions products**
Nothing in proper storage conditions.

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**
Toxicological specifications of the important substances:

| Chemical description | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| alpha-Pinene | 3.700 mg/kg (rat) | > 5.000 mg/kg (rabbit) | / |
| alpha-Thujene | / | / | / |
| beta-Pinene | 4.700 mg/kg (rat) | / | / |
| Citral (Neral + Geranial) | 4.960 mg/kg (rat) | 2.250 mg/kg (rabbit) | / |
| gamma-Terpinene | 3.650 mg/kg (rat) | / | / |
| Limonene | 5.300 mg/kg (rat) | / | / |
| Linalool | 2.790 mg/kg (rat) | 5.610 mg/kg (rabbit) | / |
| Methyl anthranilate | 2.910 mg/kg (rat) | > 5.000 mg/kg (rabbit) | / |
| Methyl-N-Methylanthranylate | / | / | / |
| p-Cymene | 4.750 mg/kg (rat) | > 5.000 mg/kg | / |

**Skin corrosion/irritation:**
H315 Causes skin irritation.

**Serious eye damage/irritation:**
No significant effects or critical hazards.

**Respiratory or skin sensitization:**
H317 May cause an allergic skin reaction.

**Aspiration hazard:**
H304 May be fatal if swallowed and enters airways.

**Germ cell mutagenicity:**
No significant effects or critical hazards.

**Carcinogenicity:**
No significant effects or critical hazards.

**Reproductive toxicity:**

No significant effects or critical hazards.

**STOT-single exposure**
Unavailable data.

**STOT-repeated exposure**
Unavailable data.

**Information on likely routes of exposure**
Unavailable data.

**Symptoms related to the physical, chemical and toxicological characteristics**
Unavailable data.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**
Unavailable data.

## 12. ECOLOGICAL INFORMATION

**12.1 Toxicity**
Use product only referred of good laboratory practice (GLP) to insure that it is not released into the environment.
According to regulation 1272/2008:

H411 Toxic to aquatic life with long lasting effects.

**Daphnies toxicity (EC50):**
No further relevant information available.

**12.2 Persistence and degradability**
No further relevant information available.

**12.3 Bioaccumulative potential**
**Bioconcentration factor (BCF):**
No further relevant information available.

**Partition coefficient n-octanol / water (log KO/W)**
No further relevant information available.

**12.4 Mobility in soil**
No further relevant information available.

**12.5 Results of PBT and vPvB assessment**
No further relevant information available.

**12.6 Other adverse effects**
No further relevant information available.

## 13. DISPOSAL CONSIDERATION

**13.1 Waste treatment methods**
Waste should be recycled or disposed of according to the legislation in force, preferably by an approved recycling or waste treatment company.

## 14. TRANSPORT INFORMATION

**14.1 UN-number**
1266

**14.2 UN proper shipping name**

| | |
|---|---|
| **Land transport:** | ADR/RID; PERFUMERY PRODUCTS with flammable solvents |
| **Transport by sea:** | IMDG/IMO; PERFUMERY PRODUCTS with flammable solvents |
| **Transport by air:** | ICAO/IATA; PERFUMERY PRODUCTS with flammable solvents |

**14.3 Transport hazard class**

| | |
|---|---|
| **ADR/RID:** | Class 3 |
| **IMDG/IMO:** | Class 3 |
| **ICAO/IATA:** | Class 3 |

**14.4 Packing group**

| | |
|---|---|
| **ADR/RID:** | Packing group III |
| **IMDG/IMO:** | Packing group III |
| **ICAO/IATA:** | Packing group III |

**14.5 Environmental hazards**

IMDG - Sea pollutant: Yes

**14.6 Special precautions for user**

Not applicable.

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

Not applicable.

## 15. REGULATORY INFORMATION

**15.1 Safety, health and environmental regulations (legislation) specific for the substance or mixture**

Council Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances and its subsequent amendments.
Directive 1999/45/EC of the European Parliament concerning the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous preparations and its subsequent amendments.
Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work preparations.
Directive 2003/15/EC
Directive 2006/8/EC
Directive 91/322/EEC
Directive 2000/39/EC
Regulation (EC) No 1907/2006 (REACH) and its subsequent amendments
Regulation (EC) No 1272/2008 (CLP)
Regulation (EC) No 790/2009
Directive 2003/105/EC - Protection of workers - Control of major-accident hazards involving dangerous substances and its subsequent amendments
German Regulation on Substances Hazardous to Water 2005 (VwVwS),

**15.2 Chemical safety assessment**

Not relevant.

## 16. OTHER INFORMATION

**Latest changes**

This data sheet replaces all previous editions. The content of the SDS is regulated by the Regulation (EC) n°1907/2006 (REACH).

**Common shortened form:**

| | |
|---|---|
| ADR: | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| CAS: | Chemical Abstracts Service (division of the American Chemical Society) |
| CLP: | Classification, Labeling, Packaging |
| EINECS: | European Inventory of Existing Commercial Chemical Substances |
| FEMA: | Federal Emergency Management Agency |
| GHS: | Globally Harmonized System of Classification and Labeling of Chemicals |
| IATA: | Dangerous Goods Regulation by the "International Air Transport Association" (IATA) |
| ICAO: | Technical Instructions by the "International Civil Aviation Organization" (ICAO) |
| IMDG: | International Maritime Code for Dangerous Goods |
| IMO: | International Maritime Organization |
| INCI: | International Nomenclature of Cosmetic Ingredients |

| | |
|---|---|
| LC50: | Lethal Concentration for 50 percent of the test population |
| LD50: | Lethal Dose for 50 percent of the test population |
| REACH: | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| PBT: | Persistent Bioaccumulating Toxicants |
| vPvB: | Very Persistent and Very Bioaccumulative Substance |
| RID: | Regulation Concerning the International Transport of Dangerous Goods by Rail |
| STOT: | Specific Target Organ Toxicity |
| TSCA: | Toxic Substances Control Act |

**Hazard statements according to regulation (EC) 1272/2008 (CLP):**

| Code | Description |
|---|---|
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H411 | Toxic to aquatic life with long lasting effects. |

**Precaution statements according to regulation (EC) 1272/2008 (CLP):**

| Code | Description |
|---|---|
| **Prevention:** | |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical /ventilating /lighting equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P261 | Avoid breathing dust /fume /gas /mist /vapours /spray. |
| P262 | Do not get in eyes, on skin, or on clothing. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/... |
| **Response:** | |
| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor /physician. |
| P302+P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P321 | Specific treatment (see on this label). |
| P331 | Do NOT induce vomiting. |
| P332+P313 | If skin irritation occurs: Get medical advice /attention. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice /attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P363 | Wash contaminated clothing before reuse. |
| P370+P378 | In case of fire: Use CO2 for extinction. |
| P391 | Collect spillage. |
| **Storage:** | |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |

**Disposal:**

P501 Dispose of contents/container in accordance with local regulation.

**Training advice:**

| | |
|---|---|
| Possible hazards: | see section 2 |
| First aid measures: | see section 4 |
| Firefighting measures: | see section 5 |
| Personal protection equipment: | see section 8 |
| Waste treatment methods: | see section 13 |

The information this contains is based on the state of our knowledge about the product concerned at the time of update. They are given in good faith. The information given is designed only as 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. Even though precaution has been taken to ensure accuracy of data, no guarantee can be given. Because data's are taken partly from other sources.

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To be observed: This data sheet contains product data as it was available to Ayus GmbH at the date of release. Ayus GmbH cannot take any responsibility for the correctness of the data – this lies entirely with the producer or manufacturer. The responsibility for proper utilization of the product, as well as its handling and storage lies with the buyer or user. They have been educated about the consequences of misuse of the product.
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