# SAFETY DATA SHEET

[In accordance with the criteria of Regulation No 1907/2006 (REACH) as amended]

## Section 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

| | |
|---|---|
| Trade name: | **ORANGE GUTTANE** |
| Chemical name: | sweet orange essential oil |
| CAS number: | 8028-48-6 |
| WE number: | 232-433-8 |
| REACH number: | 01-2119493353-35-XXXX |

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

| | |
|---|---|
| Relevant identified uses: | Oil for dissolving gutta-percha. Professional use. |
| Uses advised against: | other than mentioned above. |

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

| | |
|---|---|
| Manufacturer: | **PPH CERKAMED Wojciech Pawłowski** |
| Address: | ul. Kwiatkowskiego 1, 37-450 Stalowa Wola, Poland |
| Telephone number: | +48 15 842 35 85 |

E-mail address for a competent person responsible for SDS: jadwiga.maziarz@cerkamed.pl

### 1.4 Emergency telephone number

112

## Section 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Flam Liq. 3** H226, **Asp. Tox. 1** H304, **Skin Irrit. 2** H315, **Skin Sens. 1** H317, **Aquatic Acute 1** H400, **Aquatic Chronic 1** H410

Flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

### 2.2 Label elements

Hazard pictograms and signal words



**DANGER**

Hazard 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. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary statements

| | |
|---|---|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P273 | Avoid release to the environment. |
| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTER/doctor. |
| P331 | Do NOT induce vomiting. |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P405 | Store locked up. |

P501 Dispose of contents/container to properly labeled waste containers in accordance with national legislation.

### 2.3 Other hazards

The substance does not meet the criteria for classification as PBT or vPvB in accordance with Annex XIII of the REACH Regulation. The substance is not assessed as having endocrine disrupting properties.

## Section 3: Composition/information on ingredients

### 3.1 Substances

Chemical name: sweet orange essential oil
CAS number: 8028-48-6
WE number: 232-433-8
REACH number: 01-2119493353-35-XXXX

Hazard components

| | | |
|---|---|---|
| CAS number: 138-86-3<br>EC number: 205-341-0<br>Index number: 601-029-00-7<br>REACH number: - | limonene<br>Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 1 H410 (M=1) | 50-100 % |
| CAS number: 123-35-3<br>EC number: 204-622-5<br>Index number: -<br>REACH number: - | myrcen<br>Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Eye Irrit. 2 H319 | ≥1-< 2.5 % |
| CAS number: 78-70-6<br>EC number: 201-134-4<br>Index number: 603-235-00-2<br>REACH number: - | linalool<br>Skin Irrit. 2 H315, Skin Sens. 1B H317, Eye Irrit. 2 H319 | ≥0.1-< 1 % |
| CAS number: 7785-26-4<br>EC number: 232-077-3<br>Index number: -<br>REACH number: - | (-)-pin-2(3)-ene<br>Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 1 H410 (M=1) | ≥0.25-< 1 % |
| CAS number: 5392-40-5<br>EC number: 226-394-6<br>Index number: 605-019-00-3<br>REACH number: - | citral<br>Skin Irrit. 2 H315, Skin Sens. 1 H317, Eye Irrit. 2 H319 | ≥0.1-< 1 % |
| CAS number: 106-22-9<br>EC number: 203-375-0<br>Index number: -<br>REACH number: - | citronellol<br>Skin Irrit. 2 H315, Skin Sens. 1B H317, Eye Irrit. 2 H319 | ≥0.1-< 1 % |
| CAS number: 470-82-6<br>EC number: 207-431-5<br>Index number: -<br>REACH number: - | cineole<br>Flam. Liq. 3 H226, Skin Sens. 1B H317 | ≥.,1-< 1 % |
| CAS number: 3387-41-5<br>EC number: 222-212-4<br>Index number: -<br>REACH number: - | thuj-4(10)-ene<br>Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1B H317 | ≥0.1-< 1 % |
| CAS number: 106-24-1<br>EC number: 203-377-1<br>Index number: -<br>REACH number: - | geraniol<br>Skin Irrit. 2 H315, Skin Sens. 1B H317, Eye Dam. 1 H318 | ≥0.1-< 1 % |

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| | | |
|---|---|---|
| CAS number: 13466-78-9<br>EC number: 236-719-3<br>Index number: -<br>REACH number: - | 3,7,7-trimethylbicyclo[4.1.0]hept-3-ene<br>Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1B H317, Acute Tox. 4 H332, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 1 H410 (M=1) | ≥0.1-< 1 % |

Full text of each relevant H phrase is given in section 16 of SDS.

## Section 4: First aid measures

### 4.1 Description of first aid measures

Skin contact: take off the contaminated clothing. Wash a contaminated skin with plenty of water and soap. Consult a doctor, if allergic reaction occurs.

Eye contact: wash out an contaminated eye thoroughly with plenty of water for 10-15 min. Protect non-irritated eye, remove contact lenses. Consult an ophthalmologist, if disturbing symptoms occur.

Ingestion: do not induce vomiting. Rinse mouth with water. Never give anything to drink to an unconscious person. Consult a doctor. In the event of spontaneous vomiting, hold the injured person inclined forward with the face facing the ground.

Inhalation: remove the victim to fresh air. Keep warm and calm. Consult a doctor, if disturbing symptoms occur.

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

Skin contact: possible redness, drying, burning, irritation, rash or allergic skin reaction.

Eye contact: possible redness, tearing, burning sensation.

Ingestion: possible stomach pain, nausea, vomiting, diarrhea, digestive system irritation. There is a risk of aspiration of the product into the lungs, which may result in aspiration pneumonia and, in extreme cases, death.

Inhalation: high concentrations of vapours may cause irritation of the respiratory tract.

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

Physician makes a decision regarding further medical treatment after thoroughly examination of the injured. Symptomatic treatment.

## Section 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media: $CO_2$, powder, sand.

Unsuitable extinguishing media: water jet – risk of the propagation of the flame.

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

During the fire, may produce harmful fumes of carbon oxides, nitrogen oxide. Do not inhale combustion products, may cause health risk. Dust can form explosive mixtures with air.

### 5.3 Advice for firefighters

Flammable liquid and vapour. Product vapours may form explosive mixtures with air. Personal protection typical in case of fire. Do not stay in the fire zone without protective clothing resistant to chemicals and self-contained breathing apparatus. In case of fire cool endangered containers with water fog from safe distance. Collect used the extinguishing media.

## Section 6: Accidental release measures

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

Limit the access for the outsiders into the breakdown area, until the suitable cleaning operations are completed. Ensure that the effects of breakdown are removed only by trained personnel. Wear personal protective equipment. In case of large spills, isolate the exposed area.

Avoid eyes and skin contamination. Do not inhale vapours of the product. Ensure adequate ventilation. Eliminate sources of ignition, do not smoke, do not use sparking tools. Warning! Danger of slipping on spilled product.

**6.2 Environmental precautions**

In case of a release of large amounts of the product, it is necessary to take appropriate steps to prevent it from spreading into the environment. Notify relevant emergency services.

**6.3 Methods and material for containment and cleaning up**

Large spillage isolate and pump away the collected liquid. Absorb small spillage with liquid-binding materials (e.g. sand, universal binding agent). Collect spilled material in labeled containers. Treat the collected material as a waste. Clean and ventilate the contaminated place. Do not wash off with water or aqueous cleansers. Treat with 2% soda lye.

**6.4 Reference to other sections**

Personal protective equipment – see section 8. Appropriate conduct with waste product – see section 13.

## Section 7: Handling and storage

**7.1 Precautions for safe handling**

Handle in accordance with good occupational hygiene and safety practices. Wear personal protective equipment. Avoid eyes and skin contamination. Do not inhale vapours of the product. Do not eat, drink or smoke while working. Before break and after work wash hands carefully. Ensure adequate general and / or local ventilation. Eliminate all sources of ignition – do not use open flame, do not smoke, do not use sparking tools.

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

Keep containers only in tightly closed, original containers in a well-ventilated dry place. Recommended storage temperature < 25 °C. Keep away from food, beverages or feed for animals. Keep away from incompatible materials (see subsection 10.5). Protect from direct sunlight. Keep away from sources of heat and ignition. After opening, seal the container and store it in an upright position to avoid leakage. Do not store in unlabeled containers.

**7.3 Specific end use(s)**

No information about other uses than those mentioned in subsection 1.2.

## Section 8: Exposure controls/personal protection

**8.1 Control parameters**

There are no occupational exposure limit values at working place for the substances present in the mixture at the European Union level. Please check any national occupational exposure limit values in your country.

Legal Basis: Commission Directive 2006/15/EC, 2000/39/EC, 2009/161/EC, 2017/164/EU, 2019/1831/EU.

**8.2 Exposure controls**

Appropriate engineering controls

Use the product in accordance with good occupational hygiene and safety practices. Do not eat, drink or smoke when using the product. Before break and after work wash hands carefully. Take off contaminated clothing and wash it before reuse. Provide effective general and/or local ventilation in the workplace. Avoid contact with skin and eyes. Do not inhale vapours. If during work processes there is a risk of clothing fire on the employee - no more than 20 m in a horizontal line from the stations where these processes are performed, emergency showers (safety showers) for washing the whole body and separate showers (showers) for eye washing should be installed.

Individual protection measures, such as personal protective equipment

The necessity to use and selection of appropriate personal protective equipment should take into account the type of risk posed by the product, working conditions and the way of handling the product. The personal protective equipment used must meet the requirements of Regulation (EU) 2016/425 and the relevant standards. The employer is obliged to provide protection measures appropriate to the activities performed and meeting all quality requirements, including their maintenance and cleaning. Any contaminated or damaged PPE must be replaced immediately.

Hand and body protection

Use protective gloves resistant to the product in accordance with EN 374. Wear protective clothing. The material for gloves select individually at the workplace.

Material of gloves must be impermeable and resistant to the product. Material selection should be made taking into account the penetration times, rates of diffusion and degradation. Moreover, the selection of suitable gloves not only depends on the material, but also on further marks of quality and varies depending on the manufacturer. Advice should be obtained from the manufacturer about the exact break through time has to be observed. It is recommended to regularly change gloves and replace them immediately if you experience any signs of wear, damage or change in appearance (color, elasticity, shape).

Eye/face protection

Wear protective glasses in accordance with EN 166 if there is a risk of eye contamination.

Respiratory protection

Not required with adequate ventilation. In case of emergency situations use properly selected respiratory protection.

Thermal hazards

Do not occur.

Environmental exposure controls

Do not allow large amounts of the product to enter groundwater, sewage system, sewage or soil.

## Section 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| Physical state: | liquid |
| Colour: | orange |
| Odour | characteristic |
| Melting point/freezing point: | not determined |
| Boiling point or initial boiling point and boiling range: | not applicable |
| Flammability: | not determined |
| Lower and upper explosion limit: | not determined |
| Flash point: | 54 °C |
| Auto-ignition temperature: | not determined |
| Decomposition temperature: | not determined |
| pH: | not determined |
| Kinematic viscosity: | not determined |
| Solubility: | insoluble in water |
| Partition coefficient n-octanol/water (log value): | not determined |
| Vapour pressure: | not determined |
| Density and/or relative density: | 0.845 g/cm$^3$ |
| Relative vapour density: | not determined |
| Particle characteristics: | not applicable |

### 9.2 Other information

No additional test results.

## Section 10: Stability and reactivity

### 10.1 Reactivity

The product is reactive. It does not undergo dangerous polymerization. Product vapours may form explosive mixtures with air. See also subsections 10.3-10.5.

### 10.2 Chemical stability

The product is stable under normal conditions of handling and storage.

**10.3 Possibility of hazardous reactions**

Dangerous reactions possible with strong oxidants.

**Conditions to avoid**

Avoid direct sunlight. Avoid sources of heat, fire and ignition.

**10.5 Incompatible materials**

Strong oxidants.

**10.6 Hazardous decomposition products**

Not known.

## Section 11: Toxicological information

**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Acute toxicity

$LD_{50}$ (oral, rat) 5000 mg/kg

Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

May be fatal if swallowed and enters airways.

Information on likely routes of exposure

Routes of exposure: skin contact, eye contact, inhalation, ingestion. See subsection 4.2 for more information on the effects from each possible route of exposure.

Symptoms related to the physical, chemical and toxicological characteristics

No data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

No data.

**11.2 Information on other hazards**

Endocrine disrupting properties

The substance is not assessed as having endocrine disrupting properties.

Other information

Not applicable.

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## Section 12: Ecological information

**12.1 Toxicity**

| | | |
|---|---|---|
| Toxicity to fish: | $LC_{50}$ | 5.65 mg/l |
| Toxicity to daphnia: | $EC_{50}$ | 1.1 mg/l |
| Toxicity to algae: | $EC_{50}$ | 4.3 mg/l |

Substance is very toxic to aquatic life with long lasting effects.

**12.2 Persistence and degradability**

The substance is readily biodegradable.

**2.3 Bioaccumulative potential**

BCF = 361

The substance is highly bioaccumulative.

**12.4 Mobility in soil**

Mobility of substance depends on the hydrophilic and hydrophobic properties and biotic and abiotic conditions of soil, including its structure, climatic conditions, seasons and soil organisms.

**12.5 Results of PBT and vPvB assessment**

The substance does not meet criteria for PBT or vPvB according to Annex XIII of REACH.

**12.6 Endocrine disrupting properties**

The substance is not assessed as having endocrine disrupting properties.

**12.7 Other adverse effects**

The product has no impact on global warming and ozone layer depletion.

## Section 13: Disposal considerations

**13.1 Waste treatment methods**

Disposal methods for the substance: disposal in accordance with the local legislation. Store residues in original containers.. Waste code should be given in the place of waste formation.

Disposal methods for used packing: reuse / recycle / liquidate empty containers in accordance with the local legislation. Only completely emptied packaging can be recycled.

Legal basis: Directive 2008/98/EC as amended, 94/62/EC as amended.

## Section 14: Transport information

**14.1 UN number or ID number**

UN 1993

**14.2 UN proper shipping name**

FLAMMABLE LIQUID, N.O.S. (limonene)

**14.3 Transport hazard class(es)**

3

**14.4 Packing group**

III

**14.5 Environmental hazards**

Product is hazardous for environment in accordance with transport regulations.

**14.6 Special precautions for user**

Use personal protective equipment in accordance with section 8. Avoid ignition sources.

### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

## Section 15: Regulatory information

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

**ADR** Agreement concerning the International Carriage of Dangerous Goods by Road
**IMDG** Code International Maritime Dangerous Goods Code.
**IATA** Dangerous Goods Regulations.
**Regulation (EC) No 1907/2006** of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended.
**Commission Regulation (EU) No 2020/878** of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
**Regulation (EC) No 1272/2008** of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 as amended.
**European Parliament and Council Directive 94/62/EC** of 20 December 1994 on packaging and packaging waste as amended.
**Directive 2008/98/EC** of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives as amended.
**Regulation (EU) No 2016/425** of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC.
**Commission Directive 2000/39/EC** of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.
**Commission Directive 2006/15/EC** of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC.
**Commission Directive 2009/161/EU** of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.
**Commission Directive 2017/164/EU** of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU.
**Commission Directive 2019/1831/EU** of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.
EH40/2005 Workplace exposure limits. Fourth Edition 2020.

### 15.2 Chemical safety assessment

Chemical safety assessment has not been carried out for the substance.

## Section 16: Other information

Full text of indicated H phrases mentioned in section 3

| | |
|---|---|
| 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. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Clarification of aberrations and acronyms

| | |
|---|---|
| PBT | Persistent, Bioaccumulative and Toxic substance |
| vPvB | very Persistent, very Bioaccumulative substance |

| | |
|---|---|
| Aquatic Acute 1 | Hazardous to the aquatic environment - Acute - category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment - Chronic - category 1 |
| Asp. Tox. 1 | Aspiration toxicity category 1 |
| Eye Irrit. 2 | Eye irritation - category 2 |
| Flam. Liq. 3 | Flammable liquid category 3 |
| Skin Irrit. 2 | Skin irritation - category 2 |
| Skin Sens. 1, 1B | Skin sensitization category 1, 1B |
| Eye Dam. 1 | Serious eye damage, category 1 |

Trainings

Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training. Persons related to the transportation of the dangerous goods in compliance with the ADR Agreement should be properly trained within the scope of performed tasks (general training, on-the-job training and training related to the safety issues).

Key literature references and data sources

This SDS was prepared on the basis on the basis of the safety data sheet provided by the manufacturer, literature data, online databases, as well as our knowledge and experience, taking into account current legislation.

Additional information

| | |
|---|---|
| Date of issue: | 26.05.2022 |
| Version: | 1.0/EN |
| Safety Data Sheet made by: | **THETA** Consulting Sp. z o.o. (based on manufacturer's data) |

The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.