



# JARDIN AROMATIC CITRONELLA OIL

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Issue date: 30/12/2023 Version: 1.0

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

#### 1.1. Product identifier

Product form : Substance  
Substance name : CITRONELLA OIL  
EC-No. : 294-954-7  
CAS-No. : 91771-61-8  
Product code : 9109

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

##### 1.2.1. Relevant identified uses

Main use category : Industrial use

##### 1.2.2. Uses advised against

Restrictions on use : Ultimate consumer use

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

##### Manufacturer/Supplier

Jardin Aromatic

HMLab Kimya Mühendislik Sanayi ve Ticaret Ltd Şti.

info@jardinaromatic.com www.jardinaromatic.com

#### 1.4. Emergency telephone number

Emergency number : 112 ( TURKIYE ) - 911 ( USA ) EMERGENCY CALL ) +90 506 534 78 71 (Mon - Fri, 08:30 - 18:30  
(Mon - Fri, 08:30 - 18:30 GMT+3) GMT+3)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Full text of H statements : see section 16

##### Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Signal word (CLP) : Warning  
Hazard pictograms (CLP) :  
Skin sensitisation, Category 1 : H317 - May cause an allergic skin reaction.  
EUH-statements :  
Precautionary statements (CLP)

: P261 - Avoid breathing dust/fume/gas/mist/vapours/spray  
: P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
: P337+P313 - If eye irritation persists: Get medical advice/attention.

#### 2.3. Other hazards

No additional information available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Name : Citronella oil,  
CAS-No. : 91771-61-8  
EC-No. : 294-954-7

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Citronella oil,	(CAS-No.) 91771-61-8 (EC-No.) 294-954-7	100	
Citronellal	(CAS-No.) 106-23-0 (EC-No.) 203-376-6	≥ 0.1 – < 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317

Geraniol	(CAS-No.) 106-24-1 (EC-No.) 203-377-1	≥ 0.1 – < 1	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1B, H317
dl-Citronellol	(CAS-No.) 106-22-9 (EC-No.) 203-375-0	≥ 0.1 – < 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317
d-Limonene	(CAS-No.) 5989-27-5 (EC-No.) 227-813-5 (EC Index-No.) 601-029-00-7	≥ 0.1 – < 1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If the victim is unconscious
First-aid measures after skin contact	: Place the affected person in the recovery position. Allow affected person to breathe fresh air. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after eye contact	: In case of contact, immediately rinse eyes with plenty of water for at least 15 minutes.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Dry powder. Carbon dioxide. For large fire: Water spray. Foam.
Unsuitable extinguishing media	: Strong water jet.

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

Hazardous decomposition products in case of fire	: Toxic fumes may be released. fume.
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### 5.3. Advice for firefighters

Firefighting instructions	: Move containers away from the fire area if this can be done without risk. Keep upwind. Use water spray or fog for cooling exposed containers.
Protection during firefighting	: Wear fire/flammable resistant/retardant clothing. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Evacuate unnecessary personnel.
Other information	: Do not allow run-off from fire fighting to enter drains or water courses.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area.
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#### 6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Evacuate area.

### 6.2. Environmental precautions

Avoid release to the environment. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Take up liquid spill into absorbent material. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Ensure adequate ventilation.
Other information	: Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". Concerning disposal elimination after cleaning, see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment. Prevent aerosol formation or splashes.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions	: Store in a well-ventilated place. Keep cool. Keep only in original container. Keep container tightly closed.
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### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Personal protective equipment:

Gloves. Protective goggles.

#### Hand protection:

Chemically resistant protective gloves. Consult supplier for specific recommendations. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Breakthrough time : refer to the recommendations of the supplier

#### Eye protection:

tightly fitting safety goggles

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### Personal protective equipment symbol(s):



#### Environmental exposure controls:

Avoid release to the environment.

#### Consumer exposure controls:

Do not eat, drink or smoke during use. Take off immediately all contaminated clothing. Always wash hands after handling the product. Avoid contact with skin and eyes.

#### Other information:

Keep away from food, drink and animal feedingstuffs.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 93 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: insoluble in water.

Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

## 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

#### Citronellal (106-23-0)

LD50 oral	2500 mg/kg bodyweight
LD50 dermal	2500 mg/kg bodyweight
ATE CLP (oral)	2500 mg/kg bodyweight
ATE CLP dermal	2500 mg/kg bodyweight

#### Geraniol (106-24-1)

LD50 oral	3600 mg/kg bodyweight
ATE CLP (oral)	3600 mg/kg bodyweight

#### p-Mentha-1,4-diene (99-85-4)

LD50 oral	3850 mg/kg bodyweight
ATE CLP (oral)	3850 mg/kg bodyweight

#### Geraniol (106-24-1)

LD50 oral	3600 mg/kg bodyweight
ATE CLP (oral)	3600 mg/kg bodyweight

#### dl-Citronellol (106-22-9)

LD50 oral	: 3450 mg/kg bodyweight
ATE CLP (oral)	: 3450 mg/kg bodyweight

#### p-Cymene (99-87-6)

LD50 oral	4750 mg/kg bodyweight
ATE CLP (oral)	4750 mg/kg bodyweight
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.  
 Not rapidly degradable  
 Additional information : Take all necessary technical measures to avoid or minimize the release of the product on the workplace.  
 Avoid release to the environment.

**12.2. Persistence and degradability**

No additional information available

**12.3. Bioaccumulative potential**

No additional information available

**12.4. Mobility in soil**

No additional information available

**12.5. Results of PBT and vPvB assessment**

No additional information available

**12.6. Other adverse effects**

No additional information available

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

Regional legislation (waste) : Disposal must be done according to official regulations.  
 Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
 Sewage disposal recommendations : Prevent entry to sewers and public waters.  
 Product/Packaging disposal recommendations : Do not dispose of with domestic waste.

**SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

**14.6. Special precautions for user**

**Overland transport**  
 Not applicable  
**Transport by sea**  
 Not applicable  
**Air transport**  
 Not applicable  
**Inland waterway transport**  
 Not applicable  
**Rail transport**  
 Not applicable

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable

**SECTION 15: Regulatory information**

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

**15.1.1. EU-Regulations**  
 No REACH Annex XVII restrictions  
 Sandalwood oil is not on the REACH Candidate List Amyris oil is not on the REACH Annex XIV List  
 Sandalwood oil is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.  
 Sandalwood oil is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants  
**15.1.2. National regulations**  
 No additional information available

**15.2. Chemical safety assessment**

No chemical safety assessment has been carried out

## SECTION 16: Other information

### Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit
vPvB	Very Persistent and Very Bioaccumulative
Data sources	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. Supplier's safety documents. ECHA (European Chemicals Agency).
Training advice	Normal use of this product shall imply use in accordance with the instructions on the packaging.

### Full text of H- and EUH-statements:

H317	Flammable liquid and vapour.
H318	Causes serious eye damage.
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1B	Skin sensitisation, category 1B
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

SDS EU (REACH Annex II)

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