

Safety Data Sheet  
according to 29 CFR 1910.1200

1713303

Reviewed on: 02/10/18  
Printing date: 02/10/2018

## 01 Identification

### 1.1 Product identifier

- Trade name:  
TAGETE MADAGASCAR OIL
- Article number:  
F2959
- CAS Number:  
8016-84-0
- EC Number:  
294-862-7

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

- Application of the substance / the preparation  
Flavouring agents  
Only for industrial use  
Perfume ingredient

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

- Manufacturer/Supplier:  
BIOLANDES                      TEL: +33(0)5.58.51.00.00  
Route de Bélis                      email: fds@biolandes.com  
40420 LE SEN  
FRANCE

### 1.4 Emergency telephone number:

FR-ORFILA (INRS):+33(0)1 45 42 59 59

## 02 Hazard(s) identification

### 2.1 Classification of the substance or mixture



GHS08

Asp. Tox. 1 - H304 May be fatal if swallowed and enters airways.



GHS02

Flam. Liq. 3 - H226 Flammable liquid and vapor.



GHS07

Skin Irrit. 2 - H315 Causes skin irritation.  
Skin Sens. 1B - H317 May cause an allergic skin reaction.

GHS09

Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.

H401 Toxic to aquatic life.

### 2.2 Label elements

- GHS label elements
- Hazard pictograms



GHS08



GHS02



GHS07



GHS09

- Signal word  
Danger

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- Hazard statements
  - H304 May be fatal if swallowed and enters airways.
  - H226 Flammable liquid and vapor.
  - H315 Causes skin irritation.
  - H317 May cause an allergic skin reaction.
  - H411 Toxic to aquatic life with long lasting effects.
- Precautionary statements
  - P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
  - P233 Keep container tightly closed.
  - P240 Ground/bond container and receiving equipment.
  - P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
  - P403+P235 Store in a well-ventilated place. Keep cool.
  - P501 Dispose of contents/container in accordance with local/regional/ national/international regulations.

### 03 Composition/information on ingredients

3.1 Chemical characterization: Substances

<b>CAS No.</b>	<b>Description</b>
8016-84-0	Tagetes minuta L.

- Identification number(s)
- EC Number:  
294-862-7

- Dangerous components:

<b>CAS Number</b>		<b>%</b>
<b>5989-27-5</b>	<b>limonene-d</b>	<b>1,001- 5,00</b>

### 04 First-aid measures

- General information:  
Seek immediate medical advice.
- After inhalation:  
Supply fresh air and to be sure call for a doctor.
- After skin contact:  
If skin irritation continues, consult a doctor.  
Immediately wash with water and soap and rinse thoroughly.
- After eye contact:  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing:  
Seek immediate medical advice.

### 05 Fire-fighting measures

- Suitable extinguishing agents:  
CO<sub>2</sub>, sand, extinguishing powder. Do not use water.  
Use fire fighting measures that suit the environment.
  - For safety reasons unsuitable extinguishing agents:  
Water with full jet
- 5.2 Special hazards arising from the substance or mixture  
No further relevant information available.
- Protective equipment:  
Do not inhale explosion gases or combustion gases.
  - Additional information  
Cool endangered receptacles with water spray.

### 06 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures  
Wear protective equipment. Keep unprotected persons away.  
Keep away from ignition sources
- 6.3 Methods and material for containment and cleaning up:

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Dispose contaminated material as waste according to item 13.

**6.4 Reference to other sections**

See Section 7 for information on safe handling.  
 See Section 8 for information on personal protection equipment.  
 See Section 13 for disposal information.

• Protective Action Criteria for Chemicals

- PAC-1:  
Substance is not listed.
- PAC-2:  
Substance is not listed.
- PAC-3:  
Substance is not listed.

**07 Handling and storage**

• Handling:

**7.1 Precautions for safe handling**

Store in cool, dry place in tightly closed receptacles.  
 Keep away from heat and direct sunlight.  
 Ensure good ventilation/exhaustion at the workplace.  
 Handle with care. Avoid jolting, friction and impact.

• Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.  
 Protect against electrostatic charges.

• Storage:

• Requirements to be met by storerooms and receptacles:

Store in a cool location.  
 Prevent any seepage into the ground.

• Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.  
 Protect from heat and direct sunlight.  
 Store receptacle in a well ventilated area.

**7.3 Specific end use(s)**

No further relevant information available.

**08 Exposure controls/personal protection**

• Components with limit values that require monitoring at the workplace:

Not required.

CAS No.	Designation of material	%	Type	Value	Unit
Not required.					

Not required.

• Additional information:

The lists that were valid during the creation were used as basis.

• Personal protective equipment:

• General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.  
 Avoid contact with the skin.

• Breathing equipment: Use suitable respiratory protective device in case of insufficient ventilation.

• Protection of hands: Protective gloves The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

• Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

• Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Safety glasses

USA

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### 09 Physical and chemical properties

**General Information**
**Appearance:**

<b>Form:</b>	fluid
<b>Color:</b>	goldy yellow, orange-red, yellow
<b>Odor:</b>	fruit-like
<b>Odor threshold:</b>	Not determined.

**Change in condition**

<b>Melting point/Melting range:</b>	< -80 °C
<b>Boiling point/Boiling range:</b>	201 °C

<b>Flash point:</b>	58 °C    NFT 60-103 CC
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<b>Flammability (solid, gaseous):</b>	Undetermined.
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<b>Auto igniting:</b>	245°C
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<b>Danger of explosion:</b>	Undetermined.
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<b>Vapor pressure:</b>	Not determined.
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<b>Density:</b>	Not determined.
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<b>Relative density</b>	0,8500 0,8750 D20/20
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**Solubility in / Miscibility with**

<b>Water:</b>	Not determined.
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<b>Partition coefficient (n-octanol/water):</b>	Not determined.
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<b>Other information</b>	No further relevant information available.
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### 10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:  
Undetermined.
- Incompatible materials:  
No further relevant information available.
- Hazardous decomposition products:  
Undetermined.

### 11 Toxicological information

- Acute toxicity:
- LD/LC50 values that are relevant for classification:

**ISO LD/LC**

**8016-84-0**                      **Tagetes minuta L.**  
Oral, LD50: >5000 mg/kg (rat) (OECD 425 2009)

**5989-27-5**                      **limonene-d**  
Oral, LD50: 4400 mg/kg (rat)

- Primary irritant effect:
- on the skin:  
Irritant to skin and mucous membranes.
- on the eye:  
No irritating effect.
- Sensitization:  
Sensitization possible through skin contact.
- Subacute to chronic toxicity:  
Undetermined.
- Additional toxicological information:
- Carcinogenic categories
- IARC (International Agency for Research on Cancer)  
Substance is not listed.

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- NTP (National Toxicology Program)  
Substance is not listed.
- OSHA-Ca (Occupational Safety & Health Administration)  
Substance is not listed.

## 12 Ecological information

- Aquatic toxicity:
  - 8016-84-0** *Tagetes minuta* L.  
CE50/48h: 4,4 mg/l (daphnia) (OECD 202 calculation)  
ErC50(0-72h): 6,2 mg/l (algae) (OECD 201 calculation)
  - 5989-27-5** *limonene-d*  
LD50: 0,71 mg/l (fish) (OECD 203)
- Persistence and degradability  
Not determined.
- Behavior in environmental systems:  
Not determined.
- Bioaccumulative potential  
No further relevant information available.
- Ecotoxicological effects:  
Not determined.
- Additional ecological information:
- General notes:  
Do not allow product to reach ground water, water course or sewage system.  
Toxic for aquatic organisms  
The material is harmful to the environment.

## 13 Disposal considerations

- Waste treatment methods
- Recommendation:  
Must be specially treated adhering to official regulations.
- Uncleaned packagings:
- Recommendation:  
Disposal must be made according to official regulations.

## 14 Transport information

- UN-Number
- DOT** UN1169
- ADR** UN1169
- IMDG** UN1169
- IATA** UN1169
- UN proper shipping name
- DOT** EXTRACTS, AROMATIC, LIQUID
- ADR** 1169 EXTRACTS, AROMATIC, LIQUID
- \* **IMDG** EXTRACTS, AROMATIC, LIQUID (TAGETES MINUTA L.)
- IATA** EXTRACTS, AROMATIC, LIQUID
- Transport hazard class(es)
- DOT**
- Class** 3 Flammable liquids

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**Label**

**ADR**
**Class**

3 (F1) Flammable liquids

**Label**

**IMDG**
**Class**

3 Flammable liquids

**Label**

**IATA**
**Class**

3 Flammable liquids

**Label**


- Packing group

**DOT**

III

**ADR**

III

**IMDG**

III

**IATA**

III

- Environmental hazards:

**Marine pollutant:**

Yes

- Special precautions for user

Warning: Flammable liquids

**Danger code (Kemler):**

30

**EMS Number:**

F-E,S-D

- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code  
Not applicable.

- Transport/Additional information:  
Not applicable.

**DOT**
**Quantity limitations**

On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L

**IMDG**
**Limited quantities (LQ)**

5L

**Excepted quantities (EQ)**

E1

- UN "Model Regulation":

UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, DANGEREUX POUR

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### 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture  
Non-mandatory
- New Jersey Right-to-Know List:  
Substance is not listed.
- New Jersey Special Hazardous Substance List:  
Substance is not listed.
- Pennsylvania Right-to-Know List:  
Substance is not listed.
- Pennsylvania Special Hazardous Substance List:  
Substance is not listed.

### 16 Other information

The information in this safety data sheet is based on the state of our knowledge at the date indicated. The information in this sheet must be regarded as a description of the safety requirements for the product, they are not to be considered a warranty or quality specification and have no contractual value on properties and application areas thereof. The information contained in this safety data sheet relate to the specific material designated and may not be valid with respect to the product associated with another product or process, unless it is specified in the text of this document. The required information complies with US regulations in force. It does not exempt the user from knowing and applying all the national regulations in force.

- Relevant phrases
 

H226	Flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
  
- Training hints  
Minimum training in occupational risk prevention is recommended for personnel who will handle this product, in the purpose of facilitating the understanding and interpretation of this form of safety data in the same way as the labeling of the product.
- Date of preparation / last revision  
02.10.2018
  
- Abbreviations and acronyms:  
 IFRA: International Fragrance Association IOFI: International Organization of the Flavor Industry  
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
 IMDG: International Maritime Code for Dangerous Goods  
 DOT: US Department of Transportation  
 IATA: International Air Transport Association  
 ICAO: International Civil Aviation Organisation  
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent
  
- Sources  
IFRA/IOFI Labelling Manual, REACH registration dossier, supplier information
  
- \* Data compared to the previous version altered.