Material Safety Data Sheet acc. REACH
corrn to Annex II (Requirements for the compilation of safety data sheets), Directive EU 453/2010 (20.05.2010)
Modified: 06.09.2016
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MSDS Palmtocos Oil Page 1

1 Identification of the substance/mixture and of the company

1.1 Product identifier
Mixed Tocotrienols

<table>
<thead>
<tr>
<th>Trade Name</th>
<th>PALMTOCOS (Oil), all grades</th>
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1.2 Relevant identified uses of the substance or mixture and uses advised against
As antioxidant in food and cosmetics; as Vitamin E source.

1.3 Details of the supplier of the safety data sheet
GUSTAV PARMENTIER GmbH
Eichendorffstrasse 37
D-60320 Frankfurt am Main
GERMANY
Tel.: + 49 (0)69 / 56 10 34
Fax: + 49 (0)69 / 56 85 18
e-Mail: msds@parmentier.de

1.4 Emergency telephone number
Giftinformationszentrum Mainz
Langenbeckstrasse 1
D-55131 Mainz
GERMANY
Tel.: + 49 (0)6131 / 19240

2 Hazards identification

2.1 Classification of the substance or mixture
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements
None

2.3 Other hazards
No hazardous effects on health and environment known.

3 Composition/information on ingredients

3.2 Mixtures
D-alpha-, beta-, gamma- and delta-Tocotrienol, D-alpha-Tocopherol and Palm Oil
CAS-No.: 58864-81-6, 490-23-3, 14101-61-2, 25612-59-3, 59-02-9 and 8002-75-3
EINECS-No.: /, /, /, /, 200-412-2 and 232-316-1

3.2.1 Description
Natural tocotrienol concentrate.
4 First aid measures

4.1 Description of first aid measures
After eye and skin contact flush off with water. After ingestion drink sufficient water. Consult a physician if feeling unwell. After inhalation move affected person to fresh air. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
No data available

4.3 Indication of any immediate medical attention and special treatment needed
If problems resist, consult a physician.

5 Firefighting measures

5.1 Extinguishing media
Foam, Carbon dioxide, Exinguishing powder. Water is not suitable as extinguishing media.

5.2 Special hazards arising from the substance or mixture
No data available

5.3 Advice for firefighters
Use air supplied equipment for fighting interior fires.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Do not inhale vapors/ mist/ gas.

6.2 Environmental precautions
Keep away in larger quantities from bodies of water or sewage systems.

6.3 Methods and material for containment and cleaning up
Wipe up with a cloth or sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

7 Handling and storage

7.1 Precautions for safe handling
Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)
No data available

8 Exposure controls/personal protection

8.1 Control parameters
Does not contain substances with maximum allowable concentrations.

8.2 Exposure controls
General industrial hygiene practice
9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance: Red-brownish oil
b) Odour: Characteristic like plant oil
c) Odour threshold: No data available
d) pH-Value: No data available
e) Melting point/freezing point: No data available
f) Initial boiling point and boiling range: No data available
g) Flash point: > 93 °C
h) Evaporation rate: No data available
i) Flammability (solid): No data available
j) Upper/lower flammability or explosive limits: No data available

k) Vapour pressure: No data available
l) Vapour density: No data available
m) Relative density: 0.91 g/ml (30 °C)
n) Solubility(ies): Insoluble in water; soluble in acetone, ether, ethanol and chloroform.
o) Partition coefficient: n-octanol/water: No data available
p) Auto-ignition temperature: No data available
q) Decomposition temperature: No data available
r) Viscosity: No data available
s) Explosive properties: No data available
t) Oxidising properties: No data available

9.2 Other information

None
10 Stability and reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
No hazardous reactions known.

10.4 Conditions to avoid
Exposure to heat, light and oxygen may affect product quality.

10.5 Incompatible materials
Incompatible with strong oxidizing agents, acids and alkalis.

10.6 Hazardous decomposition products
No hazardous decomposition products known.

11 Toxicological information

11.1 Information on toxicological effects

a) Acute toxicity: LD50 (rat, oral) > 5 g/kg

b) Skin corrosion/irritation: No skin corrosion, mild irritation.

c) Serious eye damage/irritation: No eye corrosion, only mild or no irritation.

d) Respiratory or skin sensitisation: Causes no skin sensitation. Effect on respiratory tract is unknown.

e) Germ cell mutagenicity: No evidence of germ cell mutagenicity.

f) Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

g) Reproductive toxicity: No evidence of reproductive toxicity.

h) STOT-single exposure: No data available

i) STOT-repeated exposure: No data available

j) Aspiration hazard: No data available

12 Ecological information

12.1 Toxicity
Water hazard class 1 (self assessment)

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
No data available

12.6 Other adverse effects
No data available
13 Disposal considerations

13.1 Waste treatment methods
Remove mechanically. Burning or deposition.

14 Transport information

14.1 UN number
None

14.2 UN proper shipping name
None

14.3 Transport hazard class(es)
The product is not classified in ADR/IATA/IMGD/RID - guidelines.

14.4 Packing group
None

14.5 Environmental hazards
None

14.6 Special precautions for user
None

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
None

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
None

15.2 Chemical safety assessment
No obligatory information on health and environmental protection

16 Other information

INCI Name: TOCOTRIENOLS, TOCOPHEROL and ELAEIS GUINEENSIS (Palm) OIL
For further product information please see: www.parmentier.de