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

1.1. Product identifier
Curcuma longa CO2-to extract_094.005

Further trade names
Curcuma longa CO2-to Extract (ökol.), Typ Nr. 094.005
Curcuma longa CO2-to extract (organic), type no. 094.005
Curcuma longa extrait CO2-to (bio), référence 094.005

CAS No: 84775-52-0
EC No: 283-882-1

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

1.3. Details of the supplier of the safety data sheet
Company name: Flavex Natureextrakte GmbH
Street: Nordstr. 7
Place: D-66780 Rehlingen-Siersburg
Telephone: +49 (0)6835/9195-0
Telefax: +49 (0)6835/919595
E-mail: info@flavex.com
Contact person: Mr. N. Gref
Internet: www.flavex.com
Responsible Department: Poison information center Freiburg

1.4. Emergency telephone number:
+49 (0)761/19240

SECTION 2: Hazards identification

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hazard categories:
Aspiration hazard: Asp. Tox. 1
Serious eye damage/eye irritation: Eye Irrit. 2
Respiratory or skin sensitisation: Skin Sens. 1
Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:
May be fatal if swallowed and enters airways.
Causes serious eye irritation.
May cause an allergic skin reaction.
Harmful to aquatic life with long lasting effects.

2.2. Label elements
Signal word: Danger
Pictograms: GHS07-GHS08

Hazard statements
H304 May be fatal if swallowed and enters airways.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
Precautionary statements:

P273 Avoid release to the environment.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P331 Do NOT induce vomiting.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards:

Special skin risk by leaking/spilling product.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical characterization:

INCI-Name (CTFA): Curcuma Longa (Turmeric) Root Extract, CAS-Nr. 84775-52-0, EINECS-Nr. 283-882-1

Hazardous components:

<table>
<thead>
<tr>
<th>EC No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS No</td>
<td>Classification according to Directive 67/548/EEC</td>
<td></td>
</tr>
<tr>
<td>Index No</td>
<td>Classification according to Regulation (EC) No. 1272/2008 [CLP]</td>
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</tr>
<tr>
<td>283-882-1</td>
<td>Curcuma Longa, ext.</td>
<td>100 %</td>
</tr>
<tr>
<td>84775-52-0</td>
<td>Eye Irrit. 2, Skin Sens. 1, Asp. Tox. 1, Aquatic Chronic 3; H319 H317 H304 H412</td>
<td></td>
</tr>
</tbody>
</table>

Full text of R, H and EUH phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

Seek medical attention if problems persist.

After inhalation:

Provide fresh air.

After contact with skin:

After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes:

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart.

After ingestion:

Rinse mouth immediately and drink large quantities of water. Consult 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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media
**Suitable extinguishing media**
- Foam. Carbon dioxide (CO2). Powder

**Unsuitable extinguishing media**
- Water spray.

**5.2. Special hazards arising from the substance or mixture**
- Flammable vapours can accumulate in steam space of closed systems.

**5.3. Advice for firefighters**
- In case of fire: Wear self-contained breathing apparatus.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**
- Avoid contact with skin, eye and clothing.
- Wear personal protection equipment.
- Provide adequate ventilation.
- Wear respiratory protection when in the presence of vapour, dust, and aerosols.

**6.2. Environmental precautions**
- Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**
- Take up with oil-absorbing compound. Remove mechanically, placing in appropriate containers for disposal.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**
- Advice on safe handling
  - Avoid contact with skin, eye and clothing.
  - Wear suitable protective clothing, gloves and eye/face protection.
  - Do not breathe gas/fumes/vapour/spray.

- Advice on protection against fire and explosion
  - Keep away from sources of ignition - No smoking.

**7.2. Conditions for safe storage, including any incompatibilities**
- Requirements for storage rooms and vessels
  - Store in a well-ventilated place. Keep container tightly closed.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**8.2. Exposure controls**
- **Protective and hygiene measures**
  - Change contaminated clothing.

- **Eye/face protection**
  - Wear splash goggles

- **Hand protection**
  - When handling chemical substances, chemical protective clothing with CE label (including a four digit code) must be worn. EN 374

- **Skin protection**
  - Only wear fitting, comfortable and clean protective clothing.
  - Take off immediately all contaminated clothing.
  - After contact with skin, wash immediately with plenty of water and soap.
### SECTION 9: Physical and chemical properties

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

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour:</td>
<td>yellow-orange</td>
</tr>
<tr>
<td>Odour:</td>
<td>characteristic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test method:</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH-Value: No data available</td>
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</table>

#### Changes in the physical state

<table>
<thead>
<tr>
<th>Physical state:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in the physical state</td>
</tr>
<tr>
<td>Melting point: No data available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range: No data available</td>
</tr>
<tr>
<td>Sublimation point: No data available</td>
</tr>
<tr>
<td>Softening point: No data available</td>
</tr>
<tr>
<td>Pour point: No data available</td>
</tr>
<tr>
<td>Flash point: &gt; 61 °C °C closed cup</td>
</tr>
</tbody>
</table>

#### Flammability

<table>
<thead>
<tr>
<th>Physical state:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
</tr>
<tr>
<td>Solid: No data available</td>
</tr>
<tr>
<td>Gas: No data available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Explosive properties:</th>
</tr>
</thead>
<tbody>
<tr>
<td>no data available</td>
</tr>
<tr>
<td>Lower explosion limits: No data available</td>
</tr>
<tr>
<td>Upper explosion limits: No data available</td>
</tr>
<tr>
<td>Ignition temperature: No data available</td>
</tr>
</tbody>
</table>

#### Auto-ignition temperature

<table>
<thead>
<tr>
<th>Physical state:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-ignition temperature</td>
</tr>
<tr>
<td>Solid: No data available</td>
</tr>
<tr>
<td>Gas: No data available</td>
</tr>
<tr>
<td>Decomposition temperature: No data available</td>
</tr>
</tbody>
</table>

#### Oxidizing properties

<table>
<thead>
<tr>
<th>Physical state:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxidizing properties</td>
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<tr>
<td>no data available</td>
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<tr>
<td>Vapour pressure: No data available</td>
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<tr>
<td>Density (at 20 °C): &lt; 0.950 g/cm³ pycnometer</td>
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<tr>
<td>Bulk density: No data available</td>
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<tr>
<td>Water solubility: insoluble</td>
</tr>
</tbody>
</table>

#### Solubility in other solvents

<table>
<thead>
<tr>
<th>Physical state:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solubility in other solvents</td>
</tr>
<tr>
<td>good soluble in fat phases</td>
</tr>
<tr>
<td>Partition coefficient: No data available</td>
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<tr>
<td>Viscosity / dynamic: No data available</td>
</tr>
<tr>
<td>Viscosity / kinematic: No data available</td>
</tr>
<tr>
<td>Flow time: No data available</td>
</tr>
<tr>
<td>Vapour density: No data available</td>
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<tr>
<td>Evaporation rate: No data available</td>
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<tr>
<td>Solvent separation test: No data available</td>
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</table>
SECTION 10: Stability and reactivity

10.1. Reactivity
   No data available

10.2. Chemical stability
   No data available

10.3. Possibility of hazardous reactions
   No data available

10.4. Conditions to avoid
   Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

10.5. Incompatible materials
   Oxidizing agents.

Further information
   No ignition, explosion, self-heating or visible decomposition.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
   Toxicokinetics, metabolism and distribution
   No data available

   Acute toxicity
   No data available

   Severe effects after repeated or prolonged exposure
   no data available

   Practical experience
   Observations relevant to classification
   Irritating to eyes, respiratory system and skin
   may cause sensitization by skin contact

SECTION 12: Ecological information

12.1. Toxicity
   No special environmental protection measures are necessary.

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

SECTION 13: Disposal considerations
13.1. Waste treatment methods

Advice on disposal
Waste disposal according to official state regulations.

Waste disposal number of waste from residues/unused products
160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

Contaminated packaging
Waste disposal according to official state regulations.

SECTION 14: Transport information

Land transport (ADR/RID)
14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)
14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)
14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)
14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards
ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user
No data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
No data available

SECTION 15: Regulatory information

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

National regulatory information
Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
### 15.2. Chemical safety assessment

For this substance a chemical safety assessment is not required.

### SECTION 16: Other information

#### Changes

Reason for revision: general revision of whole document

#### Relevant H and EUH statements (number and full text)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H304</td>
<td>May be fatal if swallowed and enters airways.</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>H412</td>
<td>Harmful to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>EUH208</td>
<td>Contains beta-Caryophyllene, Limonene, Terpinolene. May produce an allergic reaction.</td>
</tr>
</tbody>
</table>