1 Identification

· Product identifier

· Trade name: Cocoa Distillate Organic

· Product number: 7004
· CAS Number: 84649-99-0
· EC number: 283-480-6

· Application of the substance / the mixture Food flavorings

· Details of the supplier of the safety data sheet

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· Manufacturer/Supplier:
Advanced Biotech
10 Taft Road
Totowa, NJ 07512 USA

· Information department:
Product Safety Department
productsafety@adv-bio.com

· Emergency telephone number:
1(800)535-5053 (Info Trac)
1(352)323-3500 (International)
During normal business hours: 1(973)339-6242

2 Hazard(s) identification

· Classification of the substance or mixture

GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.

· Label elements Harmful in contact with skin or if inhaled.

· GHS label elements
Pictograms on label shall be in the shape of a square set at a point and shall include a black hazard symbol on a white background with a red frame sufficiently wide to be clearly visible.
The product is classified and labeled according to the Globally Harmonized System (GHS).
Trade name: Cocoa Distillate Organic

- **Hazard pictograms**
  
  ![GHS02](image)

- **Signal word** Warning
- **Hazard statements**
  H226 Flammable liquid and vapor.
- **Precautionary statements**
  - P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  - P241 Use explosion-proof electrical/ventilating/lighting/equipment.
  - P280 Wear protective gloves/protective clothing/eye protection/face protection.
  - P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - P403+P235 Store in a well-ventilated place. Keep cool.
  - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**
  - **NFPA ratings (scale 0 - 4)**
    - Health = 0
    - Fire = 2
    - Reactivity = 0
  - **HMIS-ratings (scale 0 - 4)**
    - Health = 0
    - Fire = 2
    - Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
  - PBT: Not applicable.
  - vPvB: Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**
  - 84649-99-0 Cocoa Extract
- **Identification number(s)**
- **EC number:** 283-480-6
- **Description:** Mixture of the substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>CAS: 84649-99-0</th>
<th>Cocoa Extract</th>
<th>Flam. Liq. 3, H226</th>
<th>90.0%</th>
</tr>
</thead>
</table>

(Continued on page 3)
4 First-aid measures

- Description of first aid measures
  - General information: Immediately remove any clothing soiled by the product.
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Immediately rinse with water.
  - After eye contact: Rinse opened eye for several minutes under running water.
  - After swallowing: If symptoms persist consult doctor.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed
    No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed
    No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
  - Suitable extinguishing agents:
  CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  - Special hazards arising from the substance or mixture
    No further relevant information available.
- Advice for firefighters
  - Protective equipment: No special measures required.
- Additional information
  Cool endangered receptacles with water spray.
  Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  Wear protective equipment. Keep unprotected persons away.
- Environmental precautions:
  Prevent seepage into sewage system, workpits and cellars.
  Dilute with plenty of water.
- Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
- 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: | CAS: 64-17-5 ethyl alcohol | 1,800 ppm |
| PAC-2: | CAS: 64-17-5 ethyl alcohol | 3300* ppm |
| PAC-3: | CAS: 64-17-5 ethyl alcohol | 15000* ppm |

7 Handling and storage

· Handling:
  · Precautions for safe handling: No special precautions are necessary if used correctly.
  · Information about protection against explosions and fires:
    - Keep ignition sources away - Do not smoke.
    - Protect against electrostatic charges.

· Conditions for safe storage, including any incompatibilities

· Storage:
  · Requirements to be met by storerooms and receptacles: No special requirements.
  · Information about storage in one common storage facility: Not required.
  · Further information about storage conditions: Keep receptacle tightly sealed.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

· Control parameters
  · Components with limit values that require monitoring at the workplace:
    The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
    At this time, the remaining constituent has no known exposure limits.

<table>
<thead>
<tr>
<th>CAS: 64-17-5 ethyl alcohol</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL</td>
</tr>
<tr>
<td>REL</td>
</tr>
<tr>
<td>TLV</td>
</tr>
</tbody>
</table>

· Additional information: The lists that were valid during the creation were used as a basis.

· Exposure controls
  · General protective and hygienic measures:
    - Immediately remove all soiled and contaminated clothing.
    - Wash hands before breaks and at the end of work.

· Breathing equipment: Not required.
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 should be based 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

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

Eye protection:

- **Tightly sealed goggles**

9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Information</td>
</tr>
<tr>
<td>Appearance:</td>
</tr>
<tr>
<td>Form:</td>
</tr>
<tr>
<td>Color:</td>
</tr>
<tr>
<td>Odor:</td>
</tr>
<tr>
<td>Odor threshold:</td>
</tr>
<tr>
<td>pH-value:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Change in condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/Melting range:</td>
</tr>
<tr>
<td>Boiling point/Boiling range:</td>
</tr>
<tr>
<td>Flash point:</td>
</tr>
<tr>
<td>Flammability (solid, gaseous):</td>
</tr>
<tr>
<td>Ignition temperature:</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
</tr>
</tbody>
</table>
### Safety Data Sheet

**Trade name:** Cocoa Distillate Organic

<table>
<thead>
<tr>
<th>· <strong>Auto igniting:</strong></th>
<th>Product is not selfigniting.</th>
</tr>
</thead>
<tbody>
<tr>
<td>· <strong>Danger of explosion:</strong></td>
<td>Product is not explosive. However, formation of explosive air/vapor mixtures are possible.</td>
</tr>
<tr>
<td>· <strong>Explosion limits:</strong></td>
<td></td>
</tr>
<tr>
<td>· Lower:</td>
<td>3.5 Vol %</td>
</tr>
<tr>
<td>· Upper:</td>
<td>15 Vol %</td>
</tr>
<tr>
<td>· <strong>Vapor pressure at 20 °C (68 °F):</strong></td>
<td>59 hPa (44.3 mm Hg)</td>
</tr>
<tr>
<td>· <strong>Density at 20 °C (68 °F):</strong></td>
<td>0.985 g/cm³ (8.21983 lbs/gal)</td>
</tr>
<tr>
<td>· <strong>Relative density:</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td>· <strong>Vapor density:</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td>· <strong>Evaporation rate:</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td>· <strong>Solubility in / Miscibility with Water:</strong></td>
<td>Fully miscible.</td>
</tr>
<tr>
<td>· <strong>Partition coefficient (n-octanol/water):</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td>· <strong>Viscosity:</strong></td>
<td></td>
</tr>
<tr>
<td>· Dynamic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>· Kinematic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>· <strong>Solvent content:</strong></td>
<td></td>
</tr>
<tr>
<td>· Organic solvents:</td>
<td>10.0 %</td>
</tr>
<tr>
<td>· VOC content:</td>
<td>10.00 %</td>
</tr>
<tr>
<td>· Other information</td>
<td>98.5 g/l / 0.82 lb/gal</td>
</tr>
</tbody>
</table>

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
12 Ecological information

- Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability: No further relevant information available.
- Behavior in environmental systems:
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.
- Additional ecological information:
- General notes: Generally not hazardous for water.
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- Other adverse effects: No further relevant information available.

13 Disposal considerations

- Waste treatment methods
- Recommendation:
  Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

- UN-Number: UN1197
- DOT, ADR, IMDG, IATA: Extracts, flavoring, liquid
- UN proper shipping name: 1197 Extracts, flavoring, liquid
### IMDG, IATA

**EXTRACTS, FLAVOURING, LIQUID**

**Transport hazard class(es)**

- **DOT**
  - Class: 3 Flammable liquids

- **ADR, IMDG, IATA**
  - Class: 3 Flammable liquids

**Packing group**

- DOT, ADR, IMDG, IATA
  - Class: III

**Environmental hazards:**

- Marine pollutant: No

**Special precautions for user**

- Warning: Flammable liquids
- Stowage Category: A

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

- Not applicable.

**Transport/Additional information:**

- **DOT**
  - Quantity limitations:
    - On passenger aircraft/rail: 60 L
    - On cargo aircraft only: 220 L

- **ADR**
  - Excepted quantities (EQ): Code: E1
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 1000 ml

- **IMDG**
  - Limited quantities (LQ): 5L
  - Excepted quantities (EQ): Code: E1
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 1000 ml

**UN "Model Regulation":**

- UN 1197 EXTRACTS, FLAVORING, LIQUID, 3, III

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(Continued on page 9)
### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Sara**
    - **Section 355 (extremely hazardous substances):**
      - None of the ingredients is listed.
    - **Section 313 (Specific toxic chemical listings):**
      - None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**
  - CAS: 64-17-5 ethyl alcohol

- **TSCA new (21st Century Act) (Substances not listed)**
  - CAS: 84649-99-0 Cocoa Extract

- **Proposition 65**
  - **Chemicals known to cause cancer:**
    - None of the ingredients is listed.
  - **Chemicals known to cause reproductive toxicity for females:**
    - None of the ingredients is listed.
  - **Chemicals known to cause reproductive toxicity for males:**
    - None of the ingredients is listed.
  - **Chemicals known to cause developmental toxicity:**
    - CAS: 64-17-5 ethyl alcohol

- **Carcinogenic categories**
  - **EPA (Environmental Protection Agency)**
    - None of the ingredients is listed.
  - **TLV (Threshold Limit Value established by ACGIH)**
    - CAS: 64-17-5 ethyl alcohol A3
  - **NIOSH-Ca (National Institute for Occupational Safety and Health)**
    - None of the ingredients is listed.

- **GHS label elements**
  - Pictograms on label shall be in the shape of a square set at a point and shall include a black hazard symbol on a white background with a red frame sufficiently wide to be clearly visible.
  - The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**

  - GHS02

- **Signal word** Warning

(Continued on page 10)
Hazard statements
H226 Flammable liquid and vapor.

Precautionary statements
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information
This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases
H225 Highly flammable liquid and vapor.
H226 Flammable liquid and vapor.

Department issuing SDS: Product Safety Department
Contact:
Product Safety Department
productsafety@adv-bio.com

Date of preparation / last revision 08/25/2018 / -

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
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)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3