## 1 Identification

- **Product identifier**

- **Trade name:** Ginger Extract Organic

- **Product number:** 7018

- **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).

- **Hazard pictograms**

  GHS02

  **Signal word** Warning

(Continued on page 2)
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 = 3
- Reactivity = 0

HMIS-ratings (scale 0 - 4)
- Health = 0
- Fire = 3
- Reactivity = 0

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

3 Composition/information on ingredients

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

| CAS: 64-17-5 | ethyl alcohol | Flammable Liquid, H225 | 33.5% |

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.
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**:
  - Dilute with plenty of water.
  - Do not allow to enter sewers/surface or ground 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 3,300 ppm

  - **PAC-3**:
    - CAS: 64-17-5 ethyl alcohol 15,000 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.
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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

  | Component with limit values that require monitoring at the workplace: |
  |-----------------|-----------------|-----------------|-----------------|
  | CAS: 64-17-5 ethyl alcohol |
  | PEL Long-term value: 1900 mg/m³, 1000 ppm |
  | REL Long-term value: 1900 mg/m³, 1000 ppm |
  | TLV Short-term value: 1880 mg/m³, 1000 ppm |

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

- Exposure controls
  - Personal protective equipment:
    - 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.
### Physical and chemical properties

**Appearance:**
- Form: Liquid
- Color: According to product specification
- Odor: According to product specification
- Odor threshold: Not determined.

**pH-value:** Not determined.

**Change in condition**
- Melting point/Melting range: Undetermined.
- Boiling point/Boiling range: Undetermined.

**Flash point:** 31 °C (87.8 °F)

**Flammability (solid, gaseous):** Not applicable.

**Ignition temperature:** 425 °C (797 °F)

**Decomposition temperature:** Not determined.

**Auto igniting:** Product is not selfigniting.

**Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

**Explosion limits:**
- Lower: 3.5 Vol %
- Upper: 15 Vol %

**Vapor pressure at 20 °C (68 °F):** 59 hPa (44.3 mm Hg)

**Density at 20 °C (68 °F):** 1.018 g/cm³ (8.49521 lbs/gal)
- Relative density: Not determined.
- Vapor density: Not determined.
- Evaporation rate: Not determined.

**Solubility in / Miscibility with Water:** Fully miscible.

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**
- Dynamic: Not determined.
Safety Data Sheet  
acc. to OSHA HCS

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### 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.
    - **Sensitization:** No sensitizing effects known.
  - **Additional toxicological information:**
  - **Carcinogenic categories**
    - **IARC (International Agency for Research on Cancer)**
      - CAS: 64-17-5 ethyl alcohol
    - **NTP (National Toxicology Program)**
      - None of the ingredients is listed.
    - **OSHA-Ca (Occupational Safety & Health Administration)**
      - None of the ingredients is listed.

### 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.

(Continued on page 7)
### Additional ecological information:

- **General notes:**
  - Water hazard class 1 (Self-assessment): slightly hazardous for water
  - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

### 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**
  - **DOT, ADR, IMDG, IATA:** UN1197

- **UN proper shipping name**
  - **DOT:** Extracts, flavoring, liquid solution
  - **ADR:** 1197 Extracts, flavoring, liquid solution
  - **IMDG, IATA:** EXTRACTS, FLAVOURING, LIQUID solution

- **Transport hazard class(es)**
  - **DOT**
    - **Class:** 3 Flammable liquids
    - **Label:** 3
  - **ADR**
    - **Class:** 3 (F1) Flammable liquids
## Safety Data Sheet

**Trade name:** Ginger Extract Organic

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<td>· IMDG, IATA</td>
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### Class

| · Label | 3 Flammable liquids |
| · Label | 3 |

### Packing group

| · DOT, ADR, IMDG, IATA | III |

### Environmental hazards:

| · Marine pollutant: | No |

### Special precautions for user

| · Warning: Flammable liquids | |
| · Danger code (Kemler): | 30 |
| · EMS Number: | F-E,S-D |
| · 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 SOLUTION, 3, III |

## 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. |

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acc. to OSHA HCS

Printing date 08/25/2018
Reviewed on 03/31/2018

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- **Section 313 (Specific toxic chemical listings):**
  None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**
  All ingredients are listed.

- **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:**
    All ingredients are listed.

- **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

- **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

- **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.

(Continued on page 10)
### 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.

- **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