1 Identification

- **Product identifier**
- **Trade name:** Plum Flavor Extract
- **Article number:** 74.802

- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
  OliveNation LLC
  50 Terminal Street
  Bldg. 2, Ste. 712
  Charlestown, MA 02129
- **Information department:** Regulatory department
- **Emergency telephone number:**
  During normal opening times: Call Chemtrec Day or Night
  Domestic North America 800.424.9300/International 703.527.3887 (Collect calls accepted)

2 Hazard(s) identification

- **Classification of the substance or mixture**
  - GHS02 Flame
    Flam. Liq. 2  H225  Highly flammable liquid and vapor.
  - GHS07
    Skin Irrit. 2  H315  Causes skin irritation.
    Eye Irrit. 2A  H319  Causes serious eye irritation.
    STOT SE 3  H335  May cause respiratory irritation.

- **Label elements**
  - **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**
    - GHS02
    - GHS07

- **Signal word** Danger
Trade name: Plum Flavor Extract

· **Hazard-determining components of labeling:**
  ethyl alcohol

· **Hazard statements**
  Highly flammable liquid and vapor.
  Causes skin irritation.
  Causes serious eye irritation.
  May cause respiratory irritation.

· **Precautionary statements**
  Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  Ground/bond container and receiving equipment.
  Use explosion-proof electrical/ventilating/lighting/equipment.
  Use only non-sparking tools.
  Take precautionary measures against static discharge.
  Avoid breathing dust/fume/gas/mist/vapors/spray.
  Wash thoroughly after handling.
  Use only outdoors or in a well-ventilated area.
  Wear protective gloves/protective clothing/eye protection/face protection.
  If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  Call a poison center/doctor if you feel unwell.
  Specific treatment (see on this label).
  If skin irritation occurs: Get medical advice/attention.
  If eye irritation persists: Get medical advice/attention.
  Take off contaminated clothing and wash it before reuse.
  In case of fire: Use for extinction: CO2, powder or water spray.
  Store in a well-ventilated place. Keep container tightly closed.
  Store in a well-ventilated place. Keep cool.
  Store locked up.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

  · **NFPA ratings (scale 0 - 4)**
    
    ![NFPA Rating](image)
    
    Health = 2
    Fire = 3
    Reactivity = 0

  · **HMIS-ratings (scale 0 - 4)**
    
    ![HMIS Rating](image)
    
    Health = 2
    Fire = 3
    Reactivity = 0
Trade name: Plum Flavor Extract

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

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.

- Dangerous components:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethyl alcohol</td>
<td>50-100%</td>
</tr>
<tr>
<td>56-81-5 glycerol</td>
<td>25-50%</td>
</tr>
<tr>
<td>141-78-6 ETHYL ACETATE</td>
<td>≥0.1-&lt;2.5%</td>
</tr>
</tbody>
</table>

4 First-aid measures

- Description of first aid measures
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Generally the product does not irritate the skin.
  - After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - 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.
  - For safety reasons unsuitable extinguishing agents: Water with full jet
  - Special hazards arising from the substance or mixture: No further relevant information available.
6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions**: 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).
  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.

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**: Store in a cool location.
  - **Information about storage in one common storage facility**: Not required.
  - **Further information about storage conditions**:
    Keep container tightly sealed.
    Store in cool, dry conditions in well sealed receptacles.
- **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.
# Safety Data Sheet

**Trade name:** Plum Flavor Extract

## Control parameters

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

<table>
<thead>
<tr>
<th>Component</th>
<th>PEL</th>
<th>REL</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethyl alcohol</td>
<td>Long-term value: 1900 mg/m³, 1000 ppm</td>
<td>Long-term value: 1900 mg/m³, 1000 ppm</td>
<td>Short-term value: 1880 mg/m³, 1000 ppm</td>
</tr>
<tr>
<td>56-81-5 glycerol</td>
<td>Long-term value: 15* 5** mg/m³</td>
<td>Long-term value: 15* 5** mg/m³</td>
<td>Long-term value: 15* 5** mg/m³</td>
</tr>
<tr>
<td>141-78-6 ETHYL ACETATE</td>
<td>Long-term value: 1400 mg/m³, 400 ppm</td>
<td>Long-term value: 1400 mg/m³, 400 ppm</td>
<td>Long-term value: 1400 mg/m³, 400 ppm</td>
</tr>
</tbody>
</table>

*Total dust **Respirable fraction TLV withdrawn insufficient data human occup. exp.

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

### Exposure controls

#### General protective and hygienic measures:
- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes.
- Avoid contact with the eyes and skin.

#### Breathing equipment:
- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

#### Protection of hands:
- The glove material has to be impermeable and resistant to the product/substance/preparation.
- Due to missing tests no recommendation to the glove material can be given for the product/substance/preparation/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. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.
Trade name: Plum Flavor Extract

- Penetration time of glove material
  The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection:
  Tightly sealed goggles

9 Physical and chemical properties

- Information on basic physical and chemical properties
- General Information
- Appearance:
  Form: Liquid
  Color: According to product specification
- Odor: Characteristic
- Odor threshold: Not determined.
- pH-value: Not determined.
- Change in condition
  Melting point/Melting range: Undetermined.
  Boiling point/Boiling range: Undetermined.
- Flash point: 17.2 °C (63 °F)
- Flammability (solid, gaseous): Not applicable.
- Ignition temperature:
  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: Not determined.
  Upper: Not determined.
- Vapor pressure: Not determined.
- Density at 20 °C (68 °F): 0.93386 g/cm³ (7.79306 lbs/gal)
- Relative density: Not determined.
Trade name: Plum Flavor Extract

- Vapor density: Not determined.
- Evaporation rate: Not determined.

- Solubility in / Miscibility with Water: Not miscible or difficult to mix.

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

- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.

- Solvent content:
  - Organic solvents: 98.1 %
  - VOC content: 66.22 %
    - 618.4 g/l / 5.16 lb/gl

- Solids content: 0.0 %
- Other information: No further relevant information available.

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: Irritating effect.
  - Sensitization: No sensitizing effects known.
- Additional toxicological information:
The product shows the following dangers according to internally approved calculation methods for preparations:
- Irritant

(Contd. on page 8)
Trade name: Plum Flavor Extract

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:
    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.
### 14 Transport information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>UN1197</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT, IMDG, IATA</td>
<td>EXTRACTS, FLAVOURING, LIQUID</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>Extracts, flavoring, liquid</td>
</tr>
<tr>
<td>DOT</td>
<td>3 Flammable liquids</td>
</tr>
<tr>
<td>IMDG, IATA</td>
<td>3</td>
</tr>
</tbody>
</table>

**Transport hazard class(es)**

| DOT |
| Class | 3 Flammable liquids |
| Label | 3 |

| IMDG, IATA |
| Class | 3 Flammable liquids |
| Label | 3 |

| Packing group | II |
| DOT, IMDG, IATA |  |

| Environmental hazards: |
| Marine pollutant: | No |

| Special precautions for user | Warning: Flammable liquids |
| Danger code (Kemler): | 33 |
| EMS Number: | F-E,S-D |
| Stowage Category | B |

| 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: 5 L |
| | On cargo aircraft only: 60 L |
Trade name: Plum Flavor Extract

- IMDG
  - Limited quantities (LQ)  IL
  - Excepted quantities (EQ) Code: E2
    Maximum net quantity per inner packaging: 30 ml
    Maximum net quantity per outer packaging: 500 ml

- UN "Model Regulation": UN 1197 EXTRACTS, FLAVORING, LIQUID, 3, II

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) (Substances not listed):
    All ingredients are listed.
  - TSCA new (21st Century Act) (Substances not 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:
      64-17-5 ethyl alcohol

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

· **Safety Data Sheet** acc. to OSHA HCS

· **Printing date** 10/10/2018  
  **Reviewed on** 10/10/2018

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**

  ![GHS02](image) ![GHS07](image)

- **Signal word** Danger

- **Hazard-determining components of labeling:**
  ethyl alcohol

- **Hazard statements**
  Highly flammable liquid and vapor.
  Causes skin irritation.
  Causes serious eye irritation.
  May cause respiratory irritation.

- **Precautionary statements**
  Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  Ground/bond container and receiving equipment.
  Use explosion-proof electrical/ventilating/lighting/equipment.
  Use only non-sparking tools.
  Take precautionary measures against static discharge.
  Avoid breathing dust/fume/gas/mist/vapors/spray
  Wash thoroughly after handling.
  Use only outdoors or in a well-ventilated area.
  Wear protective gloves/protective clothing/eye protection/face protection.
  If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  Call a poison center/doctor if you feel unwell.
  Specific treatment (see on this label).
  If skin irritation occurs: Get medical advice/attention.
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  Take off contaminated clothing and wash it before reuse.
  In case of fire: Use for extinction: CO2, powder or water spray.
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  Store in a well-ventilated place. Keep cool.
  Store locked up.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 10)
Trade name: Plum Flavor Extract

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

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**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.
  
  H315 Causes skin irritation.
  
  H319 Causes serious eye irritation.
  
  H320 Causes eye irritation.
  
  H335 May cause respiratory irritation.
  
  H336 May cause drowsiness or dizziness.

- **Department issuing SDS:** Regulatory department

- **Date of preparation / last revision** 10/10/2018 / 2

- **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
  
  Skin Irrit. 2: Skin corrosion/irritation – Category 2
  
  Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
  
  Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B
  
  STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

- **Data compared to the previous version altered.**