1 Identification

- Product identifier
- Trade name: Maple Furanone 10% PG natural
- Product number: 1611
- Application of the substance / the mixture: Food flavorings
- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier: Advanced Biotech
    10 Taft Road
    Totowa, NJ 07512 USA
  - Information department: Product safety department
    sarfa@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
  The product is not classified according to the Globally Harmonized System (GHS).
- Label elements
  - 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.
  - Hazard pictograms: Not Applicable
  - Signal word: Not Applicable
  - Hazard statements: Not Applicable
  - Classification system:
    - NFPA ratings (scale 0 - 4)
      - Health = 0
      - Fire = 1
      - Reactivity = 0
  - HMIS-ratings (scale 0 - 4)
    - HEALTH 0 Health = 0
    - FIRE 1 Fire = 1
    - REACTIVITY 0 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:
  - 57-55-6 propane-1,2-diol 90.0%
4 First-aid measures

- Description of first aid measures
- General information: No special measures required.
- 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.
- 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, powder or alcoholresistant foam.
  - Use fire fighting measures that suit the environment.
- 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
  - Not required.
- Environmental precautions: 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).
- 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 measures required.
- Information about protection against explosions and fires
  - No special measures required.
- Conditions for safe storage, including any incompatibilities
  - No special requirements.
- Storage:
- Requirements to be met by storerooms and receptacles
  - No special requirements.
- Information about storage in one common storage facility
  - Not required.
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:
    - 57-55-6 propane-1,2-diol
      - WEEL Long-term value: 10 mg/m³
  
- 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:
    The usual precautionary measures for handling chemicals should be followed.
  - Breathing equipment: Not required.
  - Protection of hands:
    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: Goggles recommended during refilling.

9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
  - Appearance:
    - Form: Liquid
    - Color: Yellow to brown
    - Odor: Maple
    - Odour threshold: Not determined.
  - pH-value: Not determined.
  - Change in condition
    - Melting point/Melting range: Undetermined.
    - Boiling point/Boiling range: 187 °C (369 °F)
  - Flash point: 107 °C (225 °F)
41. Flammability (solid, gaseous): Not applicable.
· Ignition temperature: 371 °C (700 °F)
· Decomposition temperature: Not determined.
· Auto igniting: Product is not selfigniting.
· Danger of explosion: Product does not present an explosion hazard.
· Explosion limits:
  Lower: 2.6 Vol %
  Upper: 12.6 Vol %
· Vapor pressure at 20 °C (68 °F): 0.1 hPa
· Density at 20 °C (68 °F): 1.045 g/cm³ (8.721 lbs/gal)
· Relative density: Not determined.
· Vapour 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.
  Kinematic: Not determined.
· Solvent content:
  Organic solvents: 90.0 %
  VOC content: 90.0 %
  940.5 g/l / 7.85 lb/gl
· Other information No further relevant information available.

10 Stability and reactivity
· Reactivity
· 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.
Trade name: Maple Furanone 10% PG natural

(Continuation of page 4)

- **Additional toxicological information:**
  - The product is not subject to classification according to internally approved calculation methods for preparations:
  - When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- **Carcinogenic categories**
  - **IARC (International Agency for Research on Cancer)**
    - None of the ingredients is listed.
  - **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.
  - **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:** Smaller quantities can be disposed of with household waste.

- **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, ADN, IMDG, IATA: Not Regulated

- **UN proper shipping name**
  - DOT, ADR, ADN, IMDG, IATA: Not Regulated
### Safety Data Sheet
acc. to OSHA HCS

**Trade name:** Maple Furanone 10% PG natural

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<tr>
<th>Transport hazard class(es)</th>
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<td>Class</td>
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<th>Environmental hazards:</th>
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<td>Marine pollutant:</td>
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<tr>
<th>Special precautions for user</th>
<th>Not applicable.</th>
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| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |

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<th>Transport/Additional information:</th>
<th>Not dangerous according to the above specifications.</th>
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<th>UN &quot;Model Regulation&quot;:</th>
<th>-</th>
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## 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):**
  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:**
  None of the ingredients is listed.

### Carcinogenic categories

- **EPA (Environmental Protection Agency)**
  None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**
  None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  None of the ingredients is listed.

- **GHS label elements** Not Applicable
Trade name: Maple Furanone 10% PG natural

- **Hazard pictograms**
  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.

- **Signal word** Not Applicable

- **Hazard statements** Not Applicable

- **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**
  H302 Harmful if swallowed.

- **Department issuing SDS:** Product safety department

- **Contact:** Sidney Arfa

- **Date of preparation / last revision** 06/25/2015 / -

- **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)
  - Acute Tox. 4: Acute toxicity, Hazard Category 4