# 1 Identification

- **Product identifier**
- **Trade name**: Beta Damascenone synthetic
- **Product number**: 2254
- **CAS Number**: 23696-85-7
- **EC number**: 245-833-2

- **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**

  GHS07

  Skin Sens. 1 H317 May cause an allergic skin reaction.

- **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 substance is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**

  GHS07

- **Signal word** Warning

(Continued on page 2)
Trade name: Beta Damascenone synthetic

- Hazard-determining components of labeling:
  1-(2,6,6-Trimethylcyclohexa-1,3-dienyl)-2-buten-1-one

- Hazard statements
  H317 May cause an allergic skin reaction.

- Precautionary statements
  P261 Avoid breathing dust/fume/gas/mist/vapors/spray
  P280 Wear protective gloves.
  P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
  P321 Specific treatment (see on this label).
  P363 Wash contaminated clothing before reuse.
  P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system:
  NFPA ratings (scale 0 - 4)
  - Health = 0
  - Fire = 1
  - Reactivity = 0

- HMIS-ratings (scale 0 - 4)
  - Health = 0
  - Fire = 1
  - Reactivity = 0

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

3 Chemical composition/information on ingredients

- Chemical characterization: Substances
- CAS No. Description
  23696-85-7 1-(2,6,6-Trimethylcyclohexa-1,3-dienyl)-2-buten-1-one
- Identification number(s)
  - EC number: 245-833-2

4 First-aid measures

- Description of first aid measures
- After inhalation:
  Supply fresh air and be sure to call for a doctor.
  In case of unconsciousness place patient stably in side position for transportation.
- After skin contact:
  Immediately wash with water and soap and rinse thoroughly.
- 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, powder or alcoholresistant foam.
    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 Not required.
· 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).
  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: Substance is not listed.
  · PAC-2: Substance is not listed.
  · PAC-3: Substance is not listed.

7 Handling and storage

· Handling:
  · Precautions for safe handling
    Ensure good ventilation/exhaustion at the workplace.
    Prevent formation of aerosols.
  · Information about protection against explosions and fires: No special measures required.
· Conditions for safe storage, including any incompatibilities
· Storage:
  · Requirements to be met by storerooms and receptacles:
    No special requirements.
    Please refer to product specification for product storage requirements.
Trade name: Beta Damascenone synthetic

| Information about storage in one common storage facility: | Not required. |
| Further information about storage conditions: | None. |
| 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:** Not required.
- **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:**
    - 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:**
  - **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.
  - **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:** According to product specification
    - **Odor:** According to product specification
    - **Odor threshold:** Not determined.
  - **pH-value:** Not determined.
### 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:**
  - **on the skin:** No irritant effect.
  - **on the eye:** No irritating effect.
Trade name: Beta Damascenone synthetic

- **Sensitization**: Sensitization possible through skin contact.
- **Additional toxicological information**:
  - **Carcinogenic categories**
    - **IARC (International Agency for Research on Cancer)**: Substance is not listed.
    - **NTP (National Toxicology Program)**: Substance is not listed.
    - **OSHA-Ca (Occupational Safety & Health Administration)**: Substance is not 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**:
    - Water hazard class 2 (Assessment by list): hazardous for water
    - Do not allow product to reach ground water, water course or sewage system.
    - Danger to drinking water if even small quantities leak into the ground.
  - **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

- **UN-Number**
  - **DOT, ADR, ADN, IMDG, IATA**: Not Regulated
- **UN proper shipping name**
  - **DOT, ADR, ADN, IMDG, IATA**: Not Regulated

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- Transport hazard class(es)
  - DOT, ADR, ADN, IMDG, IATA
  - Class Not Regulated

- Packing group
  - DOT, ADR, IMDG, IATA
  - Not Regulated

- Environmental hazards:
  - Marine pollutant: No

- Special precautions for user
  - Not applicable.

- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  - Not applicable.

- Transport/Additional information:
  - Not dangerous according to the above specifications.

- DOT
  - Quantity limitations
    - On passenger aircraft/rail: -
    - On cargo aircraft only: -

- UN "Model Regulation": Not Regulated

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Sara
    - Section 355 (extremely hazardous substances):
      - Substance is not listed.
    - Section 313 (Specific toxic chemical listings):
      - Substance is not listed.

- TSCA (Toxic Substances Control Act):
  - Substance is listed.

- TSCA new (21st Century Act): (Substances not listed)
  - CAS: 23696-85-7 1-(2,6,6-Trimethylcyclohexa-1,3-dienyl)-2-buten-1-one

- Proposition 65
  - Chemicals known to cause cancer:
    - Substance is not listed.
  - Chemicals known to cause reproductive toxicity for females:
    - Substance is not listed.
  - Chemicals known to cause reproductive toxicity for males:
    - Substance is not listed.
  - Chemicals known to cause developmental toxicity:
    - Substance is not listed.

- Carcinogenic categories
  - EPA (Environmental Protection Agency)
    - Substance is not listed.

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### TLV (Threshold Limit Value established by ACGIH)
- Substance is not listed.

### NIOSH-Ca (National Institute for Occupational Safety and Health)
- Substance is not listed.

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### Hazard pictograms
- **GHS07**

### Signal word
- *Warning*

### Hazard-determining components of labeling:
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- **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.

### Department issuing SDS
- Product Safety Department

### Contact
- Product Safety Department
  - productsafety@adv-bio.com

### Date of preparation / last revision
- 02/11/2019 / -

### 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
- 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

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<table>
<thead>
<tr>
<th>Trade name: Beta Damascenone synthetic</th>
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<tbody>
<tr>
<td>vPvB: very Persistent and very Bioaccumulative</td>
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<tr>
<td>NIOSH: National Institute for Occupational Safety</td>
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<td>OSHA: Occupational Safety &amp; Health</td>
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<tr>
<td>TLV: Threshold Limit Value</td>
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<tr>
<td>PEL: Permissible Exposure Limit</td>
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<tr>
<td>REL: Recommended Exposure Limit</td>
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<tr>
<td>Skin Sens. 1: Skin sensitisation – Category 1</td>
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