1 Identification
· Product identifier
· Trade name: Ethyl Vanillin synthetic
· Product number: 2014
· CAS Number:
  121-32-4
· EC number: 204-464-7
· 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
  · Emergency telephone number: 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
  · GHS07
  · Acute Tox. 4 H302 Harmful if swallowed.
· 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
· Hazard-determining components of labeling:
  · 3-ethoxy-4-hydroxybenzaldehyde
· Hazard statements
  · H302 Harmful if swallowed.
· Precautionary statements
  · P264 Wash thoroughly after handling.
  · P270 Do not eat, drink or smoke when using this product.
  · P301+P312 If swallowed: Call a poison center/doctor/physician if you feel unwell.

(Continued on page 2)
Trade name: Ethyl Vanillin synthetic

P330 Rinse mouth.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system:
- NFPA ratings (scale 0 - 4)
  
  Health = 2  
  Fire = 1  
  Reactivity = 0

- HMIS-ratings (scale 0 - 4)

  HEALTH: Health = 2  
  FIRE: Fire = 1  
  REACTIVITY: 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
  121-32-4 3-ethoxy-4-hydroxybenzaldehyde
- Identification number(s)
  EC number: 204-464-7

4 First-aid measures

- Description of first aid measures
  - General information:
    Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
  - 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: Immediately call a 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.
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:
  Dispose contaminated material as waste according to item 13.
- 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: No special measures required.
- 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: 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:
    Keep away from foodstuffs, beverages and feed.
    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/substance/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**: Not required.

### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>Form:</td>
<td>Solid</td>
</tr>
<tr>
<td>Color:</td>
<td>White to pale yellow</td>
</tr>
<tr>
<td>Odor:</td>
<td>Vanilla</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>pH-value:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Change in condition</td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range:</td>
<td>76-77 °C (169-171 °F)</td>
</tr>
<tr>
<td>Boiling point/Boiling range:</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Flash point:</td>
<td>146 °C (295 °F)</td>
</tr>
<tr>
<td>Flammability (solid, gaseous):</td>
<td>Product is not flammable.</td>
</tr>
<tr>
<td>Ignition temperature:</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Auto igniting:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Danger of explosion:</td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>Explosion limits:</td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Upper:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapor pressure:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Density:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Relative density:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapour density:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with Water:</td>
<td>Insoluble.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water):</td>
<td>Not determined.</td>
</tr>
</tbody>
</table>
Trade name: Ethyl Vanillin synthetic

- Viscosity:
  - Dynamic: Not applicable.
  - Kinematic: Not applicable.
- Organic solvents: 0.0%
- Solids content: 100.0%
- 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:
  - LD/LC50 values that are relevant for classification:
    - 121-32-4 3-ethoxy-4-hydroxybenzaldehyde
    - Oral LD50 1590 mg/kg (rat)
  - 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)
    - 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.
Trade name: Ethyl Vanillin synthetic

- 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

- UN-Number
  - DOT, ADR, ADN, IMDG, IATA: Not Regulated
- UN proper shipping name
  - DOT, ADR, ADN, IMDG, IATA: Not Regulated
- Transport hazard class(es)
  - DOT, ADR, ADN, IMDG, IATA: Not Regulated
  - 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.
- UN "Model Regulation": -
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.
  - **Proposition 65**
    - **Chemicals known to cause cancer:**
      Substance is not listed.
    - **WARNING!** This product contains a chemical known to the State of California to cause cancer: Acetaldehyde CAS-no. 75-07-0

- **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.
  - **TLV (Threshold Limit Value established by ACGIH)**
    Substance is not listed.
  - **NIOSH-Ca (National Institute for Occupational Safety and Health)**
    Substance is not listed.

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

- **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.

  GHS07

- **Signal word** Warning

- **Hazard-determining components of labeling:**
  - 3-ethoxy-4-hydroxybenzaldehyde

- **Hazard statements**
  - H302 Harmful if swallowed.

(Continued on page 8)
Trade name: Ethyl Vanillin synthetic

· **Precautionary statements**
  P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P301+P312 If swallowed: Call a poison center/doctor/physician if you feel unwell.
P330 Rinse mouth.
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:** Sidney Arfa
· **Date of preparation / last revision** 06/26/2015 / -
· **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
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  NFPA: National Fire Protection Association (USA)
  HMIS: Hazardous Materials Identification System (USA)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  Acute Tox. 4: Acute toxicity, Hazard Category 4