Safety Data Sheet  
acc. to OSHA HCS

Printing date 02/11/2019  
Reviewed on 02/08/2019

1 Identification

· Product identifier
  · Trade name: Tobacco Extract natural
  · Product number: 6079
  · CAS Number: 84961-66-0
  · EINECS Number: 284-656-5

· Application of the substance / the mixture
  Food flavorings
  Tobacco Products

· 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
  Acute Tox. 4  H302  Harmful if swallowed.

· 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.
    The product is classified and labeled according to the Globally Harmonized System (GHS).
  · Hazard pictograms
    GHS07

· Signal word Warning

(Continued on page 2)
Trade name: Tobacco Extract natural

- **Hazard-determining components of labeling:**
  - nicotine
- **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 if you feel unwell.
  - P330 Rinse mouth.
  - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Classification system:**
  - NFPA ratings (scale 0 - 4)
    - Health = 1
    - Fire = 1
    - Reactivity = 0
  - HMIS-ratings (scale 0 - 4)
    - HEALTH
      - Health = 1
    - 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**

- **Description:** Extractives of Tobacco, Water and Glycerin
- **Dangerous components:** Not Applicable

**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.
    - CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant 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.
  - 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.
- 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

<table>
<thead>
<tr>
<th>PAC-1:</th>
<th>CAS: 54-11-5 nicotine</th>
<th>1.5 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAC-2:</td>
<td>CAS: 54-11-5 nicotine</td>
<td>3.5 mg/m³</td>
</tr>
<tr>
<td>PAC-3:</td>
<td>CAS: 54-11-5 nicotine</td>
<td>35 mg/m³</td>
</tr>
</tbody>
</table>

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.
    - Please refer to product specification for product storage requirements.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions: None.
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:**
    The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
  - **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:**
    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:** 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:** >110 °C (>230 °F)
- **Flammability (solid, gaseous):** Not applicable.
### 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**
  - **LD/LC50 values that are relevant for classification**:
    | Route   | LD50   | LD50 (mg/kg) |
    |---------|--------|--------------|
    | Oral    | 188    | (Rat)        |
    | Dermal  | 50     | (rabbit)     |

**CAS: 54-11-5 nicotine**

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50</th>
<th>LD50 (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>5</td>
<td>(ATE)</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>(rat)</td>
</tr>
</tbody>
</table>
48.1.23

Dermal LD50 70 mg/kg (ATE)
50 mg/kg (rat)

Inhalative LC50/4 h 0.19 mg/l (ATE)

· Primary irritant effect:
  · on the skin: No irritant effect.
  · on the eye: No irritating effect.
  · Sensitization: No sensitizing effects known.
  · Additional toxicological information: Harmful

· 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:
      Water hazard class 2 (Self-assessment): 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.
  · Recommended cleansing agent: Water, if necessary with cleansing agents.
14 Transport information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>DOT, ADR, ADN, IMDG, IATA</th>
<th>Not Regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>DOT, ADR, ADN, IMDG, IATA</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
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<td>Not Regulated</td>
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<tr>
<td>Class</td>
<td>DOT, ADR, ADN, IMDG, IATA</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>Packing group</td>
<td>DOT, ADR, IMDG, IATA</td>
<td>Not Regulated</td>
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<tr>
<td>Environmental hazards:</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Marine pollutant</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td></td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Transport in bulk according to Annex II of</td>
<td></td>
<td>Not applicable.</td>
</tr>
<tr>
<td>MARPOL73/78 and the IBC Code</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport/Additional information:</td>
<td></td>
<td>Not dangerous according to the above specifications.</td>
</tr>
<tr>
<td>UN &quot;Model Regulation&quot;:</td>
<td></td>
<td>Not Regulated</td>
</tr>
</tbody>
</table>

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Sara
    - Section 355 (extremely hazardous substances):
      All ingredients are listed.
    - Section 313 (Specific toxic chemical listings):
      All ingredients are listed.
  - TSCA (Toxic Substances Control Act):
    All ingredients are listed.
  - Proposition 65
    - Chemicals known to cause cancer:
      None of the ingredients is listed.

**WARNING:** Consuming this product can expose you to chemicals including Tobacco Smoke and Nicotine, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov/food.

Nicotine CAS-no: 54-11-5 (0.90% by weight)

- Chemicals known to cause reproductive toxicity for females:
  None of the ingredients is listed.
Trade name: Tobacco Extract natural

Tobacco Extract: oral use of smokeless products is known to cause cancer.

WARNING: Consuming this product can expose you to chemicals including Tobacco Smoke and Nicotine, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov/food.

Nicotine CAS-no: 54-11-5 (0.90% by weight)

- 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
  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).

- Signal word Warning
  GHS07
Trade name: Tobacco Extract natural

· **Hazard-determining components of labeling:**
  nicotine

· **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 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.

· **Relevant phrases**
  H301 Toxic if swallowed. ***Only if nicotine is greater than 1%***
  H310 Fatal if in contact with skin. ***Only if nicotine is greater than 1%***
  R25 Toxic if swallowed. ***Only if nicotine is greater than 1%***
  R27 Very toxic in contact with skin. ***Only if nicotine is greater than 1%***
  R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. ***Only if nicotine is greater than 1%***

· **Department issuing SDS:** Product Safety Department
· **Contact:**
  Product Safety Department
  productssafety@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
  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)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  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
  REL: Recommended Exposure Limit
  PEL: Permissible Exposure Limit
  Acute Tox. 4: Acute toxicity – Category 4