SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation of the mixture: BISCUIT FLAVOR N&A TYPE

Registration number: -

Synonyms: None.

Product code: SLP108

Issue date: 22-August-2017

Version number: 02

Revision date: 14-February-2019

Supersedes date: 22-August-2017

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Use in accordance with supplier’s recommendations.

Uses advised against: No other uses are advised.

1.3. Details of the supplier of the safety data sheet

Supplier

Company name: Capella Flavors, Inc.

Address: 6155 Corte Del Cedro

Carlsbad, CA 92011

United States

Division

Telephone: Office 760 650-0200

Fax: n/a

e-mail: customerservice@capellaflavors.com

Contact person: Not available.

1.4. Emergency telephone number

CHEMTREC 800-424-9300

International 703-741-5970

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

Hazard summary: Not classified for health hazards. However, occupational exposure to the mixture or substance(s) may cause adverse health effects.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms: None.

Signal word: None.

Hazard statements: The mixture does not meet the criteria for classification.

Precautionary statements

Prevention: Observe good industrial hygiene practices.

Response: Wash hands after handling.

Storage: Store away from incompatible materials.

Disposal: Dispose of waste and residues in accordance with local authority requirements.

Supplemental label information: EUH208 - Contains TRADE SECRET. May produce an allergic reaction.

2.3. Other hazards

Not a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures
General information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>%</th>
<th>CAS-No. / EC No.</th>
<th>REACH Registration No.</th>
<th>Index No.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>VANILLIN #234</td>
<td>5 - &lt; 10</td>
<td>121-33-5</td>
<td>204-465-2</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Classification:** Eye Irrit. 2; H319

Other components below reportable levels

90 - 100

List of abbreviations and symbols that may be used above

- #: This substance has been assigned Union workplace exposure limit(s).
- M: M-factor
- PBT: persistent, bioaccumulative and toxic substance.
- vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments

The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

**General information**

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

**4.1. Description of first aid measures**

**Inhalation**

Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact**

Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact**

Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion**

Rinse mouth. Get medical attention if symptoms occur.

**4.2. Most important symptoms and effects, both acute and delayed**

Exposure may cause temporary irritation, redness, or discomfort.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

SECTION 5: Firefighting measures

**General fire hazards**

No unusual fire or explosion hazards noted.

**5.1. Extinguishing media**

- **Suitable extinguishing media:** Alcohol resistant foam. Carbon dioxide (CO2).
- **Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**5.2. Special hazards arising from the substance or mixture**

During fire, gases hazardous to health may be formed.

**5.3. Advice for firefighters**

- **Special protective equipment for firefighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
- **Special fire fighting procedures:** Move containers from fire area if you can do so without risk.

**Specific methods**

Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

- **For non-emergency personnel:** Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
- **For emergency responders:** Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

**6.2. Environmental precautions**

Avoid discharge into drains, water courses or onto the ground.

**6.3. Methods and material for containment and cleaning up**

- **Large Spills:** Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
- **Small Spills:** Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
- **Never return spills to original containers for re-use.**
For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Avoid prolonged exposure. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities
Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s)
Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09 Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPYLENE GLYCOL NOM NF1 (CAS 57-55-6)</td>
<td>MAC</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>150 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ireland. Occupational Exposure Limits Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPYLENE GLYCOL NOM NF1 (CAS 57-55-6)</td>
<td>TWA</td>
<td>470 mg/m³</td>
<td>Total vapour and particulates.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³</td>
<td>Particulate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>150 ppm</td>
<td>Total vapour and particulates.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Latvia. OELs. Occupational exposure limit values of chemical substances in work environment Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPYLENE GLYCOL NOM NF1 (CAS 57-55-6)</td>
<td>TWA</td>
<td>7 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lithuania. OELs. Limit Values for Chemical Substances, General Requirements Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPYLENE GLYCOL NOM NF1 (CAS 57-55-6)</td>
<td>TWA</td>
<td>7 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Norway. Administrative Norms for Contaminants in the Workplace Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPYLENE GLYCOL NOM NF1 (CAS 57-55-6)</td>
<td>TLV</td>
<td>79 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UK, EH40 Workplace Exposure Limits (WELs) Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPYLENE GLYCOL NOM NF1 (CAS 57-55-6)</td>
<td>TWA</td>
<td>474 mg/m³</td>
<td>Total vapour and particulates.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³</td>
<td>Particulate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>150 ppm</td>
<td>Total vapour and particulates.</td>
</tr>
</tbody>
</table>

Biological limit values
No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures
Follow standard monitoring procedures.

Derived no effect levels (DNELs)
Not available.

Predicted no effect concentrations (PNECs)
Not available.

8.2. Exposure controls

Appropriate engineering controls
Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Individual protection measures, such as personal protective equipment

**General information**
Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection**
Wear safety glasses with side shields (or goggles).

**Skin protection**
- **Hand protection**
  Wear appropriate chemical resistant gloves.
- **Other**
  Wear suitable protective clothing.

**Respiratory protection**
In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards**
Wear appropriate thermal protective clothing, when necessary.

**Hygiene measures**
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**Environmental exposure controls**
Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

**Appearance**
- **Physical state**
  Liquid.
- **Form**
  Liquid.
- **Colour**
  Not available.
- **Odour**
  Not available.
- **Odour threshold**
  Not available.
- **pH**
  Not available.
- **Melting point/freezing point**
  -59 °C (-74,2 °F) estimated
- **Initial boiling point and boiling range**
  188,2 °C (370,76 °F) estimated
- **Flash point**
  > 93,3 °C (> 200,0 °F) Closed cup
- **Evaporation rate**
  Not available.
- **Flammability (solid, gas)**
  Not applicable.

**Upper/lower flammability or explosive limits**
- **Flammability limit - lower (%)**
  Not available.
- **Flammability limit - upper (%)**
  Not available.
- **Vapour pressure**
  0,16 hPa estimated
- **Vapour density**
  Not available.
- **Relative density**
  Not available.

**Solubility(ies)**
- **Solubility (water)**
  Not available.
- **Partition coefficient (n-octanol/water)**
  Not available.
- **Auto-ignition temperature**
  371,11 °C (700 °F) estimated
- **Decomposition temperature**
  Not available.
- **Viscosity**
  Not available.
- **Explosive properties**
  Not explosive.
- **Oxidising properties**
  Not oxidising.

9.2. Other information
- **Refractive index**
  1,4276 - 1,4576
- **Specific gravity**
  1,03 - 1,06

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Material is stable under normal conditions.
10.3. Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

10.5. Incompatible materials
Strong oxidising agents.

10.6. Hazardous decomposition products
No hazardous decomposition products are known.

SECTION 11: Toxicological information
General information
Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure
- Inhalation: May cause allergy or asthma symptoms or breathing difficulties if inhaled. Prolonged inhalation may be harmful.
- Skin contact: May cause an allergic skin reaction.
- Eye contact: Direct contact with eyes may cause temporary irritation.
- Ingestion: May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms
Exposure may cause temporary irritation, redness, or discomfort.

11.1. Information on toxicological effects
- Acute toxicity: No data available.
- Skin corrosion/irritation: Based on available data, the classification criteria are not met.
- Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.
- Respiratory sensitisation: Based on available data, the classification criteria are not met.
- Skin sensitisation: Based on available data, the classification criteria are not met.
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.

- Hungary, 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)
  Not listed.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- Specific target organ toxicity - single exposure: Based on available data, the classification criteria are not met.
- Specific target organ toxicity - repeated exposure: Based on available data, the classification criteria are not met.
- Aspiration hazard: Due to partial or complete lack of data the classification is not possible.
- Mixture versus substance information: No information available.
- Other information: May cause allergic respiratory and skin reactions.

SECTION 12: Ecological information
12.1. Toxicity
Based on available data, the classification criteria are not met for hazardous to the aquatic environment.

12.2. Persistence and degradability
No data is available on the degradability of any ingredients in the mixture.

12.3. Bioaccumulative potential

12.4. Mobility in soil
No data available.

12.5. Results of PBT and vPvB assessment
Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Residual waste
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code
The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information
Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Special precautions
Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR
14.1. - 14.6.: Not regulated as dangerous goods.

RID
14.1. - 14.6.: Not regulated as dangerous goods.

ADN
14.1. - 14.6.: Not regulated as dangerous goods.

IATA
14.1. - 14.6.: Not regulated as dangerous goods.

IMDG
14.1. - 14.6.: Not regulated as dangerous goods.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not established.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations
Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended
Not listed.
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended
Not listed.
Not listed.
Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA
Not listed.

Authorisations
Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended
Not listed.

Restrictions on use
Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended
Not listed.
Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.
Not listed.

Other EU regulations
Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended
Not listed.

Other regulations
The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.
<table>
<thead>
<tr>
<th>National regulations</th>
<th>Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.2. Chemical safety assessment</td>
<td>No Chemical Safety Assessment has been carried out.</td>
</tr>
</tbody>
</table>

**SECTION 16: Other information**

<table>
<thead>
<tr>
<th>List of abbreviations</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>References</td>
<td>Not available.</td>
</tr>
<tr>
<td>Information on evaluation method leading to the classification of mixture</td>
<td>The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.</td>
</tr>
<tr>
<td>Full text of any H-statements not written out in full under Sections 2 to 15</td>
<td>H319 Causes serious eye irritation.</td>
</tr>
<tr>
<td>Revision information</td>
<td>This document has undergone significant changes and should be reviewed in its entirety.</td>
</tr>
<tr>
<td>Training information</td>
<td>Follow training instructions when handling this material.</td>
</tr>
<tr>
<td>Disclaimer</td>
<td>Capella Flavors, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.</td>
</tr>
</tbody>
</table>