# 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** | V2 CARAMEL FLAVOR N&A TYPE |
| **Registration number** | - |
| **Synonyms** | None. |
| **Product code** | CA1408 |
| **Issue date** | 26-August-2015 |
| **Version number** | 07 |
| **Revision date** | 28-July-2016 |
| **Supersedes date** | 01-December-2015 |

**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<br>Carlsbad, CA 92011<br>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 | 703-741-5500 |

## 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 Directive 67/548/EEC or 1999/45/EC as amended**

**Classification** Xi;R36, R43

The full text for all R-phrases is displayed in section 16.

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

**Health hazards**

| | | |
|---|---|---|
| Serious eye damage/eye irritation | Category 2 | H319 - Causes serious eye irritation. |
| Skin sensitisation | Category 1 | H317 - May cause an allergic skin reaction. |

**Hazard summary**

| | |
|---|---|
| **Physical hazards** | Not classified for physical hazards. |
| **Health hazards** | Irritating to eyes. May cause sensitisation by skin contact. Occupational exposure to the substance or mixture may cause adverse health effects. |
| **Environmental hazards** | Not classified for hazards to the environment. |
| **Specific hazards** | None known. |
| **Main symptoms** | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. Rash. |

**2.2. Label elements**

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

**Contains:** VANILLIN #234

**Hazard pictograms**



**Signal word** Warning

**Hazard statements**

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

**Precautionary statements**

**Prevention**

P261 Avoid breathing mist or vapour.
P264 Wash thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear eye protection/face protection.
P280 Wear protective gloves.

**Response**

P302 + P352 IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

**Storage** Store away from incompatible materials.

**Disposal**

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

**Supplemental label information** None.

**2.3. Other hazards** None known.

## SECTION 3: Composition/information on ingredients

**3.2. Mixtures**

**General information**

| Chemical name | % | CAS-No. / EC No. | REACH Registration No. | INDEX No. | Notes |
|---|---|---|---|---|---|
| VANILLIN #234 | 5 - < 10 | 121-33-5<br>204-465-2 | - | - | |
| **Classification:** | **DSD:** Xn;R22, Xi;R36, R43, R52/53<br>**CLP:** Acute Tox. 4;H302, Skin Sens. 1;H317, Eye Irrit. 2;H319, Aquatic Chronic 3;H412 | | | | |
| ETHYL VANILLIN #296 | 3-<5 | 121-32-4<br>204-464-7 | - | - | |
| **Classification:** | **DSD:** Xn;R22, R52/53<br>**CLP:** Acute Tox. 4;H302, Aquatic Chronic 3;H412 | | | | |
| TRADE SECRET | <1 | Proprietary<br>- | - | - | |
| **Classification:** | **DSD:** R43<br>**CLP:** Skin Sens. 1;H317 | | | | |
| TRADE SECRET | < 0,2 | Proprietary<br>- | - | - | |
| **Classification:** | **DSD:** C;R34, Xn;R22<br>**CLP:** Acute Tox. 4;H302, Acute Tox. 3;H311, Skin Corr. 1B;H314, Eye Dam. 1;H318 | | | | |
| Other components below reportable levels | 80 - < 90 | | | | |

**List of abbreviations and symbols that may be used above**

CLP: Regulation No. 1272/2008.
DSD: Directive 67/548/EEC.
M: M-factor
vPvB: very persistent and very bioaccumulative substance.
PBT: persistent, bioaccumulative and toxic substance.
#: This substance has been assigned Community workplace exposure limit(s).

**Composition comments** The full text for all R- and H-phrases 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. Wash contaminated clothing before reuse.

**4.1. Description of first aid measures**

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

**Skin contact** Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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** Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. Rash.

**4.3. Indication of any immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

## SECTION 5: Firefighting measures

**General fire hazards** No unusual fire or explosion hazards noted.

**5.1. Extinguishing media**

**Suitable extinguishing media** Powder. 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. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8.

**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. Cover with plastic sheet to prevent spreading. Use water spray to reduce vapours or divert vapour cloud drift. 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.

**6.4. Reference to other sections** For personal protection, see section 8. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling**

Avoid breathing mist or vapour. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**7.2. Conditions for safe storage, including any incompatibilities**

Store in original 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**

**Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work**

| Components | Type | Value |
|---|---|---|
| TRADE SECRET | TWA | 10 mg/m3 |

**Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09**

| Components | Type | Value |
|---|---|---|
| PROPYLENE GLYCOL NOM NFI (CAS 57-55-6) | MAC | 10 mg/m3 |
| | | 150 ppm |

**Ireland. Occupational Exposure Limits**

| Components | Type | Value | Form |
|---|---|---|---|
| PROPYLENE GLYCOL NOM NFI (CAS 57-55-6) | TWA | 470 mg/m3 | Total vapour and particulates. |
| | | 10 mg/m3 | Particulate. |
| | | 150 ppm | Total vapour and particulates. |

**Latvia. OELs. Occupational exposure limit values of chemical substances in work environment**

| Components | Type | Value |
|---|---|---|
| PROPYLENE GLYCOL NOM NFI (CAS 57-55-6) | TWA | 7 mg/m3 |
| TRADE SECRET | TWA | 10 mg/m3 |

**Lithuania. OELs. Limit Values for Chemical Substances, General Requirements**

| Components | Type | Value |
|---|---|---|
| PROPYLENE GLYCOL NOM NFI (CAS 57-55-6) | TWA | 7 mg/m3 |
| TRADE SECRET | TWA | 10 mg/m3 |

**Norway. Administrative Norms for Contaminants in the Workplace**

| Components | Type | Value |
|---|---|---|
| PROPYLENE GLYCOL NOM NFI (CAS 57-55-6) | TLV | 79 mg/m3 |
| | | 25 ppm |

**Romania. OELs. Protection of workers from exposure to chemical agents at the workplace**

| Components | Type | Value |
|---|---|---|
| TRADE SECRET | STEL | 30 mg/m3 |
| | | 8 ppm |
| | TWA | 15 mg/m3 |
| | | 4 ppm |

**UK. EH40 Workplace Exposure Limits (WELs)**

| Components | Type | Value | Form |
|---|---|---|---|
| PROPYLENE GLYCOL NOM NFI (CAS 57-55-6) | TWA | 474 mg/m3 | Total vapour and particulates. |
| | | 10 mg/m3 | Particulate. |
| | | 150 ppm | Total vapour and particulates. |

**Biological limit values**

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

**Recommended monitoring procedures**

Follow standard monitoring procedures.

**Derived no-effect level (DNEL)**

Not available.

| | |
|---|---|
| **Predicted no effect concentrations (PNECs)** | Not available. |

**8.2. Exposure controls**

| | |
|---|---|
| **Appropriate engineering controls** | Good general ventilation (typically 10 air changes per hour) 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. Provide eyewash station. |

**Individual protection measures, such as personal protective equipment**

| | |
|---|---|
| **General information** | Use personal protective equipment as required. 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** | Face shield is recommended. Wear safety glasses with side shields (or goggles). |
| **Skin protection** | |
| **- Hand protection** | Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. |
| **- Other** | Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. |
| **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. Contaminated work clothing should not be allowed out of the workplace. |
| **Environmental exposure controls** | Environmental manager must be informed of all major releases. |

## 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** | 184,0<br>84,4 °C (184,0 °F) |
| **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. |
| **Solubility (other)** | 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. |
| **Oxidizing properties** | Not oxidizing. |

**9.2. Other information**

| | |
|---|---|
| **Refractive index** | 1,4411 - 1,4711 |
| **Specific gravity** | 1,05 - 1,08<br>1,05 - 1,08 |

## 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** | 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** | Prolonged inhalation may be harmful. |
| **Skin contact** | May cause an allergic skin reaction. |
| **Eye contact** | Causes serious eye irritation. |
| **Ingestion** | May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure. |
| **Symptoms** | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. Rash. |

**11.1. Information on toxicological effects**

| | |
|---|---|
| **Acute toxicity** | May cause an allergic skin reaction. |
| **Skin corrosion/irritation** | Due to partial or complete lack of data the classification is not possible. |
| **Serious eye damage/eye irritation** | Causes serious eye irritation. |
| **Respiratory sensitisation** | Due to partial or complete lack of data the classification is not possible. |
| **Skin sensitisation** | May cause an allergic skin reaction. |
| **Germ cell mutagenicity** | Due to partial or complete lack of data the classification is not possible. |
| **Carcinogenicity** | Due to partial or complete lack of data the classification is not possible. |
| **Reproductive toxicity** | Due to partial or complete lack of data the classification is not possible. |
| **Specific target organ toxicity - single exposure** | Due to partial or complete lack of data the classification is not possible. |
| **Specific target organ toxicity - repeated exposure** | Due to partial or complete lack of data the classification is not possible. |
| **Aspiration hazard** | Due to partial or complete lack of data the classification is not possible. |
| **Mixture versus substance information** | No information available. |
| **Other information** | Not available. |

## SECTION 12: Ecological information

| | |
|---|---|
| **12.1. Toxicity** | The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. |
| **12.2. Persistence and degradability** | No data is available on the degradability of this product. |

**12.3. Bioaccumulative potential**

| **Partition coefficient n-octanol/water (log Kow)** | |
|---|---|
| ETHYL VANILLIN #296 | 1,61 |
| TRADE SECRET | 0,79<br>1,05 |

| | |
|---|---|
| VANILLIN #234 | 1,37 |

| | |
|---|---|
| **Bioconcentration factor (BCF)** | Not available. |
| **12.4. Mobility in soil** | No data available. |
| **12.5. Results of PBT and vPvB assessment** | Not available. |
| **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. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| **Special precautions** | Dispose in accordance with all applicable regulations. |

## SECTION 14: Transport information

**ADR**

Not regulated as dangerous goods.

**RID**

Not regulated as dangerous goods.

**ADN**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

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, as amended**

Not listed.

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II, as amended**

Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

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.

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use 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.

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding, as amended**

Not listed.

**Other EU regulations**

**Directive 2012/18/EU on major accident hazards involving dangerous substances**

Not listed.

**Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as amended**

TRADE SECRET (CAS Proprietary)

**Directive 94/33/EC on the protection of young people at work, as amended**

TRADE SECRET (CAS Proprietary)

| | |
|---|---|
| **Other regulations** | The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. |
| **National regulations** | Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work. Follow national regulation for work with chemical agents. |
| **15.2. Chemical safety assessment** | No Chemical Safety Assessment has been carried out. |

## SECTION 16: Other information

| | |
|---|---|
| **List of abbreviations** | Not available. |
| **References** | Not available. |
| **Information on evaluation method leading to the classification of mixture** | The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available. |
| **Full text of any statements or R-phrases and H-statements under Sections 2 to 15** | R22 Harmful if swallowed.<br>R34 Causes burns.<br>R36 Irritating to eyes.<br>R43 May cause sensitisation by skin contact.<br>R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.<br>H302 Harmful if swallowed.<br>H311 Toxic in contact with skin.<br>H314 Causes severe skin burns and eye damage.<br>H317 May cause an allergic skin reaction.<br>H318 Causes serious eye damage.<br>H319 Causes serious eye irritation.<br>H412 Harmful to aquatic life with long lasting effects. |
| **Revision information** | Composition / Information on Ingredients: Disclosure Overrides<br>Physical & Chemical Properties: Multiple Properties |
| **Training information** | Follow training instructions when handling this material. |
| **Disclaimer** | 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. |