# Yeti - Strawberry (0mg/ml) - UFI: NJ41-E0DF-T009-8VWY

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

**1.1 Product identifier:** Yeti - Strawberry (0mg/ml) - UFI: NJ41-E0DF-T009-8VWY

**Other means of identification:**

Non-applicable

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

Relevant uses: Liquid for electronic cigarettes

Uses advised against: All uses not specified in this section or in section 7.3

**1.3 Details of the supplier of the safety data sheet:**

Rule13 Limited
Unit 1 Fountain Enterprise Park
ME15 6ZQ Maidstone - Kent - United Kingdom
Phone.: 01622 851 436
david.bowers@prohibitionvapes.co.uk
https://www.prohibition.co.uk/

**1.4 Emergency telephone number:** +44 1622 851436

## SECTION 2: HAZARDS IDENTIFICATION **

**2.1 Classification of the substance or mixture:**

**CLP Regulation (EC) No 1272/2008:**

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Flam. Liq. 3: Flammable liquids, Category 3, H226
Skin Sens. 1A: Sensitisation, skin, Category 1A, H317

**2.2 Label elements:**

**CLP Regulation (EC) No 1272/2008:**

**Warning**

**Hazard statements:**

Flam. Liq. 3: H226 - Flammable liquid and vapour.
Skin Sens. 1A: H317 - May cause an allergic skin reaction.

**Precautionary statements:**

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P210: Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352: IF ON SKIN: Wash with plenty of water.
P370+P378: In case of fire: Use ABC powder extinguisher to extinguish.
P403+P235: Store in a well-ventilated place. Keep cool.
P501: Dispose of contents/container according to the separated collection system used in your municipality.

**Supplementary information:**

Contains Methyl cinnamate.

**Substances that contribute to the classification**

Furaneol

**UFI:** NJ41-E0DF-T009-8VWY

**2.3 Other hazards:**

Product fails to meet PBT/vPvB criteria
Please note that the inclusion of this product in a mist-generating device (vapers, etc.) may raise its classification with respect to acute inhalation toxicity to a higher hazard category and additionally require the application of Article 12 of Regulation (EC) No 1272/2008.

*** Changes with regards to the previous version*

*** Changes with regards to the previous version*

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## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS **

**3.1 Substance:**

Non-applicable

**3.2 Mixture:**

**Chemical description:** Mixture based on chemical products for aroma formulation

**Components:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

| Identification | Chemical name/Classification | | Concentration |
|---|---|---|---|
| CAS: 56-81-5<br>EC: 200-289-5<br>Index: Non-applicable<br>REACH: Non-applicable | **Glycerin** [1] | Not classified | **50 - <75 %** |
| | Regulation 1272/2008 | | |
| CAS: 57-55-6<br>EC: 200-338-0<br>Index: Non-applicable<br>REACH: Non-applicable | **Propylene Glycol** [1] | Not classified | **10 - <25 %** |
| | Regulation 1272/2008 | | |
| CAS: 105-54-4<br>EC: 203-306-4<br>Index: Non-applicable<br>REACH: 01-2120118576-54-XXXX | **Ethyl butyrate** [2] | Self-classified | **1 - <3 %** |
| | Regulation 1272/2008 | Eye Irrit. 2: H319; Flam. Liq. 3: H226 - Warning | |
| CAS: 121-33-5<br>EC: 204-465-2<br>Index: Non-applicable<br>REACH: 01-2119516040-60-XXXX | **Vanillin** [2] | Self-classified | **1 - <3 %** |
| | Regulation 1272/2008 | Eye Irrit. 2: H319 - Warning | |
| CAS: 103-26-4<br>EC: 203-093-8<br>Index: Non-applicable<br>REACH: 01-2119979458-16-XXXX | **Methyl cinnamate** [2] | Self-classified | **1 - <3 %** |
| | Regulation 1272/2008 | Skin Sens. 1B: H317 - Warning | |
| CAS: 123-92-2<br>EC: 204-662-3<br>Index: 607-130-00-2<br>REACH: 01-2119548408-32-XXXX | **Isopentyl acetate** [3] | ATP CLP00 | **0.1 - <1 %** |
| | Regulation 1272/2008 | Flam. Liq. 3: H226; EUH066 - Warning | |
| CAS: 3658-77-3<br>EC: 222-908-8<br>Index: Non-applicable<br>REACH: Non-applicable | **Furaneol** [2] | Self-classified | **0.1 - <1 %** |
| | Regulation 1272/2008 | Acute Tox. 4: H302; Eye Dam. 1: H318; Skin Corr. 1B: H314; Skin Sens. 1A: H317; EUH071 - Danger | |
| CAS: Non-applicable<br>EC: Non-applicable<br>Index: Non-applicable<br>REACH: Non-applicable | **Limonene** [1] | ATP CLP00 | **<0.1 %** |
| | Regulation 1272/2008 | Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning | |

[1] Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2015/830
[2] Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830
[3] Substance with a Union workplace exposure limit

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

*** Changes with regards to the previous version*

## SECTION 4: FIRST AID MEASURES

**4.1 Description of first aid measures:**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

**By inhalation:**

This product does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

**By skin contact:**

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

**By eye contact:**

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## SECTION 4: FIRST AID MEASURES (continued)

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

**By ingestion/aspiration:**

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

## SECTION 5: FIREFIGHTING MEASURES

**5.1 Extinguishing media:**

**Suitable extinguishing media:**

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers ($CO_2$).

**Unsuitable extinguishing media:**

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

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

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

**5.3 Advice for firefighters:**

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

**Additional provisions:**

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

**6.2 Environmental precautions:**

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

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

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

**6.4 Reference to other sections:**

See sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

**7.1 Precautions for safe handling:**

A.- Precautions for safe manipulation

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## SECTION 7: HANDLING AND STORAGE (continued)

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,…) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 2014/34/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137 / The Dangerous Substances and Explosive Atmospheres Regulations 2002, 2002 No. 2776). Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

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

A.- Technical measures for storage

Minimum Temp.: 5 ºC

Maximum Temp.: 30 ºC

Maximum time: 6 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

**7.3 Specific end use(s):**

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters:**

Substances whose occupational exposure limits have to be monitored in the workplace:

EH40/2005 Workplace exposure limits, fourth edition, published 2020:

| Identification | Occupational exposure limits | | |
|---|---|---|---|
| Propylene Glycol | WEL (8h) | 150 ppm | 474 mg/m³ |
| CAS: 57-55-6 EC: 200-338-0 | WEL (15 min) | | |
| Glycerin | WEL (8h) | | 10 mg/m³ |
| CAS: 56-81-5 EC: 200-289-5 | WEL (15 min) | | |
| Isopentyl acetate | WEL (8h) | 50 ppm | 270 mg/m³ |
| CAS: 123-92-2 EC: 204-662-3 | WEL (15 min) | 100 ppm | 541 mg/m³ |

**DNEL (Workers):**

| Identification | | Short exposure | | Long exposure | |
|---|---|---|---|---|---|
| | | Systemic | Local | Systemic | Local |
| Glycerin | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| CAS: 56-81-5 | Dermal | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| EC: 200-289-5 | Inhalation | Non-applicable | Non-applicable | Non-applicable | 56 mg/m³ |
| Propylene Glycol | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| CAS: 57-55-6 | Dermal | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| EC: 200-338-0 | Inhalation | Non-applicable | Non-applicable | 168 mg/m³ | 10 mg/m³ |
| Ethyl butyrate | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| CAS: 105-54-4 | Dermal | Non-applicable | Non-applicable | 2.33 mg/kg | Non-applicable |
| EC: 203-306-4 | Inhalation | Non-applicable | Non-applicable | 49.3 mg/m³ | Non-applicable |

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

| Identification | | Short exposure | | Long exposure | |
|---|---|---|---|---|---|
| | | Systemic | Local | Systemic | Local |
| Methyl cinnamate | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| CAS: 103-26-4 | Dermal | Non-applicable | Non-applicable | 4 mg/kg | Non-applicable |
| EC: 203-093-8 | Inhalation | Non-applicable | Non-applicable | 28.2 mg/m³ | Non-applicable |

**DNEL (General population):**

| Identification | | Short exposure | | Long exposure | |
|---|---|---|---|---|---|
| | | Systemic | Local | Systemic | Local |
| Glycerin | Oral | Non-applicable | Non-applicable | 229 mg/kg | Non-applicable |
| CAS: 56-81-5 | Dermal | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| EC: 200-289-5 | Inhalation | Non-applicable | Non-applicable | Non-applicable | 33 mg/m³ |
| Propylene Glycol | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| CAS: 57-55-6 | Dermal | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| EC: 200-338-0 | Inhalation | Non-applicable | Non-applicable | 50 mg/m³ | 10 mg/m³ |
| Ethyl butyrate | Oral | Non-applicable | Non-applicable | 0.833 mg/kg | Non-applicable |
| CAS: 105-54-4 | Dermal | Non-applicable | Non-applicable | 0.833 mg/kg | Non-applicable |
| EC: 203-306-4 | Inhalation | Non-applicable | Non-applicable | 7.4 mg/m³ | Non-applicable |
| Methyl cinnamate | Oral | Non-applicable | Non-applicable | 2 mg/kg | Non-applicable |
| CAS: 103-26-4 | Dermal | Non-applicable | Non-applicable | 2 mg/kg | Non-applicable |
| EC: 203-093-8 | Inhalation | Non-applicable | Non-applicable | 6.96 mg/m³ | Non-applicable |

**PNEC:**

| Identification | | | | |
|---|---|---|---|---|
| Glycerin | STP | 1000 mg/L | Fresh water | 0.885 mg/L |
| CAS: 56-81-5 | Soil | 0.141 mg/kg | Marine water | 0.088 mg/L |
| EC: 200-289-5 | Intermittent | 8.85 mg/L | Sediment (Fresh water) | 3.3 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0.33 mg/kg |
| Propylene Glycol | STP | 20000 mg/L | Fresh water | 260 mg/L |
| CAS: 57-55-6 | Soil | 50 mg/kg | Marine water | 26 mg/L |
| EC: 200-338-0 | Intermittent | 183 mg/L | Sediment (Fresh water) | 572 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 57.2 mg/kg |
| Ethyl butyrate | STP | 23.6 mg/L | Fresh water | 0.0297 mg/L |
| CAS: 105-54-4 | Soil | 0.0171 mg/kg | Marine water | 0.00297 mg/L |
| EC: 203-306-4 | Intermittent | 1 mg/L | Sediment (Fresh water) | 0.173 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0.0173 mg/kg |
| Vanillin | STP | 10 mg/L | Fresh water | 0.118 mg/L |
| CAS: 121-33-5 | Soil | 11.54 mg/kg | Marine water | 0.012 mg/L |
| EC: 204-465-2 | Intermittent | Non-applicable | Sediment (Fresh water) | 58.22 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 5.822 mg/kg |
| Methyl cinnamate | STP | 1.81 mg/L | Fresh water | 0.00276 mg/L |
| CAS: 103-26-4 | Soil | 0.013 mg/kg | Marine water | 0.000276 mg/L |
| EC: 203-093-8 | Intermittent | 0.0276 mg/L | Sediment (Fresh water) | 0.074 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0.0074 mg/kg |
| Isopentyl acetate | STP | 30 mg/L | Fresh water | 0.011 mg/L |
| CAS: 123-92-2 | Soil | 0.06 mg/kg | Marine water | 0.001 mg/L |
| EC: 204-662-3 | Intermittent | 0.11 mg/L | Sediment (Fresh water) | 0.335 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0.034 mg/kg |

**8.2 Exposure controls:**

A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,…) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.
All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

B.- Respiratory protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|---|---|---|---|
|  Mandatory respiratory tract protection | Filter mask for gases and vapours | CE CAT III | EN 405:2002+A1:2010 | Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment. |

C.- Specific protection for the hands

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|---|---|---|---|
|  Mandatory hand protection | Protective gloves against minor risks | CE CAT I | | Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2004+A1:2010 and EN ISO 374-1:2016+A1:2018 |

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Ocular and facial protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|---|---|---|---|
|  Mandatory face protection | Panoramic glasses against splash/projections. | CE CAT II | EN 166:2002<br>EN ISO 4007:2018 | Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing. |

E.- Body protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|---|---|---|---|
|  Mandatory complete body protection | Antistatic and fireproof protective clothing | CE CAT III | EN 1149-1:2006<br>EN 1149-2:1997<br>EN 1149-3:2004<br>EN 168:2002<br>EN ISO 14116:2015<br>EN 1149-5:2018 | Limited protection against flames. |
|  Mandatory foot protection | Safety footwear with antistatic and heat resistant properties | CE CAT III | EN ISO 13287:2013<br>EN ISO 20345:2011 | Replace boots at any sign of deterioration. |

F.- Additional emergency measures

| Emergency measure | Standards | Emergency measure | Standards |
|---|---|---|---|
|  Emergency shower | ANSI Z358-1<br>ISO 3864-1:2011, ISO 3864-4:2011 |  Eyewash stations | DIN 12 899<br>ISO 3864-1:2011, ISO 3864-4:2011 |

**Environmental exposure controls:**

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

**Volatile organic compounds:**

With regard to Directive 2010/75/EU, this product has the following characteristics:

| | |
|---|---|
| V.O.C. (Supply): | 3.2 % weight |
| V.O.C. density at 20 ºC: | 37.31 kg/m³ (37.31 g/L) |
| Average carbon number: | 6.56 |
| Average molecular weight: | 116.94 g/mol |

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

*Not relevant due to the nature of the product, not providing information property of its hazards.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

**9.1 Information on basic physical and chemical properties:**

For complete information see the product datasheet.

**Appearance:**

| | |
|---|---|
| Physical state at 20 ºC: | Liquid |
| Appearance: | Colorless |
| Colour: | Not available |
| Odour: | Pleasant |
| Odour threshold: | Non-applicable * |

**Volatility:**

| | |
|---|---|
| Boiling point at atmospheric pressure: | 181 ºC |
| Vapour pressure at 20 ºC: | 60 Pa |
| Vapour pressure at 50 ºC: | 372.84 Pa (0.37 kPa) |
| Evaporation rate at 20 ºC: | Non-applicable * |

**Product description:**

| | |
|---|---|
| Density at 20 ºC: | 1166.6 kg/m³ |
| Relative density at 20 ºC: | 1.167 |
| Dynamic viscosity at 20 ºC: | Non-applicable * |
| Kinematic viscosity at 20 ºC: | Non-applicable * |
| Kinematic viscosity at 40 ºC: | Non-applicable * |
| Concentration: | Non-applicable * |
| pH: | Non-applicable * |
| Vapour density at 20 ºC: | Non-applicable * |
| Partition coefficient n-octanol/water 20 ºC: | Non-applicable * |
| Solubility in water at 20 ºC: | |
| Solubility properties: | Non-applicable * |
| Decomposition temperature: | Non-applicable * |
| Melting point/freezing point: | Non-applicable * |
| Explosive properties: | Non-applicable * |
| Oxidising properties: | Non-applicable * |

**Flammability:**

| | |
|---|---|
| Flash Point: | 37 ºC |
| Heat of combustion: | Non-applicable * |
| Flammability (solid, gas): | Non-applicable * |
| Autoignition temperature: | 235 ºC |
| Lower flammability limit: | Not available |
| Upper flammability limit: | Not available |

**Explosive:**

| | |
|---|---|
| Lower explosive limit: | Non-applicable * |
| Upper explosive limit: | Non-applicable * |

**9.2 Other information:**

| | |
|---|---|
| Surface tension at 20 ºC: | Non-applicable * |
| Refraction index: | Non-applicable * |

*Not relevant due to the nature of the product, not providing information property of its hazards.

## SECTION 10: STABILITY AND REACTIVITY

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## SECTION 10: STABILITY AND REACTIVITY (continued)

**10.1 Reactivity:**

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

**10.2 Chemical stability:**

Chemically stable under the conditions of storage, handling and use.

**10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

**10.4 Conditions to avoid:**

Applicable for handling and storage at room temperature:

| Shock and friction | Contact with air | Increase in temperature | Sunlight | Humidity |
|---|---|---|---|---|
| Not applicable | Not applicable | Risk of combustion | Avoid direct impact | Not applicable |

**10.5 Incompatible materials:**

| Acids | Water | Oxidising materials | Combustible materials | Others |
|---|---|---|---|---|
| Avoid strong acids | Not applicable | Avoid direct impact | Not applicable | Avoid alkalis or strong bases |

**10.6 Hazardous decomposition products:**

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

## SECTION 11: TOXICOLOGICAL INFORMATION **

**11.1 Information on toxicological effects:**

The experimental information related to the toxicological properties of the product itself is not available

**Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for skin contact. For more information see section 3.
- Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
  IARC: Benzyl acetate (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

*** Changes with regards to the previous version*

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## SECTION 11: TOXICOLOGICAL INFORMATION ** (continued)

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

**Other information:**

Non-applicable

**Specific toxicology information on the substances:**

| Identification | Acute toxicity | | Genus |
|---|---|---|---|
| Propylene Glycol | LD50 oral | >2000 mg/kg | |
| CAS: 57-55-6 | LD50 dermal | >2000 mg/kg | |
| EC: 200-338-0 | LC50 inhalation | >20 mg/L (4 h) | |
| Glycerin | LD50 oral | 12600 mg/kg | Rat |
| CAS: 56-81-5 | LD50 dermal | >2000 mg/kg | |
| EC: 200-289-5 | LC50 inhalation | >20 mg/L (4 h) | |
| Ethyl butyrate | LD50 oral | >2000 mg/kg | |
| CAS: 105-54-4 | LD50 dermal | >2000 mg/kg | |
| EC: 203-306-4 | LC50 inhalation | >20 mg/L (4 h) | |
| Methyl cinnamate | LD50 oral | 2610 mg/kg | |
| CAS: 103-26-4 | LD50 dermal | >2000 mg/kg | |
| EC: 203-093-8 | LC50 inhalation | >5 mg/L (4 h) | |
| Vanillin | LD50 oral | 3500 mg/kg | Rat |
| CAS: 121-33-5 | LD50 dermal | >2000 mg/kg | |
| EC: 204-465-2 | LC50 inhalation | Non-applicable | |
| Isopentyl acetate | LD50 oral | 7400 mg/kg | Rat |
| CAS: 123-92-2 | LD50 dermal | >2000 mg/kg | |
| EC: 204-662-3 | LC50 inhalation | >20 mg/L | |
| Furaneol | LD50 oral | >2000 mg/kg | |
| CAS: 3658-77-3 | LD50 dermal | >2000 mg/kg | |
| EC: 222-908-8 | LC50 inhalation | >5 mg/L | |
| Limonene | LD50 oral | >2000 mg/kg | |
| CAS: Non-applicable | LD50 dermal | >2000 mg/kg | |
| EC: Non-applicable | LC50 inhalation | >20 mg/L | |

*** Changes with regards to the previous version*

## SECTION 12: ECOLOGICAL INFORMATION **

The experimental information related to the eco-toxicological properties of the product itself is not available

**12.1 Toxicity:**

| Identification | Acute toxicity | | Species | Genus |
|---|---|---|---|---|
| Propylene Glycol | LC50 | 51400 mg/L (96 h) | Pimephales promelas | Fish |
| CAS: 57-55-6 | EC50 | 10000 mg/L (24 h) | Daphnia magna | Crustacean |
| EC: 200-338-0 | EC50 | 19100 mg/L (336 h) | Selenastrum capricornutum | Algae |
| Ethyl butyrate | LC50 | 100 mg/L (96 h) | Danio rerio | Fish |
| CAS: 105-54-4 | EC50 | 116.6 mg/L (48 h) | Daphnia magna | Crustacean |
| EC: 203-306-4 | EC50 | 100 mg/L (72 h) | Desmodesmus subspicatus | Algae |

*** Changes with regards to the previous version*

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## SECTION 12: ECOLOGICAL INFORMATION ** (continued)

| Identification | Acute toxicity | | Species | Genus |
|---|---|---|---|---|
| Vanillin | LC50 | 57 mg/L (96 h) | Pimephales promelas | Fish |
| CAS: 121-33-5 | EC50 | Non-applicable | | |
| EC: 204-465-2 | EC50 | Non-applicable | | |
| Isopentyl acetate | LC50 | Non-applicable | | |
| CAS: 123-92-2 | EC50 | 42 mg/L (48 h) | Daphnia magna | Crustacean |
| EC: 204-662-3 | EC50 | Non-applicable | | |
| Limonene | LC50 | 38.5 mg/L (96 h) | Pimephales promelas | Fish |
| CAS: Non-applicable | EC50 | 0.7 mg/L (48 h) | Daphnia magna | Crustacean |
| EC: Non-applicable | EC50 | 1.6 mg/L (48 h) | Selenastrum capricornutum | Algae |

**12.2 Persistence and degradability:**

| Identification | Degradability | | Biodegradability | |
|---|---|---|---|---|
| Glycerin | BOD5 | Non-applicable | Concentration | 100 mg/L |
| CAS: 56-81-5 | COD | Non-applicable | Period | 14 days |
| EC: 200-289-5 | BOD5/COD | Non-applicable | % Biodegradable | 63 % |
| Propylene Glycol | BOD5 | 1.08 g O2/g | Concentration | 100 mg/L |
| CAS: 57-55-6 | COD | 1.63 g O2/g | Period | 28 days |
| EC: 200-338-0 | BOD5/COD | 0.66 | % Biodegradable | 90 % |
| Ethyl butyrate | BOD5 | Non-applicable | Concentration | 4 mg/L |
| CAS: 105-54-4 | COD | Non-applicable | Period | 28 days |
| EC: 203-306-4 | BOD5/COD | Non-applicable | % Biodegradable | 76.5 % |
| Vanillin | BOD5 | Non-applicable | Concentration | 100 mg/L |
| CAS: 121-33-5 | COD | Non-applicable | Period | 14 days |
| EC: 204-465-2 | BOD5/COD | Non-applicable | % Biodegradable | 97 % |
| Furaneol | BOD5 | Non-applicable | Concentration | Non-applicable |
| CAS: 3658-77-3 | COD | Non-applicable | Period | 28 days |
| EC: 222-908-8 | BOD5/COD | Non-applicable | % Biodegradable | 96 % |
| Limonene | BOD5 | Non-applicable | Concentration | 100 mg/L |
| CAS: Non-applicable | COD | Non-applicable | Period | 14 days |
| EC: Non-applicable | BOD5/COD | Non-applicable | % Biodegradable | 69 % |

**12.3 Bioaccumulative potential:**

| Identification | Bioaccumulation potential | |
|---|---|---|
| Glycerin | BCF | 3 |
| CAS: 56-81-5 | Pow Log | -1.76 |
| EC: 200-289-5 | Potential | Low |
| Propylene Glycol | BCF | 1 |
| CAS: 57-55-6 | Pow Log | -0.92 |
| EC: 200-338-0 | Potential | Low |
| Ethyl butyrate | BCF | 8 |
| CAS: 105-54-4 | Pow Log | 1.35 |
| EC: 203-306-4 | Potential | Low |
| Vanillin | BCF | 6 |
| CAS: 121-33-5 | Pow Log | 1.37 |
| EC: 204-465-2 | Potential | Low |
| Isopentyl acetate | BCF | 10 |
| CAS: 123-92-2 | Pow Log | |
| EC: 204-662-3 | Potential | Low |
| Limonene | BCF | 660 |
| CAS: Non-applicable | Pow Log | 4.57 |
| EC: Non-applicable | Potential | High |

**12.4 Mobility in soil:**

*** Changes with regards to the previous version*

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## SECTION 12: ECOLOGICAL INFORMATION ** (continued)

| Identification | Absorption/desorption | | Volatility | |
|---|---|---|---|---|
| Glycerin | Koc | Non-applicable | Henry | Non-applicable |
| CAS: 56-81-5 | Conclusion | Non-applicable | Dry soil | Non-applicable |
| EC: 200-289-5 | Surface tension | 6.516E-2 N/m (25 ºC) | Moist soil | Non-applicable |
| Propylene Glycol | Koc | Non-applicable | Henry | Non-applicable |
| CAS: 57-55-6 | Conclusion | Non-applicable | Dry soil | Non-applicable |
| EC: 200-338-0 | Surface tension | 3.547E-2 N/m (25 ºC) | Moist soil | Non-applicable |
| Ethyl butyrate | Koc | 22181 | Henry | Non-applicable |
| CAS: 105-54-4 | Conclusion | Immobile | Dry soil | Non-applicable |
| EC: 203-306-4 | Surface tension | Non-applicable | Moist soil | Non-applicable |
| Vanillin | Koc | 130 | Henry | 2.128E-4 Pa·m³/mol |
| CAS: 121-33-5 | Conclusion | Very High | Dry soil | No |
| EC: 204-465-2 | Surface tension | Non-applicable | Moist soil | No |
| Isopentyl acetate | Koc | 70 | Henry | 59.78 Pa·m³/mol |
| CAS: 123-92-2 | Conclusion | Very High | Dry soil | Non-applicable |
| EC: 204-662-3 | Surface tension | 2.388E-2 N/m (25 ºC) | Moist soil | Yes |
| Limonene | Koc | 1300 | Henry | 3242.4 Pa·m³/mol |
| CAS: Non-applicable | Conclusion | Low | Dry soil | Yes |
| EC: Non-applicable | Surface tension | Non-applicable | Moist soil | Yes |

**12.5 Results of PBT and vPvB assessment:**

Product fails to meet PBT/vPvB criteria

**12.6 Other adverse effects:**

Not described

*** Changes with regards to the previous version*

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods:**

| Code | Description | Waste class (Regulation (EU) No 1357/2014) |
|---|---|---|
| | It is not possible to assign a specific code, as it depends on the intended use by the user | Dangerous |

**Type of waste (Regulation (EU) No 1357/2014):**

HP3 Flammable

**Waste management (disposal and evaluation):**

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC, The Waste Regulations 2011, 2011 No. 988). As under 15 01 (2014/955/EU) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

**Regulations related to waste management:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

## SECTION 14: TRANSPORT INFORMATION **

**Transport of dangerous goods by land:**

With regard to ADR 2019 and RID 2019:

*** Changes with regards to the previous version*

- CONTINUED ON NEXT PAGE -

## SECTION 14: TRANSPORT INFORMATION ** (continued)


| | | |
|---|---|---|
| **14.1** | **UN number:** | UN1993 |
| **14.2** | **UN proper shipping name:** | FLAMMABLE LIQUID, N.O.S. (Ethyl butyrate) |
| **14.3** | **Transport hazard class(es):** | 3 |
| | Labels: | 3 |
| **14.4** | **Packing group:** | III |
| **14.5** | **Environmental hazards:** | No |
| **14.6** | **Special precautions for user** | |
| | Special regulations: | 274, 601 |
| | Tunnel restriction code: | D/E |
| | Physico-Chemical properties: | see section 9 |
| | Limited quantities: | 5 L |
| **14.7** | **Transport in bulk according to Annex II of Marpol and the IBC Code:** | Non-applicable |

**Transport of dangerous goods by sea:**

With regard to IMDG 39-18:


| | | |
|---|---|---|
| **14.1** | **UN number:** | UN1993 |
| **14.2** | **UN proper shipping name:** | FLAMMABLE LIQUID, N.O.S. (Ethyl butyrate) |
| **14.3** | **Transport hazard class(es):** | 3 |
| | Labels: | 3 |
| **14.4** | **Packing group:** | III |
| **14.5** | **Marine pollutant:** | No |
| **14.6** | **Special precautions for user** | |
| | Special regulations: | 274, 223, 955 |
| | EmS Codes: | F-E, S-E |
| | Physico-Chemical properties: | see section 9 |
| | Limited quantities: | 5 L |
| | Segregation group: | Non-applicable |
| **14.7** | **Transport in bulk according to Annex II of Marpol and the IBC Code:** | Non-applicable |

**Transport of dangerous goods by air:**

With regard to IATA/ICAO 2020:


| | | |
|---|---|---|
| **14.1** | **UN number:** | UN1993 |
| **14.2** | **UN proper shipping name:** | FLAMMABLE LIQUID, N.O.S. (Ethyl butyrate) |
| **14.3** | **Transport hazard class(es):** | 3 |
| | Labels: | 3 |
| **14.4** | **Packing group:** | III |
| **14.5** | **Environmental hazards:** | No |
| **14.6** | **Special precautions for user** | |
| | Physico-Chemical properties: | see section 9 |
| **14.7** | **Transport in bulk according to Annex II of Marpol and the IBC Code:** | Non-applicable |

*** Changes with regards to the previous version*

## SECTION 15: REGULATORY INFORMATION

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

Regulation (EC) No 528/2012: contains a preservative to protect the initial properties of the treated article. Contains benzyl alcohol.

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

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## SECTION 15: REGULATORY INFORMATION (continued)

**Seveso III:**

| Section | Description | Lower-tier requirements | Upper-tier requirements |
|---|---|---|---|
| P5c | FLAMMABLE LIQUIDS | 5000 | 50000 |

**Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ….) :**

Directive 2014/40/EU of the European Parliament and of the Council of 3 April 2014 on the approximation of the laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products and repealing Directive 2001/37/EC:
(a) unit packets of electronic cigarettes and refill containers include a leaflet with information on:
(i) instructions for use and storage of the product, including a reference that the product is not recommended for use by young people and non-smokers;
(ii) contra-indications;
(iii) warnings for specific risk groups;
(iv) possible adverse effects;
(v) addictiveness and toxicity; and
(vi) contact details of the manufacturer or importer and a legal or natural contact person within the Union;
(b) unit packets and any outside packaging of electronic cigarettes and refill containers:
(i) include a list of all ingredients contained in the product in descending order of the weight, and an indication of the nicotine content of the product and the delivery per dose, the batch number and a recommendation to keep the product out of reach of children;
(ii) without prejudice to point (i) of this point, do not include elements or features referred to in Article 13, with the exception of Article 13(1)(a) and (c) concerning information on the nicotine content and on flavourings; and
(iii) carry one of the following health warnings:
'This product contains nicotine which is a highly addictive substance. It is not recommended for use by non-smokers'.
or
'This product contains nicotine which is a highly addictive substance.'
Member States shall determine which of these health warnings is to be used;
(c) health warnings comply with the requirements specified in Article 12(2).

**Specific provisions in terms of protecting people or the environment:**

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

**Other legislation:**

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (CDG 2009), SI 2009 No 1348
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment (Amendment) Regulations 2011, 2011 No. 1885
Control of Substances Hazardous to Health Regulations 2002 (as amended)
EH40/2005 Workplace exposure limits
The Waste Regulations 2011, 2011 No. 988
Directive 2014/40/EU of the European Parliament and of the Council of 3 April 2014 on the approximation of the laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products and repealing Directive 2001/37/EC

**15.2 Chemical safety assessment:**

The supplier has not carried out evaluation of chemical safety.

## SECTION 16: OTHER INFORMATION **

**Legislation related to safety data sheets:**
This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

**Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:**

*** Changes with regards to the previous version*

- CONTINUED ON NEXT PAGE -

## SECTION 16: OTHER INFORMATION ** (continued)

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):
- New declared substances
  Ethyl butyrate (105-54-4)

CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):
- Pictograms
- Hazard statements
- Precautionary statements

TRANSPORT INFORMATION (SECTION 14):
- UN number
- Packing group

**Texts of the legislative phrases mentioned in section 2:**

H317: May cause an allergic skin reaction.
H226: Flammable liquid and vapour.

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

**CLP Regulation (EC) No 1272/2008:**

Acute Tox. 4: H302 - Harmful if swallowed.
Aquatic Acute 1: H400 - Very toxic to aquatic life.
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.
Eye Dam. 1: H318 - Causes serious eye damage.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Flam. Liq. 3: H226 - Flammable liquid and vapour.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
Skin Sens. 1A: H317 - May cause an allergic skin reaction.
Skin Sens. 1B: H317 - May cause an allergic skin reaction.

**Classification procedure:**

Skin Sens. 1A: Calculation method
Flam. Liq. 3: Calculation method (2.6.4.3)

**Advice related to training:**

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

**Principal bibliographical sources:**

http://echa.europa.eu
http://eur-lex.europa.eu

**Abbreviations and acronyms:**

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol-water partition coefficient
Koc: Partition coefficient of organic carbon

*** Changes with regards to the previous version*



- END OF SAFETY DATA SHEET -