

Hazardous according to criteria of Australian Safety and Compensation Council.

1 Identification

- **Other means of identification**
- **Trade name:** CARAMEL NATURAL FLAVOUR
- **Article number:** AAC9125
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** SU4 Manufacture of food products
- **Application of the substance / the mixture** Flavouring agents
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Metarom Australia
117 Stephen Rd
Banksmeadow NSW 2019
Australia
+61 2 9317 5002
- **Further information obtainable from:** info@metarom.com.au
- **Emergency telephone number:**
Poison Information Centre NSW Australia 13 11 26
National Poisons Centre New Zealand 0800 764 766

2 Hazard(s) Identification

- **Classification of the substance or mixture**



Flammable liquids – Category 2 H225 Highly flammable liquid and vapour.



Skin sensitisation – Category 1 H317 May cause an allergic skin reaction.

- **Label elements**
- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



- **Signal word** Danger
- **Hazard-determining components of labelling:**
vanillin (≥2.5-<10 %)
Methylcyclopentenolone (≥1-≤2.5 %)
4-Hydroxy-2,5-dimethyl-3(2H)-furanone (≥1-≤2.5 %)
- **Hazard statements**
H225 Highly flammable liquid and vapour.
H317 May cause an allergic skin reaction.
- **Precautionary statements**
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition and Information on Ingredients

- **Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

(Contd. on page 2)

Safety Data Sheet

according to WHS Regulations

Date of issue: 23.07.2025

Version number 1

Revision: 23.07.2025

Trade name: CARAMEL NATURAL FLAVOUR

(Contd. of page 1)

· Dangerous components:

64-17-5	ethanol ⚠ Flammable liquids – Category 2, H225	50-100%
121-33-5	vanillin ⚠ Acute toxicity - oral – Category 4, H302; Eye damage/irritation – Category 2A, H319; Skin sensitisation – Category 1, H317	≥2.5-<10%
118-71-8	maltol ⚠ Acute toxicity - oral – Category 4, H302	≤2.5%
80-71-7	Methylcyclopentenolone ⚠ Acute toxicity - oral – Category 4, H302; Skin sensitisation – Category 1, H317	≥1-≤2.5%
3658-77-3	4-Hydroxy-2,5-dimethyl-3(2H)-furanone ⚠ Acute toxicity - oral – Category 4, H302; Skin sensitisation – Category 1, H317	≥1-≤2.5%
119-84-6	Dihydrocoumarin ⚠ Acute toxicity - oral – Category 4, H302; Skin sensitisation – Category 1, H317	≥0.1-<1%
107-92-6	butyric acid ⚠ Acute toxicity - dermal – Category 3, H311; ⚠ Skin corrosion/irritation – Category 1B, H314; Eye damage/irritation – Category 1, H318; ⚠ Acute toxicity - oral – Category 4, H302; Flammable liquids – Category 4, H227	<1%

· Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First Aid Measures

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult 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

- **Suitable extinguishing agents:** CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Protective equipment:** No special measures required.

6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** 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 section 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and Storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.

(Contd. on page 3)

AU

Safety Data Sheet

according to WHS Regulations

Date of issue: 23.07.2025

Version number 1

Revision: 23.07.2025

Trade name: **CARAMEL NATURAL FLAVOUR**

· **Specific end use(s)** No further relevant information available.

(Contd. of page 2)

8 Exposure controls and personal protection

· **Appropriate engineering controls** No further data; see section 7.

· **Ingredients with limit values that require monitoring at the workplace:**

64-17-5 ethanol

WES | Long-term value: 1880 mg/m³, 1000 ppm

· **Additional information:** The lists valid during the making were used as basis.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**



Protective gloves

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 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 found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Wear protective gloves / face protection.

9 Physical and Chemical Properties

· **General Information**

· **Appearance:**

· **Form:**

Fluid

· **Colour:**

Yellow

· **Odour:**

Characteristic

· **Odour threshold:**

Not determined.

· **pH-value:**

Not determined.

· **Change in condition**

· **Melting point/freezing point:**

Undetermined.

· **Initial boiling point and boiling range:** 78 °C

· **Flash point:**

13 °C

· **Flammability**

Highly flammable.

· **Auto-ignition temperature:**

425 °C

· **Decomposition temperature:**

Not determined.

· **Ignition temperature:**

Product is not selfigniting.

· **Explosive properties:**

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Explosion limits:**

· **Lower:**

3.5 Vol %

· **Upper:**

15 Vol %

· **Vapour pressure at 20 °C:**

59 hPa

· **Vapour pressure at 50 °C:**

280 hPa

· **Density at 20 °C:**

0.93 g/cm³

· **Relative density**

Not determined.

· **Vapour density**

Not determined.

· **Evaporation rate**

Not determined.

· **Solubility in / Miscibility with**

· **water:**

Not miscible or difficult to mix.

· **Partition coefficient: n-octanol/water:** Not determined.

(Contd. on page 4)

AU

Safety Data Sheet

according to WHS Regulations

Date of issue: 23.07.2025

Version number 1

Revision: 23.07.2025

Trade name: **CARAMEL NATURAL FLAVOUR**

(Contd. of page 3)

- | | |
|----------------------------|-----------------|
| · Viscosity: | |
| · Dynamic: | Not determined. |
| · Kinematic: | Not determined. |
| · Solvent content: | |
| · Organic solvents: | 53.0 % |

- | | |
|-----------------------------------|-----------------|
| · Other information | |
| · Particle characteristics | Not applicable. |
| · Physical state | Liquid |

10 Stability and Reactivity

- **Reactivity** No further relevant information available.
- **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** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

12 Ecological Information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour 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 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|----------------------------------|---|
| · UN-Number | |
| · ADG, IMDG, IATA | UN1197 |
| · UN proper shipping name | |
| · ADG | 1197 EXTRACTS, LIQUID, special provision 640D |
| · IMDG, IATA | Extracts, liquid, for flavour or aroma |

(Contd. on page 5)

AU

Safety Data Sheet

according to WHS Regulations

Date of issue: 23.07.2025

Version number 1

Revision: 23.07.2025

Trade name: CARAMEL NATURAL FLAVOUR

(Contd. of page 4)

· **Transport hazard class(es)**· **ADG**· **Class**

3 (F1) Flammable liquids.

· **Label**

3

· **IMDG, IATA**· **Class**

3 Flammable liquids.

· **Label**

3

· **Packing group**· **ADG, IMDG, IATA**

II

· **Environmental hazards:**

Not applicable.

· **Special precautions for user**

Warning: Flammable liquids.

· **Hazard identification number (Kemler code):**

33

· **EMS Number:**

F-E,S-D

· **Stowage Category**

B

· **Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

· **Transport/Additional information:**· **ADG**· **Limited quantities (LQ)**

5L

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **Transport category**

2

· **Tunnel restriction code**

D/E

· **IMDG**· **Limited quantities (LQ)**

5L

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":**

UN 1197 EXTRACTS, LIQUID, 3, II

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**· **Australian Inventory of Industrial Chemicals**

64-17-5	ethanol
121-33-5	vanillin
118-71-8	maltol
80-71-7	Methylcyclopentenolone
3658-77-3	4-Hydroxy-2,5-dimethyl-3(2H)-furanone
431-03-8	diacetyl
513-86-0	acetoin
119-84-6	Dihydrocoumarin
120-57-0	piperalon
107-92-6	butyric acid
100-52-7	benzaldehyde
104-50-7	gamma-Octalactone
	Gamma decalactone
104-61-0	gamma-Nonalactone

· **Standard for the Uniform Scheduling of Medicines and Poisons**

107-92-6	butyric acid	S6
----------	--------------	----

· **Australia: Priority Existing Chemicals**

None of the ingredients is listed.

(Contd. on page 6)

AU

Safety Data Sheet

according to WHS Regulations

Date of issue: 23.07.2025

Version number 1

Revision: 23.07.2025

Trade name: CARAMEL NATURAL FLAVOUR

(Contd. of page 5)

- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Danger
- **Hazard-determining components of labelling:**
vanillin (≥2.5-<10 %)
 - Methylcyclopentenolone (≥1-≤2.5 %)
 - 4-Hydroxy-2,5-dimethyl-3(2H)-furanone (≥1-≤2.5 %)
- **Hazard statements**
H225 Highly flammable liquid and vapour.
H317 May cause an allergic skin reaction.
- **Precautionary statements**
 - P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 - P241 Use explosion-proof electrical/ventilating/lighting equipment.
 - P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 - P280 Wear protective gloves/protective clothing/eye protection/face protection.
 - P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category** P5c FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t
- **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**
H225 Highly flammable liquid and vapour.
H227 Combustible liquid.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
- **Department issuing SDS:** Regulation and technical service
- **Contact:**
- **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
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)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flammable liquids – Category 2: Flammable liquids – Category 2
Flammable liquids – Category 4: Flammable liquids – Category 4
Acute toxicity - oral – Category 4: Acute toxicity – Category 4
Acute toxicity - dermal – Category 3: Acute toxicity – Category 3
Skin corrosion/irritation – Category 1B: Skin corrosion/irritation – Category 1B
Eye damage/irritation – Category 1: Serious eye damage/eye irritation – Category 1
Eye damage/irritation – Category 2A: Serious eye damage/eye irritation – Category 2A
Skin sensitisation – Category 1: Skin sensitisation – Category 1
- *** Data compared to the previous version altered.**

AU