



FRATERWORKS

SAFETY DATA SHEET

Printed on 18 Apr 2024

GHS: According to 2015/830/EU

Code Number 747473
Version 2 Revised 4/18/2024 11:50:41 PM

Section 1. Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product Name ARTEMAL
Code Number 747473
Alternative Name
REACH Reg No Not registered

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

Concentrated material for manufacturing purposes only

1.3 Details of the supplier of the safety data sheet

Fraterworks
P. O. Box 46009
Park Avenue
Lower Hutt 5044
New Zealand

Telephone Number Tel No. +6448893800
Email Address info@fraterworks.com

1.4 Emergency Tel No Emergency No. +6448893800

Section 2. Hazard Identification

2.1 Classification of the substance or mixture

AH 1 Aspiration hazard, category 1
SCI 2 Skin corrosion/irritation, category 2
SS 1B Skin sensitisation, category 1B
EDI 2A Eye damage/irritation, category 2A
EH A2 Aquatic hazard, acute, category 2
EH C2 Aquatic hazard, chronic, category 2

2.2 Label elements

This document is generated by calculation based on the ingredients present in the formula. The information contained herein is, to the best of our knowledge, true and accurate at the date of issue. It is provided to the customer for information and internal use only. It is not a confirmation of compliance and it is customer responsibility to perform his own evaluation on the product, including with respect to end-use application.

SAFETY DATA SHEET

Printed on 18 Apr 2024

GHS: According to 2015/830/EU

Code Number 747473

Version 2 Revised 4/18/2024 11:50:41 PM

GHS classification according to Regulation (EC) No 1272/2008

Hazard Pictograms



Signal Word Danger

Hazard Statements

- | | |
|------|---|
| H304 | May be fatal if swallowed and enters airways |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H319 | Causes serious eye irritation |
| H401 | Toxic to aquatic life |
| H411 | Toxic to aquatic life with long lasting effects |

Precautionary Statements

- | | |
|-----------|--|
| P261 | Avoid breathing fumes. |
| P264 | Wash hands thoroughly after handling |
| P280 | Wear protective gloves and eye protection |
| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTRE. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice. |
| P337+P313 | If eye irritation persists: Get medical attention. |

2.3 Other Hazards

Contains Amyl Cinnamal, Benzyl Alcohol, Benzyl Benzoate, Benzyl Salicylate, Citral, Citronellol, Eugenol, Evernia Prunastri (Oak Moss) Extract, Farnesol, Geraniol, Hexyl Cinnamal, Hydroxycitronellal, Isoeugenol, Limonene and Linalool which may produce an allergic reaction

No further information available at this time

Section 3. Composition / information on ingredients

Any percentage values listed here for hazardous components are for illustrative purposes only

This document is generated by calculation based on the ingredients present in the formula. The information contained herein is, to the best of our knowledge, true and accurate at the date of issue. It is provided to the customer for information and internal use only. It is not a confirmation of compliance and it is customer responsibility to perform his own evaluation on the product, including with respect to end-use application.

SAFETY DATA SHEET

Printed on 18 Apr 2024

GHS: According to 2015/830/EU

Code Number 747473

Version 2 Revised 4/18/2024 11:50:41 PM

3.2 Mixtures

Complex mixture of fragrance ingredients

Hazardous components

ID Numbers	Chemical Name, Classification and Hazards	Conc (%)
CAS 5989-27-5 EINECS 227-813-5 REACH	d-Limonene (p-Mentha-1,8-diene) FL 4;AH 1;SCI 2;SS 1B;EH A1,C1 H227,H304,H315,H317,H400,H410	>=5%, <10%
CAS 101-86-0 EINECS 202-983-3 REACH	alpha-Hexyl cinnamic aldehyde (HCA) (2-Hexyl-phenyl-2-propenal) ATO 5(3100);SCI 3;SS 1B;EH C2 H303,H316,H317,H411	>=5%, <10%
CAS 546-80-5 EINECS 208-912-2 REACH	Thujones FL 4;ATO 4(500) H227,H302	>=3%, <5%
CAS 1205-17-0 EINECS 214-881-6 REACH	Helional (Heliogan) (3-(3,4-Methylenedioxyphenyl)-2-methylpropanal) ATO 5(3550);SS 1B;EH A2,C2 H303,H317,H401,H411	>=3%, <5%
CAS 117-98-6 EINECS 204-225-7 REACH	Vetiveryl acetate (Synthetic) SCI 3;SS 1B;EH A2,C2 H316,H317,H401,H411	>=3%, <5%
CAS 76-22-2 EINECS 200-945-0 REACH	Camphor (1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one) FS 2;ATO 4(1500);ATI 4(1.5);STO-SE 2(oral,CNS,kidney);EH A3 H228,H302,H332,H371,H402	>=1%, <3%
CAS 78-70-6 EINECS 201-134-4 REACH	Linalool FL 4;ATO 5(2790);SCI 2;SS 1B;EDI 2A;EH A3 H227,H303,H315,H317,H319,H402	>=1%, <3%
CAS 89-83-8 EINECS 201-944-8 REACH	Thymol ATO 4(980);SCI 1B;EDI 1;EH A2,C2 H302,H314,H318,H401,H411	>=1%, <3%
CAS 80-56-8 EINECS 201-291-9 REACH	Pinenes FL 4;ATO 5(3500);AH 1;SCI 2;SS 1B;EH A1,C1 H227,H303,H304,H315,H317,H400,H410	>=1%, <3%
CAS 107-75-5 EINECS 203-518-7 REACH	Hydroxycitronellal (Laurine, Hydronal, Phixia, Laurinal) SS 1B;EDI 2A H317,H319	>=1%, <3%
CAS 115-95-7 EINECS 204-116-4 REACH	Linalyl acetate FL 4;SCI 2;EDI 2A;EH A3 H227,H315,H319,H402	>=1%, <3%
CAS 470-82-6 EINECS 207-431-5 REACH	Cineols (Eucalyptol) FL 4;ATO 5(2480);SCI 3;SS 1B H227,H303,H316,H317	>=1%, <3%

This document is generated by calculation based on the ingredients present in the formula. The information contained herein is, to the best of our knowledge, true and accurate at the date of issue. It is provided to the customer for information and internal use only. It is not a confirmation of compliance and it is customer responsibility to perform his own evaluation on the product, including with respect to end-use application.

SAFETY DATA SHEET

Printed on 18 Apr 2024

GHS: According to 2015/830/EU

Code Number 747473
Version 2 Revised 4/18/2024 11:50:41 PM

CAS 99-85-4 EINECS 202-794-6 REACH	gamma-Terpinene (p-Mentha-1,4-diene) FL 3;ATO 5(3850);SCI 3;AH 1 H226,H303,H304,H316	>= 1%, < 3%
CAS 99-49-0 EINECS 202-759-5 REACH	Carvone FL 4;ATD 5(3800);SS 1B;EH A2 H227,H313,H317,H401	>= 1%, < 3%
CAS 127-91-3 EINECS 204-872-5 REACH	beta-Pinene FL 4;AH 1;SCI 2;SS 1B;EH A1,C1 H227,H304,H315,H317,H400,H410	>= 0.1%, < 1%
CAS 141-25-3 EINECS 205-473-9 REACH	Rhodinols (3,7-Dimethyl-7-octen-1-ol) ATO 5(3800);ATD 5(3600);SCI 2;SS 1;EDI 1;EH A2 H303,H313,H315,H317,H318,H401	>= 0.1%, < 1%
CAS 79-92-5 EINECS 201-234-8 REACH	Camphene FS 2;SCI 3;EDI 2A;EH A1,C1 H228,H316,H319,H400,H410	>= 0.1%, < 1%

Refer to section 16 for the wording of listed classification and hazard statement codes

Section 4. First Aid measures

Take phrases in section 2 into account

4.1 Description of first aid measures

After inhalation

Remove from the exposure area to fresh air. Contact a doctor if necessary.

After skin contact

Remove contaminated clothing. Wash thoroughly with soap and water. Seek medical advice if irritation persists or there is any sign of tissue damage.

After eye contact

Flush with plenty of water and seek medical advice if necessary.

After ingestion

Wash mouth with plenty of water and obtain medical advice immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further information available at this time

4.3 Indication of immediate medical attention and special treatment needed

No further information available at this time

This document is generated by calculation based on the ingredients present in the formula. The information contained herein is, to the best of our knowledge, true and accurate at the date of issue. It is provided to the customer for information and internal use only. It is not a confirmation of compliance and it is customer responsibility to perform his own evaluation on the product, including with respect to end-use application.

SAFETY DATA SHEET

Printed on 18 Apr 2024

GHS: According to 2015/830/EU

Code Number 747473

Version 2 Revised 4/18/2024 11:50:41 PM

Section 5. Fire-fighting measures

5.1 Extinguishing Media

Carbon dioxide, foam or dry powder.
DO NOT USE A DIRECT WATER JET.

5.2 Special hazards arising from the substance or mixture

May produce Carbon dioxide and unidentified organic compounds.

5.3 Advice for fire-fighters

Wear protective clothing and avoid inhalation of vapours. Keep containers cool with water spray

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition.
Avoid inhalation, skin and eye contact.
Ensure proper ventilation.

6.2 Environmental precautions

Do not discharge directly into drains or the soil. Keep away from surface and ground water

6.3 Methods and material for containment and cleaning up

Soak up spillage with sand or other inert absorbant material such as earth or vemiculite; transfer used material to a suitable waste container and dispose in accordance with regulations.

6.4 Reference to other sections

Refer to information in Sections 7, 8 and 13

Section 7. Handling and storage

7.1 Precautions for safe handling

Maintain good occupational and personal hygiene. Avoid inhalation and contact with skin and eyes.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly sealed original containers away from ignition sources and in a cool place.

7.3 Specific end use(s)

No further information available

This document is generated by calculation based on the ingredients present in the formula. The information contained herein is, to the best of our knowledge, true and accurate at the date of issue. It is provided to the customer for information and internal use only. It is not a confirmation of compliance and it is customer responsibility to perform his own evaluation on the product, including with respect to end-use application.

SAFETY DATA SHEET

Printed on 18 Apr 2024

GHS: According to 2015/830/EU

Code Number 747473

Version 2 Revised 4/18/2024 11:50:41 PM

Section 8. Exposure controls / personal protection

8.1 Control Parameters

No information

8.2 Exposure controls

Engineering controls

No information

Individual protection measures

Refer to Section 5 for specific fire/chemical personal protective equipment advice.
Always wash routinely before breaks, meals and at the end of the work period.

Eye/face protection

Wear safety goggles.

Hand protection

Wear chemically resistant disposable gloves.

Other skin protection

Wear overalls. Always wash routinely before breaks, meals and at the end of the work period.

Respiratory protection

Not generally required. Use inhalation protection in poorly ventilated areas

Thermal hazards

No information

Environmental exposure controls

No information

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

FLASH POINT (°C) 140

9.2 Other information

No further information available

Section 10. Stability and reactivity

10.1 Reactivity

Not determined

This document is generated by calculation based on the ingredients present in the formula. The information contained herein is, to the best of our knowledge, true and accurate at the date of issue. It is provided to the customer for information and internal use only. It is not a confirmation of compliance and it is customer responsibility to perform his own evaluation on the product, including with respect to end-use application.

SAFETY DATA SHEET

Printed on 18 Apr 2024

GHS: According to 2015/830/EU

Code Number 747473
Version 2 Revised 4/18/2024 11:50:41 PM

10.2 Chemical Stability

Not determined

10.3 Possibility of hazardous reactions

Not determined

10.4 Conditions to avoid

Extreme temperatures

10.5 Incompatible materials

Highly reactive chemicals which may produce unknown reaction products and so cause additional hazards.

10.6 Hazardous decomposition products

Not determined

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

alpha-Amyl cinnamic aldehyde (ACA) (2-Pentyl-3-phenyl-2-prop (CAS: 122-40-7)
Oral route: LD50 = 3730 mg/kg

alpha-Hexyl cinnamic aldehyde (HCA) (2-Hexyl-phenyl-2-propen (CAS: 101-86-0)
Oral route: LD50 = 3100 mg/kg

Armoise oil (Artemesia oil) (Mugwort) (CAS: 68991-20-8)
Oral route: LD50 = 700 mg/kg

Coriandrol (Linalool) (3,7-Dimethyl-1,6-octadien-3-ol) (CAS: 78-70-6)
Oral route: LD50 = 2780 mg/kg

Helional (Heliogan) (3-(3,4-Methylenedioxyphenyl)-2-methylpr (CAS: 1205-17-0)
Oral route: LD50 = 3550 mg/kg

Mentha viridis oil (Spearmint oil) (CAS: 8008-79-5)
Oral route: LD50 = 2100 mg/kg
Dermal route: LD50 = 4800 mg/kg

Oakmoss absolute IFRA LOW ATRANOL (CAS: 9000-50-4)
Oral route: LD50 = 2900 mg/kg

para- Cresol L(T24/25)=L(C34)=5%; L(Xn21/22)=L(Xi36/38)=1 (CAS: 106-44-5)
Oral route: LD50 = 207 mg/kg
Dermal route: LD50 = 300 mg/kg

Rhodinols (3,7-Dimethyl-7-octen-1-ol) (CAS: 141-25-3)
Oral route: LD50 = 3800 mg/kg
Dermal route: LD50 = 3600 mg/kg

This document is generated by calculation based on the ingredients present in the formula. The information contained herein is, to the best of our knowledge, true and accurate at the date of issue. It is provided to the customer for information and internal use only. It is not a confirmation of compliance and it is customer responsibility to perform his own evaluation on the product, including with respect to end-use application.

SAFETY DATA SHEET

Printed on 18 Apr 2024

GHS: According to 2015/830/EU

Code Number 747473

Version 2 Revised 4/18/2024 11:50:41 PM

Thyme oil, Red (CAS: 8007-46-3)
Oral route: LD50 = 1800 mg/kg

Ylang-ylang oil extra (CAS: 8006-81-3)
Oral route: LD50 = 4300 mg/kg

Skin corrosion / irritation

No data

Serious eye damage / irritation

No data

Respiratory or skin sensitisation

No data

Germ cell mutagenicity

No data

Carcinogenicity

No data

Reproductive toxicity

No data

STO-single exposure

No data

STO-repeated exposure

No data

Aspiration hazard

No data

Information on likely routes of exposure

No data

Symptoms related to the physical, chemical and toxicological characteristics

No data

Delayed and immediate effects as well as chronic effects from short and long-term exposure

No data

Interactive effects

No data

This document is generated by calculation based on the ingredients present in the formula. The information contained herein is, to the best of our knowledge, true and accurate at the date of issue. It is provided to the customer for information and internal use only. It is not a confirmation of compliance and it is customer responsibility to perform his own evaluation on the product, including with respect to end-use application.

SAFETY DATA SHEET

Printed on 18 Apr 2024

GHS: According to 2015/830/EU

Code Number 747473
Version 2 Revised 4/18/2024 11:50:41 PM

Other information
No data

Section 12. Ecological information

12.1 Toxicity

No data available. Avoid soil, surface water and water-bearing stratum contamination.

12.2 Persistence and degradability

No data

12.3 Bioaccumulative potential

No data

12.4 Mobility in soil

No data

12.5 Results of PBT and vPvB assessment

No data

12.6 Other adverse effects

No data available

Section 13. Disposal considerations

Please refer to the information in section 8 (Exposure controls and personal protection)

13.1 Waste treatment methods

Dispose in accordance with the law and local regulations. Treat as trade effluent.

Section 14. Transport information

14.1 UN number

ADR	3082
IATA	3082
IMDG	3082

14.2 UN proper shipping name

ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LINALOOL)
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LINALOOL)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LINALOOL)

This document is generated by calculation based on the ingredients present in the formula. The information contained herein is, to the best of our knowledge, true and accurate at the date of issue. It is provided to the customer for information and internal use only. It is not a confirmation of compliance and it is customer responsibility to perform his own evaluation on the product, including with respect to end-use application.

SAFETY DATA SHEET

Printed on 18 Apr 2024

GHS: According to 2015/830/EU

Code Number 747473

Version 2 Revised 4/18/2024 11:50:41 PM

14.3 Transport hazard class(es)

ADR 9

IATA 9

IMDG 9

14.4 Packing group

ADR III

IATA III

IMDG III

Tunnel Code (E)

14.5 Environmental Hazards

No relevant information available

14.6 Special precautions for user

No relevant information available

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

Section 15. Regulatory information

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

No relevant information available at this time

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out

Section 16. Other information

Full list of precautionary phrases

P261 Avoid breathing fumes.

P264 Wash hands thoroughly after handling

P280 Wear protective gloves and eye protection

P301+P310 IF SWALLOWED: Immediately call a POISON CENTRE.

P333+P313 If skin irritation or rash occurs: Get medical advice.

P337+P313 If eye irritation persists: Get medical attention.

This document is generated by calculation based on the ingredients present in the formula. The information contained herein is, to the best of our knowledge, true and accurate at the date of issue. It is provided to the customer for information and internal use only. It is not a confirmation of compliance and it is customer responsibility to perform his own evaluation on the product, including with respect to end-use application.

SAFETY DATA SHEET

Printed on 18 Apr 2024

GHS: According to 2015/830/EU

Code Number 747473

Version 2 Revised 4/18/2024 11:50:41 PM

Wording of any hazard classes listed in section 3

FL 3	Flammable liquid, category 3
FL 4	Flammable liquid, category 4
FS 2	Flammable solid, category 2
ATO 3	Acute toxicity, oral, category 3
ATO 4	Acute toxicity, oral, category 4
ATO 5	Acute toxicity, oral, category 5
AH 1	Aspiration hazard, category 1
ATD 3	Acute toxicity, dermal, category 3
ATD 4	Acute toxicity, dermal, category 4
ATD 5	Acute toxicity, dermal, category 5
SCI 1B	Skin corrosion/irritation, category 1B
SCI 2	Skin corrosion/irritation, category 2
SCI 3	Skin corrosion/irritation, category 3
SS 1	Skin sensitisation, category 1
SS 1A	Skin sensitisation, category 1A
SS 1B	Skin sensitisation, category 1B
EDI 1	Eye damage/irritation, category 1
EDI 2A	Eye damage/irritation, category 2A
EDI 2B	Eye damage/irritation, category 2B
ATI 4	Acute toxicity, inhalation, category 4
MUT 2	Germ cell mutagenicity, category 2
CAR 2	Carcinogenicity, category 2
REP 2	Reproductive toxicity, category 2
STO-SE 2	Specific target organ, single exposure, category 2
EH A1	Aquatic hazard, acute, category 1
EH A2	Aquatic hazard, acute, category 2
EH A3	Aquatic hazard, acute, category 3
EH C1	Aquatic hazard, chronic, category 1
EH C2	Aquatic hazard, chronic, category 2
EH C3	Aquatic hazard, chronic, category 3

Wording of any hazard statements listed in section 3

H226	Flammable liquid and vapour
H227	Combustible liquid

This document is generated by calculation based on the ingredients present in the formula. The information contained herein is, to the best of our knowledge, true and accurate at the date of issue. It is provided to the customer for information and internal use only. It is not a confirmation of compliance and it is customer responsibility to perform his own evaluation on the product, including with respect to end-use application.

SAFETY DATA SHEET

Printed on 18 Apr 2024

GHS: According to 2015/830/EU

Code Number 747473

Version 2 Revised 4/18/2024 11:50:41 PM

H228	Flammable solid
H301	Toxic if swallowed
H302	Harmful if swallowed
H303	May be harmful if swallowed
H304	May be fatal if swallowed and enters airways
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H313	May be harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H316	Causes mild skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H320	Causes eye irritation
H332	Harmful if inhaled
H341	Suspected of causing genetic defects
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H371	May cause damage to organs
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

This document is generated by calculation based on the ingredients present in the formula. The information contained herein is, to the best of our knowledge, true and accurate at the date of issue. It is provided to the customer for information and internal use only. It is not a confirmation of compliance and it is customer responsibility to perform his own evaluation on the product, including with respect to end-use application.