



Certificate of Analysis

Batch Details

Product Name: STRAWBERRY LIQUID FRUIT EXTRACT
Product Code: FESTRA
Batch No: 4420006
Best Before End: JANUARY 2023

Specification:

Quality Control Results

| Analytical Test Characteristic | Specification Limit | | Value | Status |
|-----------------------------------|-------------------------------|-------|-------|--------|
| | Lower | Upper | | |
| Addendum 00 | PASS OR FAIL | | Pass | P |
| REVISION NUMBER | 1.0 | | Pass | |
| ASPECT | CLEAR LIQUID | | Pass | P |
| COLOUR | PALE YELLOW TO DARK ORANGE | | Pass | P |
| ODOUR | CHARACTERISTIC | | Pass | P |
| SPECIFIC GRAVITY (20°C) | 1.085 | 1.115 | 1.107 | P |
| REFRACTIVE INDEX (20°C) | 1.370 | 1.400 | 1.387 | P |
| pH VALUE (20°C) | 4.00 | 6.0 | 4.9 | P |
| TOTAL GERMS | 100 MAX CFU/G | | Pass | P |
| MOULDS/YEASTS | MAX CFU/G | | Pass | P |

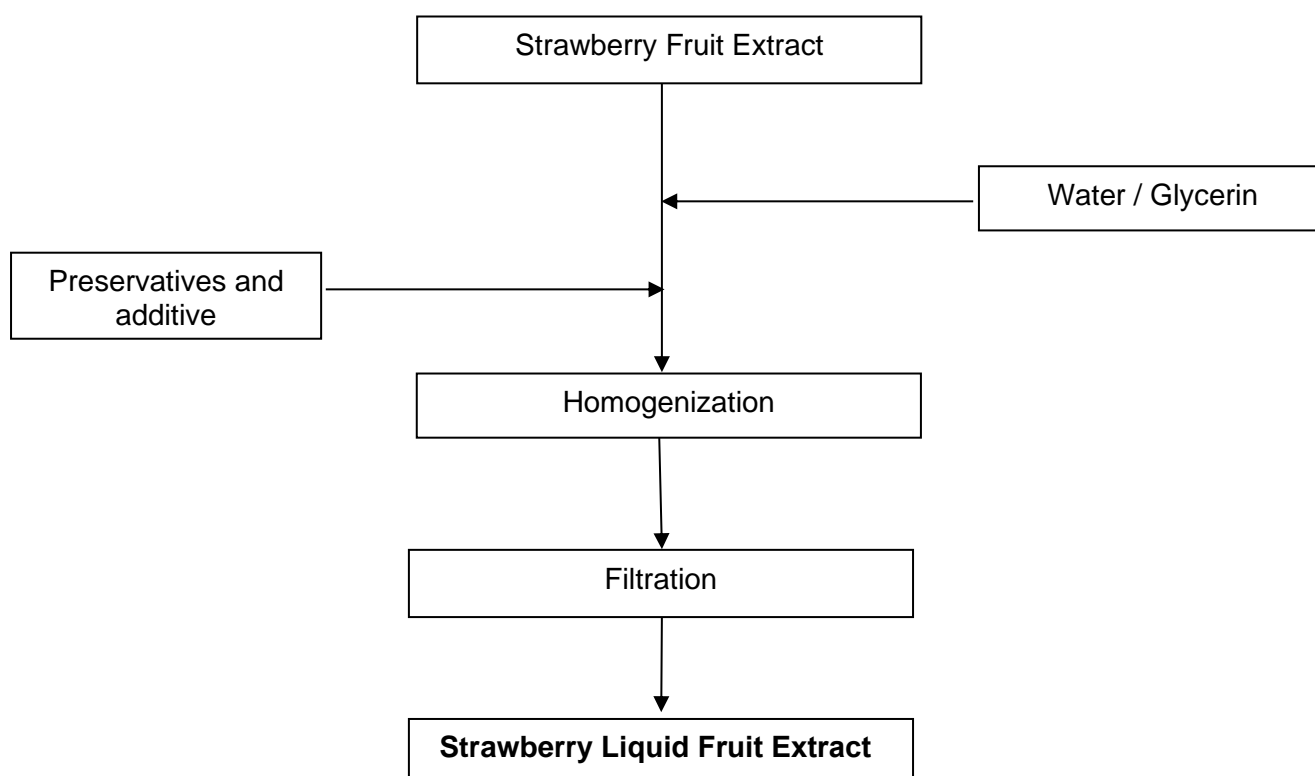
STORAGE:

Between 15-25°C, dark in closed containers

The performed analysis are guaranteed on original packaging When stored accordingly, stable for 24 months

Batch Status: Pass

Flow Chart of Strawberry Liquid Fruit Extract



Non-warranty

The information in this publication is believed to be accurate and is given in good faith but no representation or warranty as to its completeness or accuracy is made. Suggestions for uses or applications are only opinions. Users are responsible for determining the suitability of these products for their own particular purpose. No representation or warranty, express or implied, is made with respect to information or products including without limitation warranties of merchantability or fitness for a particular purpose or non-infringement of any third party patent or other intellectual property rights including without limit copyright, trademark and designs.



Date: 05.08.2015

To whom it may concern:

ORIGIN STATEMENT

We herewith confirm that the product Strawberry Liquid Fruit Extract, is produced from plant and synthetic raw materials, with reference to the confirmation of our raw materials suppliers.

This product is derived from non animal sources and does not contain material of bovine, ovine, caprine origin with reference to the confirmation of our raw materials suppliers.

According our knowledge and the confirmation of our suppliers, this product:

- ☐ Does not contain any genetically modified organism
- ☐ Is not produced with help of genetic engineering techniques

This information is given in good faith and is based on our knowledge to date. This correspondence will not be automatically updated in the future.



Composition Information

Product Name: Strawberry Liquid Fruit Extract

INCI Name : Water, Glycerin, Fragaria Vesca (Strawberry) Fruit Extract

INCI Name EU : to follow Cosing, the European Commission database on <http://ec.europa.eu/consumers/cosmetics/cosing/>

Composition :

| | |
|--|-----------|
| Water | 56 – 60 % |
| Glycerin | 38 – 42 % |
| Fragaria Vesca (Strawberry) Fruit Extract* | 1 – 5 %* |

** Fragaria Vesca (Strawberry) Fruit Extract has been concentrated in a preliminary step. 1kg of this concentrated extract corresponds to approx. 9-10kg of fresh fruits*

| | | |
|------------------------|-------------------|---------------|
| Preservatives : | Potassium Sorbate | approx. 0.3 % |
| | Sodium Benzoate | approx. 0.3 % |

Antioxidant : None

| | | |
|-----------------------|-------------|---------------|
| Co-additives : | Citric Acid | approx. 0.1 % |
|-----------------------|-------------|---------------|

06/17

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REACH STATEMENT

MADAR Corporation is committed to meet the requirements set out in the REACH (Registration Evaluation and Authorization of Chemicals) regulations and we are working with our suppliers to ensure a continued supply of the below mentioned product.

Below listed product is so called preparation composed of ingredients (named under REACH as substances).

Strawberry Liquid Fruit Extract

| INCI | CAS | EINECS | REACH status | Comment |
|---|------------|-----------|--------------|-------------------------|
| Water | 7732-18-5 | 231-791-2 | / | / |
| Glycerin | 56-81-5 | 200-289-5 | Exempt | Annex V |
| Fragaria Vesca (Strawberry) Fruit Extract | 84929-78-2 | 284-556-1 | Exempt | Production < 1 T / year |
| Potassium Sorbate | 24634-61-5 | 246-376-1 | Registered | 01-2119950315-41 |
| Sodium Benzoate | 532-32-1 | 208-534-8 | Registered | 01-2119457026-42 |
| Citric Acid | 5949-29-1 | 611-842-9 | Registered | 01-2119531326-45 |

If in the future the amount of a substance produced by our supplier would exceed the 1T/year limit, they will ensure its registration.

Substances of Very High Concern (SVHC; in REACH's Appendix XIV substances' list subjected to authorization) have not been added in the above mentioned product and are not expected to be impurities of the raw materials used in this product

This information is given in good faith and is based on our knowledge to date.



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

STRAWBERRY LIQUID FRUIT EXTRACT

Version
2.0

Revision Date:
01.04.2019

Date of last issue: Print Date :
- 18.03.2020
Date of first issue:
01.04.2019

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

1.1 Product identifier

Product code : STRAWBERRY LIQUID FRUIT EXTRACT

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

Use of the Sub- : Manufacture of soap and detergents, cleaning and polishing
stance/Mixture mixtures
Cosmetic additive

1.3 Details of the supplier of the safety data sheet

Company : MADAR Corporation Limited
19-20 Sandleheath Industrial Estate
Fordingbridge
Hampshire
SP6 1PA
UK

Telephone : +44 (0)1425 655555

Telefax

E-mail address : sales@madarcorporation.co.uk

1.4 Emergency telephone number

Emergency telephone number : USA: 24 Hour Emergency Response Information CHEMTREC
toll free: 1-800-424-9300; direct/international: 1-703-527-3887.
CANADA: CANUTEC 1-888-CAN-UTEC (226-8832), 613-996-
6666 or *666. EUROPE: 00 32 3575 5555. ASIA PACIFIC -
excl. China: +65 6542-9595. CHINA: +86 816-635 2206.
AUSTRALIA: +61 2 7808 3390. SOUTH AFRICA: +32 3 575 55
55. BRASIL: Suatrans 0800 707 7022 / 0800 707 1767. LATAM:
Suatrans (+55) 11 98149-0850 / (+55) 19 3833-5300. INDIA:
+91 22 30948601/2. JAPAN: +65 6542 9595 (24 時間 日本語対
応無料通話, シンガポール). TÜRKIYE: Sağlık Bakanlığı Ulusal
Zehir Merkezi - 114

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

STRAWBERRY LIQUID FRUIT EXTRACT

Version
2.0

Revision Date:
01.04.2019

Date of last issue: Print Date :
- 18.03.2020
Date of first issue:
01.04.2019

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Remarks : No hazardous ingredients

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled : If breathed in, move person into fresh air.
If symptoms persist, call a physician.

In case of skin contact : In case of contact, immediately flush skin with soap and plenty of water.
If symptoms persist, call a physician.

In case of eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

If swallowed : If large quantities of this material are swallowed, call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : None known.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray, alcohol-resistant foam, dry chemical or car-



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

STRAWBERRY LIQUID FRUIT EXTRACT

Version
2.0

Revision Date:
01.04.2019

Date of last issue: Print Date :
- 18.03.2020
Date of first issue:
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bon dioxide.

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : In case of fire hazardous decomposition products may be produced such as:
Carbon oxides

Do not use a solid water stream as it may scatter and spread fire.

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further information : Prevent fire extinguishing water from contaminating surface water or the ground water system.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Ensure adequate ventilation.
Use personal protective equipment.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material.
Sweep up and shovel into suitable containers for disposal.

6.4 Reference to other sections

None.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

STRAWBERRY LIQUID FRUIT EXTRACT

| | | | |
|---------|----------------|----------------------|--------------|
| Version | Revision Date: | Date of last issue: | Print Date : |
| 2.0 | 01.04.2019 | - | 18.03.2020 |
| | | Date of first issue: | |
| | | 01.04.2019 | |

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container. Keep container tightly closed in a dry and well-ventilated place.

Advice on common storage : No special restrictions on storage with other products.

Recommended storage temperature : 15 - 25 °C

Further information on storage stability : Recommended storage temperature

Stable under recommended storage conditions.

7.3 Specific end use(s)

Specific use(s) : Manufacture of chemical products

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis |
|---------------------|---|-------------------------------|----------------------|---------|
| Glycerine | 56-81-5 | TWA (Mist) | 10 mg/m ³ | GB EH40 |
| Further information | Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used | | | |

8.2 Exposure controls

Personal protective equipment

Eye protection : Safety glasses with side-shields

Hand protection
Remarks : For prolonged or repeated contact use protective gloves.

Skin and body protection : Impervious clothing

Respiratory protection : No personal respiratory protective equipment normally required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : clear, liquid



SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

STRAWBERRY LIQUID FRUIT EXTRACT

Version
2.0

Revision Date:
01.04.2019

Date of last issue: -
Date of first issue:
01.04.2019

Print Date :
18.03.2020

| | | |
|--|---|---|
| Colour | : | orange |
| Odour | : | characteristic |
| Odour Threshold | : | No data available |
| pH | : | 4.0 - 6.0 (20 °C) |
| Melting point | : | No data available |
| Boiling point | : | No data available |
| Decomposition temperature | : | No data available |
| Flash point | : | No data available |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | No data available |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapour pressure | : | No data available |
| Relative vapour density | : | No data available |
| Density | : | 1.085 - 1.115 g/cm ³ (20 °C) |
| Solubility(ies) | | |
| Water solubility | : | soluble |
| Solubility in other solvents | : | not determined |
| Partition coefficient: n-octanol/water | : | No data available |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity | | |
| Viscosity, dynamic | : | No data available |
| Viscosity, kinematic | : | No data available |
| Explosive properties | : | Classification Code: No data available |
| Oxidizing properties | : | No data available |



SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

STRAWBERRY LIQUID FRUIT EXTRACT

Version
2.0

Revision Date:
01.04.2019

Date of last issue: -
Date of first issue:
01.04.2019

Print Date :
18.03.2020

9.2 Other information

Self-ignition : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

No data available

10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.

10.4 Conditions to avoid

Conditions to avoid : None known.

10.5 Incompatible materials

Materials to avoid : Strong oxidizing agents

10.6 Hazardous decomposition products

No data available

In case of fire hazardous decomposition products may be produced such as:

Carbon oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : No data available:

Acute inhalation toxicity : No data available:

Acute dermal toxicity : No data available:

Skin corrosion/irritation

Product:

Remarks : No data available

SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

STRAWBERRY LIQUID FRUIT EXTRACT

Version
2.0

Revision Date:
01.04.2019

Date of last issue: -
Date of first issue:
01.04.2019

Print Date :
18.03.2020

Serious eye damage/eye irritation

Product:

Remarks : No data available

Respiratory or skin sensitisation

Product:

Remarks : No data available

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: No data available

Carcinogenicity

Product:

Carcinogenicity - Assessment : No data available

STOT - single exposure

Product:

Assessment : No data available

STOT - repeated exposure

Product:

Assessment : No data available

Aspiration toxicity

Product:

No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : Remarks: No data available

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available

SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

STRAWBERRY LIQUID FRUIT EXTRACT

Version
2.0

Revision Date:
01.04.2019

Date of last issue: -
Date of first issue:
01.04.2019

Print Date :
18.03.2020

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

12.4 Mobility in soil

Product:

Distribution among environmental compartments : Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

Product:

Additional ecological information : No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.

Contaminated packaging : Empty remaining contents.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good



SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

STRAWBERRY LIQUID FRUIT EXTRACT

| | | | |
|---------|----------------|----------------------|--------------|
| Version | Revision Date: | Date of last issue: | Print Date : |
| 2.0 | 01.04.2019 | - | 18.03.2020 |
| | | Date of first issue: | |
| | | 01.04.2019 | |

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

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

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

The components of this product are reported in the following inventories:

| | | |
|--------|---|---|
| CH INV | : | On the inventory, or in compliance with the inventory |
| AICS | : | On the inventory, or in compliance with the inventory |
| IECSC | : | On the inventory, or in compliance with the inventory |

15.2 Chemical safety assessment

SECTION 16: Other information

Full text of other abbreviations

| | | |
|---------------|---|--|
| GB EH40 | : | UK. EH40 WEL - Workplace Exposure Limits |
| GB EH40 / TWA | : | Long-term exposure limit (8-hour TWA reference period) |

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

STRAWBERRY LIQUID FRUIT EXTRACT

Version
2.0

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Date of last issue: Print Date :
- 18.03.2020
Date of first issue:
01.04.2019

Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GB / EN



Specification

Date: 12.09.2018

Product Name: STRAWBERRY LIQUID FRUIT EXTRACT

Specification: 10/12/2012

| Analy. Test Method No. | Characteristic | Specification Limits | | Units |
|---------------------------|----------------------------|---|-------|-------|
| | | Lower | Upper | |
| — | — | — | — | — |
| AC018000 | REVISION NUMBER | 1.0 | | |
| AC018000 | ASPECT | CLEAR LIQUID | | |
| AC018000 | COLOUR | PALE YELLOW TO DARK ORANGE CHARACTERISTIC | | |
| AC018000 | ODOUR | | | |
| FC0031A0 | SPECIFIC GRAVITY (20°C) | 1.085 | 1.115 | |
| FC0032A0 | REFRACTIVE INDEX (20°C) | 1.370 | 1.400 | |
| FC0064A0 | pH VALUE (20°C) | 4.0 | 6.0 | |
| JC0054B0 | TOTAL GERMS | 100 MAX CFU/G | | |
| JC0054B0 | MOULDS/YEASTS | 10 MAX CFU/G | | |

Between 15-25°C, dark in closed containers
The performed analysis are guaranteed on original packaging
When stored accordingly, stable for 24 months



Toxicological dossier

Product Name: Strawberry Liquid Fruit Extract

INCI Name : Water, Glycerin, Fragaria Vesca (Strawberry) Fruit Extract

INCI Name EU: to follow Cosing, the European Commission database on <http://ec.europa.eu/consumers/cosmetics/cosing/>

Composition :

(A: > 50 %; B: 25 - 50 %; C: 10 - 25 %; D: 5 - 10 %; E: 1 - 5 %; F: 0.1 - 1 %; G: < 0.1 %)

| | |
|---|---|
| Water | A |
| Glycerin | B |
| Fragaria Vesca (Strawberry) Fruit Extract | E |

Origin of raw materials :

- Plant origin : Glycerin
 - from organic culture : No
 - free of GMO : Yes
- Plant origin : Fragaria Vesca
 - plant part : Fruit
 - from organic culture : No
 - free of GMO : Yes
- Biotechnologic and plant origin : Citric Acid
- Synthetic origin : Potassium Sorbate, Sodium Benzoate
- Animal origin : No

Preservatives : Potassium Sorbate approx. 0.3 %
Sodium Benzoate approx. 0.3 %

Antioxidant : None

Co-additive: Citric Acid as pH buffer approx. 0.1 %

Manufacturing process : Multistep manufacturing process : solubilisation of a concentrated strawberry fruit juice in water/glycerine, preservation, conditioning and filling

Microbiological Data :

| | | |
|---|----------------------------|---------------|
| ⇒ | Bacteria | < 100 cfu / g |
| ⇒ | Moulds and yeasts | < 10 cfu / g |
| ⇒ | Pathogenic Micro-organisms | Not tested |

Contamination by trace elements :

| | | |
|---|----------------|---|
| ⇒ | Heavy metals : | Total heavy metals expressed as Pb < 10 ppm according to Ph. Eur. 2.4.8 method C or USP <231> method II. Conclusion by analogy |
| ⇒ | Pesticides: | Pesticides are expected to pass DFG S 19 (according to "Rückstandshöchstmengenverordnung") Conclusion by analogy |
| ⇒ | Impurities : | Not expected – not tested |

Impurities are residual monomer, dioxane, chloroacetic acid, 3-Chloropropanol, nitrosamines, amine, polychloro biphenyls, benzene, nats, polychloro dibenzo dioxins and dibenzo furans and dimethyl aminopropylamine

| | | |
|---|--------------------|---------------------------|
| ⇒ | Residual solvents: | Not expected – not tested |
|---|--------------------|---------------------------|

Total volatile components / Allergens content :

We herewith confirm that **Strawberry Liquid Fruit Extract**, meets the following properties:

| CAS-No. | Allergen | Content expected |
|------------|--------------------------|------------------|
| 122-40-7 | Amyl cinnamic aldehyde | < 1ppm* |
| 101-85-9 | Amyl cinnamic alcohol | < 1ppm* |
| 105-13-5 | Anisyl alcohol | < 1ppm* |
| 100-51-6 | Benzyl alcohol | < 1ppm* |
| 120-51-4 | Benzyl benzoate | < 1ppm* |
| 103-41-3 | Benzyl cinnamate | < 1ppm* |
| 118-58-1 | Benzyl salicylate | < 1ppm* |
| 104-55-2 | Cinnamic aldehyde | < 1ppm* |
| 104-54-1 | Cinnamic alcohol | < 1ppm* |
| 5392-40-5 | Citral | < 1ppm* |
| 106-22-9 | Citronellol | < 1ppm* |
| 91-64-5 | Coumarin | < 1ppm* |
| 97-53-0 | Eugenol | < 1ppm* |
| 4602-84-0 | Farnesol | < 1ppm* |
| 106-24-1 | Geraniol | < 1ppm* |
| 101-86-0 | Hexyl cinnamaldehyde | < 1ppm* |
| 107-75-5 | Hydroxycitronellal | < 1ppm* |
| 97-54-1 | Isoeugenol | < 1ppm* |
| 80-54-6 | Lilial | < 1ppm* |
| 5989-27-5 | d-Limonene | < 1ppm* |
| 78-70-6 | Linalool | < 1ppm* |
| 31906-04-4 | Lylal | < 1ppm* |
| 111-12-6 | Methyl heptine carbonate | < 1ppm* |
| 127-51-5 | Methyl ionone alpha iso | < 1ppm* |
| 90028-68-5 | Oakmoss | < 1ppm* |
| 90028-67-4 | Tree Moss | < 1ppm* |

*not expected as a component of the fruits of *Fragaria Vesca*

None of the 26 identified allergen perfume compounds (Directive 2003/15 EC) have been added to the product.

The absence of any of these 26 allergens cannot be confirmed, but we attest that they cannot technically occur due to the extraction process used.

The single contents are based on risk estimation which is based on botanical and phytomedicinal reference literature and conclusions by analogy.

Hazardous & CMR Substances

We herewith confirm that, with reference to the confirmation of our raw materials suppliers, we do not add any CMR (Carcinogenic, Mutagenic, Toxic for reproduction) substances graded 1A, 1B or 2 in accordance with the Annex VI of the European Regulation 1272/2008 and its amendments to our product listed below.

Strawberry Liquid Fruit Extract

The product fulfils the requirement of Article 15 of the European Regulation 1223/2009 and its amendments.

Botanical preparations which contain technically unavoidable traces or impurities of plant constituents listed as CMR in the European Regulation 1272/2008 are not affected by the exclusion listed in Article 15 of the European Regulation 1223/2009.

Animal testing

The manufacturer confirms that since 1990, their products have not been tested on animals in order to meet the requirements of the Cosmetic Regulation and we will not carry out animal tests in the future to meet the requirements of the Cosmetic Regulation.

We are aware that the individual substances that comprise our products may have been tested on animals in the past, but these tests were not carried out either by or on the request of MADAR or the manufacturer.

MADAR therefore confirms the compliance of our products with the Cosmetic Regulation 1223/2009 concerning the ban on testing in animals in order to meet the requirements of the Cosmetic Regulation.

Main actives in the plant :

- ⇒ Tannins
- ⇒ Fruit acids
- ⇒ Sugars, proteins

Main actives in the extract :

Not determined

Toxicological Data :

We do not see any danger in using Strawberry Liquid Fruit Extract in cosmetic agents taking into account the application form, the concentration, the amount used and the frequency of use.

We haven't carried out clinical studies on Strawberry Liquid Fruit Extract, but according to literature, Glycerin and Fragaria Vesca don't contain potentially toxic compounds and they are safe when used appropriately.

Strawberries fruits are commonly eaten since hundreds of years.

⇒ Human skin irritation :

Glycerin : Skin irritation studies on albino rabbit showed that no skin irritation appeared after 90 days of application.⁽²⁾

⇒ Mucous membrane irritation :

Glycerin : Eye irritation studies on albino rabbit showed that there was no measurable eye irritation.⁽²⁾

⇒ Sensitisation potential :

Glycerin : Sensitization tests on guinea pigs showed that no sensitization occurred.⁽²⁾

Fragaria vesca: There is food allergy against strawberries linked to a protein that is said to be not destroyed during processing / heating. This protein is linked to the red colour and people who have birch pollen allergy may react also against strawberry fruits.
People with known allergy against strawberries should avoid any cosmetics containing strawberry.⁽³⁾⁽⁴⁾

⇒ Cytotoxicity : No data available

⇒ Phototoxicity : No data available

- ⇒ Mutagenicity (e.g. Ames Test) : No data available
- ⇒ Carcinogenicity : No data available
- ⇒ Acute toxicity :
 - Glycerin : LD₅₀ (mice, oral) = 23 g/kg
 - LD₅₀ (rats, oral) = 27.2 g/kg
 - LD₅₀ (guinea pigs, oral) = 10 g/kg ⁽²⁾
- ⇒ Inhalation toxicity : No data available
- ⇒ Chronic toxicity : No data available
- ⇒ Reproduction toxicity : No data available

Ecological Data :

Our product contains mainly (Glycerin / Water) as vehicle/carrier :

- ⇒ The ecological information about Glycerin is ⁽²⁾ :
 - Environmental toxicity : LC₅₀ (fish – 96 hours) > 1000 mg/l
 - EC₅₀ (Daphnia magna– 24 hours) > 10 g/l
 - EC₅₀ (Pseudomonias putida – 16 hours) > 10 g/l
 - Biodegradability : Totally biodegradable
- ⇒ Water hazard class: 1 (self classification)

Phytopharmaceutical Data :

- ⇒ External uses : used in creams, lotions, shampoos, for bath additives and for refreshing and astringent face and hair tonics
- ⇒ Contraindications : None known
- ⇒ Side effects : None known
- ⇒ Interactions: None known

References :

- (1) Martindale, The Extra Pharmacopoea, 30th Edition for toxicological information regarding Glycerin
- (2) Comparative study of synthetic and natural Glycerin
- (3) <http://www.sigmaaldrich.com/life-science/nutrition-research/learning-center/plant-profiler/fragaria-vesca.printerview.html>
- (4) <http://usehealthguide.com/strawberry-side-effect>

12/19

This toxicological dossier replaces the earlier one dated 03/11, 04/12, 04/15

Non-warranty

The information in this publication is believed to be accurate and is given in good faith but no representation or warranty as to its completeness or accuracy is made. Suggestions for uses or applications are only opinions. Users are responsible for determining the suitability of these products for their own particular purpose. No representation or warranty, express or implied, is made with respect to information or products including without limitation warranties of merchantability or fitness for a particular purpose or non-infringement of any third party patent or other intellectual property rights including without limit copyright, trademark and designs.



Date : 18.03.2020

STATEMENT

We hereby confirm that the below mentioned product is derived from non-animal sources. the manufacturer further confirms that since 1990, this product has not been tested on animals in order to meet the requirements of the Cosmetic Regulation neither by nor on the request of them and we will not carry out animal tests in the future to meet the requirements of the Cosmetic Regulation.

Strawberry Liquid Fruit Extract

Cross-contamination cannot be excluded considering that some of the raw materials used in our production site are from animals' origins, but the risk is expected to be very low as adequate quality measures are implemented to limit the occurrence of contamination.

This information is given in good faith with our actual knowledge. This correspondence will not be automatically updated in the future.

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