



Certificate of Analysis

Batch Details
Product Name: STRAWBERRY LIQUID FRUIT EXTRACT
Product Code: FESTRA
Batch No: 4340206
Best Before End: OCTOBER 2020

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:

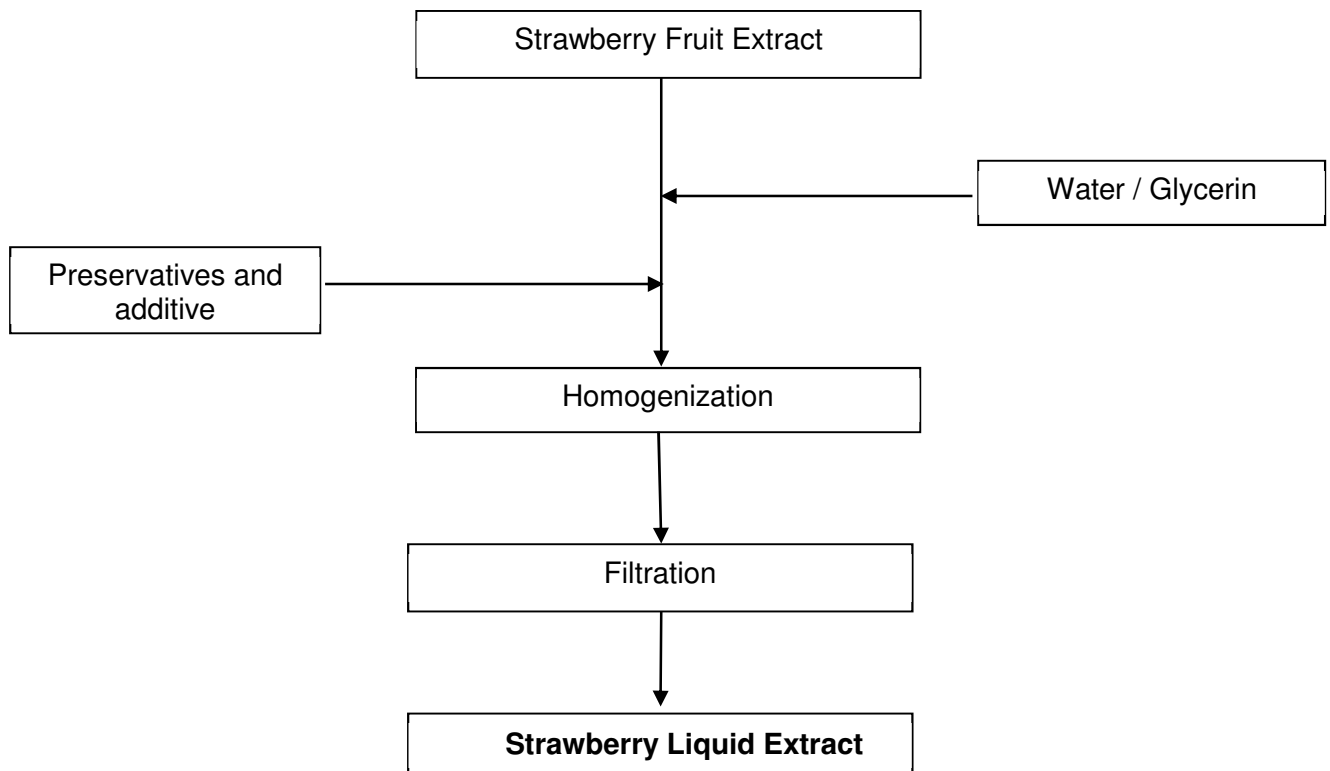
Between 15-25°C, dark in closed containers

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



1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product identifier:	Strawberry Liquid Fruit Extract
Relevant identified uses of the substance or mixture and uses advised against:	Cosmetic Products
Product code:	FESTRA
Details of the supplier of the safety data sheet:	MADAR Corporation Limited 19-20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA Approved sellers - Mystic Moments, New Directions, World of Moulds
	Phone: +44 (0) 1425 653574 Fax: +44 (0) 1425 658182
Emergency telephone number:	

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:	The product does not need to be labelled in accordance with regulation (CE) 1907/2006 - 1272/2008 on classification, packaging and labelling of dangerous substances
EC number:	Not applicable.
Label elements (R - S):	
- Symbol(s):	None according to the regulation (EC) No 1907/2006 - 1272/2008 and amending.
- R-phrase(s):	None according to the regulation (EC) No 1907/2006 - 1272/2008 and amending.
- S-phrase(s):	None according to the regulation (EC) No 1907/2006 - 1272/2008 and amending.
Most important hazards:	none
Other hazards:	none

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component(s) contributing to the hazard:	None according to the regulation (EC) No 1907/2006 - 1272/2008 and amending.
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4. FIRST AID MEASURES

Description of first aid measures:	In case of doubt or persistent symptoms, consult always a physician.
Most important symptoms and effects, both acute and delayed:	There is no data available on the product itself.
- Inhalation:	Move to fresh air in case of accidental inhalation.
- Skin contact:	Wash skin with plenty of water and soap.
- Eye contact:	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Ingestion:	If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.
- Indication of any immediate medical attention and special treatment needed :	Notes to physician

5. FIREFIGHTING MEASURES

Extinguishing media:	foam, powder, carbon dioxide (CO2)
Extinguishing media which must NOT be used for safety reasons:	Do not use water jet.
Special hazards arising from the substance or mixture:	In case of fire and/or explosion do not breathe fumes.

Version: 2

Review date: 21/06/2011

Advice for firefighters: Standard

Specific method(s): Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Concerning personal protective equipment to use, see item 8.

Environmental precautions: Dike and contain spill. Prevent product from entering drains. Concerning disposal elimination after cleaning, see item 13.

Methods and material for containment and cleaning up: Contain and collect spillages with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth

Reference to other sections: Concerning personal protective equipment to use, see item 8.

7. HANDLING AND STORAGE

Handling:

- Precautions for safe handling: Smoking, eating and drinking is prohibited in areas of storage and use. For personal protection, see Section 8.
- Technical condition(s): The product should only be used in areas from which all naked lights and other sources of ignition have been excluded.
- Safe handling advice(s): Opened containers must be carefully closed and kept upright to avoid leakage.

Storage:

- Conditions for safe storage, including any incompatibilities: Keep container tightly closed. Store always product in container of same material as original container.
- Technical condition(s): Not applicable
- Storage condition(s): Keep at temperature not exceeding (°C): 15-25
- Separation of incompatible product(s): No incompatible products to be specially mentioned.
- Packaging / tank material: made of the same material as the supply container.

Specific end use(s): Not determined.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

- Exposure limit(s): No data available.

Exposure controls:

- Respiratory protection: No personal breathing protective equipment is normally required.
- Hand protection: Wear suitable gloves. (natural rubber gloves., Latex gloves, PVC or other plastic material gloves)
- Skin and body protection: protective clothing
- Eye protection: Eye protection designed to protect against liquid splashes should be worn.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

- Appearance: Clear liquid
- Colour: Orange brown to strong orange brown
- Odour: characteristic
- pH: 4.0 -7.0 (20°C)
- Boiling point/range: Not determined.

Version: 2

Review date: 21/06/2011

- Flash point: > 100°C
- Explosion limits: Not determined.
- Relative density (water = 1): 1.035 -1.065 kg/l (20°C)
- Viscosity: Not determined.
- Other information:
- Water solubility: Yes
- Fat solubility: No
- Solvent solubility: soluble in most organic solvents

Other data:

10. STABILITY AND REACTIVITY

- Reactivity: Stable under the recommended storage and handling conditions. (See Section 7).
- Chemical stability: Stable in use and storage conditions as recommended in item 7.
- Possibility of hazardous reactions: Stable in use and storage conditions as recommended in item 7.
- Conditions to avoid: None under normal use.
- Incompatible materials: No data available.
- Hazardous decomposition products: No data available.

11. TOXICOLOGICAL INFORMATION

- Information on toxicological effects: Health injuries are not known or expected under normal use.
- Acute toxicity:
- Inhalation: No data available.
- Skin contact: No data available.
- Eyes contact: No data available.
- Ingestion: No data available.

12. ECOLOGICAL INFORMATION

- Toxicity: Ecological problems are not known or expected under normal use.
- Persistence and degradability: Contains no substances known to be not biodegradable in wastewater treatment plants.
- Bioaccumulative potential: Not determined.
- Mobility in soil: Not determined.
- Other adverse effects: Not determined.
- Results of PBT and vPvB assessment: Not determined.
- General information(s): The product should not be allowed to enter drains or water courses or be deposited where it can affect ground or surface waters.

13. DISPOSAL CONSIDERATIONS

- Waste treatment methods: Collect all waste in suitable and labelled containers and dispose according to local legislation.
- Contaminated packaging: Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act.

14. TRANSPORT INFORMATION

- General information(s): Not classified as dangerous in the meaning of transport regulations.
- UN number: Not applicable.
- Environmental hazards: Ecological problems are not known or expected under normal use.

Version: 2

Review date: 21/06/2011

Special precautions for user: For personal protection, see Section 8.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture: The user is always responsible for ensuring that the requirements of relevant legislation are complied with.

Chemical safety assessment: Not applicable.

16. OTHER INFORMATION

Text of R phrases listed in section 3:

Important remarks: As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.

References and / or bibliography: Code ED6-15-05c

- First edition date: 28/04/2004
 - Previous revision date: 21/06/2011
 - Review date: 21/06/2011
 - Version: 2



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 %
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Non-warranty

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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.

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Specification

Product Name: STRAWBERRY LIQUID FRUIT EXTRACT
Product Code: FESTRA
Specification: 10/12/2012

Period of validity of Certificate of Analysis for material stored in unopened containers and stored in cool dry conditions (unless otherwise specified): 730 days.

Analy. Test Method No.	Characteristic	Specification Limits		Units
		Lower	Upper	
	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

according to 6th and 7th Amendments of the Directive 76/768/EEC

Product Name: **Strawberry Liquid Fruit Extract**

Article No: **FESTRA**

INCI Name : Propylene Glycol, Water, 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 %)

Propylene Glycol	B
Water	B
Fragaria Vesca (Strawberry) Fruit Extract	D

Origin of raw materials :

- Plant origin : Fragaria Vesca
 - plant part : Fruit
 - from organic culture : No
 - free of GMO : Yes
- Synthetic origin : Propylene Glycol and preservatives
- Animal origin : No

Preservatives :

Phenova	approx 0.6 %
Potassium Sorbate	approx 0.5 %

Phenova composition :

Phenoxyethanol	A
Methylparaben	C
Ethylparaben	E
Butylparaben	E
Propylparaben	E
Isobutylparaben	E

Antioxidant : None

Manufacturing process : Multistep manufacturing starting by Fragaria Vesca fruit to be concentrated to fruit juice in a first step. Homogenisation of the fruit concentrate in a propylene glycol-aqueous medium, followed by standardisation with natural aroma, preservation, filtration, conditioning and filling

Maximum recommended level for safe use : Up to **10 %**

Microbiological Data :

⇒	Bacteria	< 100 cfu / ml
⇒	Moulds and yeasts	< 10 cfu / ml
⇒	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, nuts, polychloro dibenzo dioxins and dibenzo furans and dimethyl aminopropylamine

⇒	Residual solvents:	
	Ethanol	Max. 700 ppm

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

MADAR Corporation confirms that since 1990, this product has not been tested on animals and we will not carry out animal tests in the future in order to meet the requirements of the Cosmetic Directive.

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

MADAR therefore confirm the compliance of our product with the 7th amendment 2003/15/EC to the Cosmetic Directive 76/768/EEC concerning the ban on testing in animals in order to meet the requirements of the Cosmetic Directive.

Main actives in the plant :

⇒ Tannins, anthocyan, flavone glucosides, fruit acids, fructose and pectin

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, Propylene Glycol 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 :

Propylene Glycol : In a 24-h skin irritation test involving nude mice, there were no reactions to 10% PG.⁽¹⁾
Draize test results indicated that PG was, at most, a mild skin irritant when applied for 24 h to abraded and intact skin of rabbits. When PG was applied to the skin of guinea pigs and rabbits (guinea pigs and rabbits lack sweat glands) for 48 h using open and closed patches, no reactions were observed. The results of 48 h and 21 day open and closed patch tests involving Gottingen swine (no sweat glands) indicated no reactions to PG.⁽¹⁾

⇒ Mucous membrane irritation :

Propylene Glycol : Propylene glycol did not induce corneal damage in rabbits in the Draize test and was classified as a slight ocular irritant in another ocular irritation study.⁽¹⁾

⇒ Sensitisation potential :

Propylene Glycol : Results were negative for 100% PG in a mouse external ear swelling sensitization test. The results of a GMPT, OET and chamber (Finn chamber) test indicated no sensitization reactions to 70% PG.⁽¹⁾

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.⁽²⁾⁽³⁾

- ⇒ Cytotoxicity : No data available
- ⇒ Phototoxicity : No data available
- ⇒ Mutagenicity (e.g. Ames Test) :
 Propylene Glycol : In the Ames test, PG was not mutagenic in strains TA1535, TA1537, TA1538, TA98 and TA100 of Salmonella typhimurium with and without metabolic activation.⁽¹⁾
- ⇒ Carcinogenicity :
 Propylene glycol : Not carcinogenic ⁽¹⁾
- ⇒ Acute toxicity :
 Propylene glycol : Propylene glycol is relatively harmless.
 Oral LD₅₀ = 21 g/kg body wt in rats ⁽¹⁾
- ⇒ Inhalation toxicity : No data available
- ⇒ Chronic toxicity : No data available
- ⇒ Reproduction toxicity :
 Propylene glycol : PG was not teratogenic in female CD-1 mice when administered at a concentration of 10 000 ppm on days 8-12 of gestation.⁽¹⁾

Ecological Data :

Our product contains mainly (Propylene Glycol / Water) vehicle :

- ⇒ The ecological information about Propylene Glycol is :
 Environmental toxicity : LC₅₀ (fish – 96 hours) > 54900 mg/l
 EC₅₀ (Daphnia – 48 hours) > 43500 mg/l
 EC₅₀ (Algae – 78 hours) > 19000 mg/l
 Biodegradability : Easily biodegradable
- ⇒ Water hazard class: 1 (self classification)

Phytopharmaceutical Data :

- ⇒ External uses : used as an additive for lotions, tonics, milks, bath- and shower formulations
- ⇒ Contraindications : None known
- ⇒ Side effects : None known
- ⇒ Interactions: None known

References :

1. CIR Report, CTFA 2006 for toxicological information regarding Propylene Glycol
2. <http://www.sigmaaldrich.com/life-science/nutrition-research/learning-center/plant-profiler/fragaria-vesca.printerview.html>
3. <http://usehealthguide.com/strawberry-side-effect>

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