



## Certificate of Analysis

Product Name: BLUEBERRY LIQUID FRUIT EXTRACT  
Batch No: 4448402  
Best Before End: OCTOBER 2023

### Quality Control

Results Analytical Test		Specification Limit		Value	Status
Method No.	Characteristic	Lower	Upper		
	Addendum 00	PASS OR FAIL		Pass	p
	REVISION	1.0		Pass	p
AC018000	NUMBER ASPECT	CLEAR LIQUID		Pass	p
AC018000	COLOUR	VERY PALE YELLOW TO		Pass	p
	COLOUR	YELLOW			
AC018000	ODOUR	POSSIBLE PINK NUANCE		Pass	p
AC018000		CHARACTERISTIC		Pass	p
◆0031 AO	SPECIFIC GRAVITY (20°C)	1.115	1.145	1.133	p
FC0032AO	REFRACTIVE INDEX (20°C)	1.385	1.415	1.401	p
EC003000	WATER CONTENT	47.0	52.0	49.2 %	p
	KARL FISCHER				
FC0064AO	pH VALUE (20°C)	4.0	6.0	5.6	p
JC0054BO	MOULDS/YEASTS	10 MAX CFU/G		Pass	p
JC0054BO	TOTAL GERMS	100 MAX CFU/G		Pass	p

Long term 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

The quality tests on this batch are reported above. The tests carried out are those necessary to demonstrate compliance with our product specification and are not intended to guarantee the product as suitable for any application beyond those contained in the specification. We recommend you perform your own quality and or identification checks on receipt



Date: 29.03.2019

To whom it may concern:

### **STATEMENT**

We herewith confirm that the product **Blueberry Liquid Fruit Extract** 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

However, this confirmation does not permit any claims such as "produced without genetically modified organism" for products manufactures from our delivered product, according the EC regulations N° 1829/2003 and 1830/2003 because this law is not applicable to non-food products.

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.



## Product Information File – cosmetic ingredient

Product Name: **Blueberry Liquid Fruit Extract**

**PCPC INCI Name** : Water, Glycerin, Vaccinium Myrtillus Fruit Extract

**EU INCI Name** : Water, Glycerin, Vaccinium Myrtillus Fruit Extract

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### **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, expressed or implied, is made with respect to information or products including, without limitation, warranties of merchantability, fitness for a particular purpose, non-infringement of any third party patent or other intellectual property rights including, without limit, copyright, trademark and designs.*

## I.PRODUCT INFORMATION

### Composition

<u>Ingredient PCPC INCI Name</u>	<u>CAS</u>	<u>EINECS</u>	<u>Function</u>	<u>Origin*</u>	<u>Free of GMO (yes/no)</u>	<u>Concentration (%)</u> <i>based on theoretical composition</i>
Water	7732-18-5	231-791-2	Solvent	N	N/A	47-51
Glycerin	56-81-5	200-289-5	Solvent	V	Yes	47-51
Vaccinium Myrtillus Fruit Extract**	84082-34-8	281-983-5	Botanical	V (organic)	Yes	1-5**
Potassium Sorbate	24634-61-5	246-376-1	Preservative	S	N/A	Approx.0.4
Sorbic Acid	110-44-1	203-768-7	Preservative	S	N/A	Approx. 0.15

\*V: vegetable; S: synthetic, B: biotechnological; N: natural

\*\* Vaccinium Myrtillus Fruit Extract is expressed as **dried** fruits

The value of the water content in the final selling specification (SAP specification) per batch will be slightly higher due to the water entry by the plant material. The definition of "water content" in selling spec is the total water composed of process and plant water. The "water content" in the PIF is the process water only.

### Microbiological data

#### Bacteria

< 100 cfu / g

#### Moulds and yeasts

< 10 cfu / g

#### Pathogenic Micro-organisms

Not tested

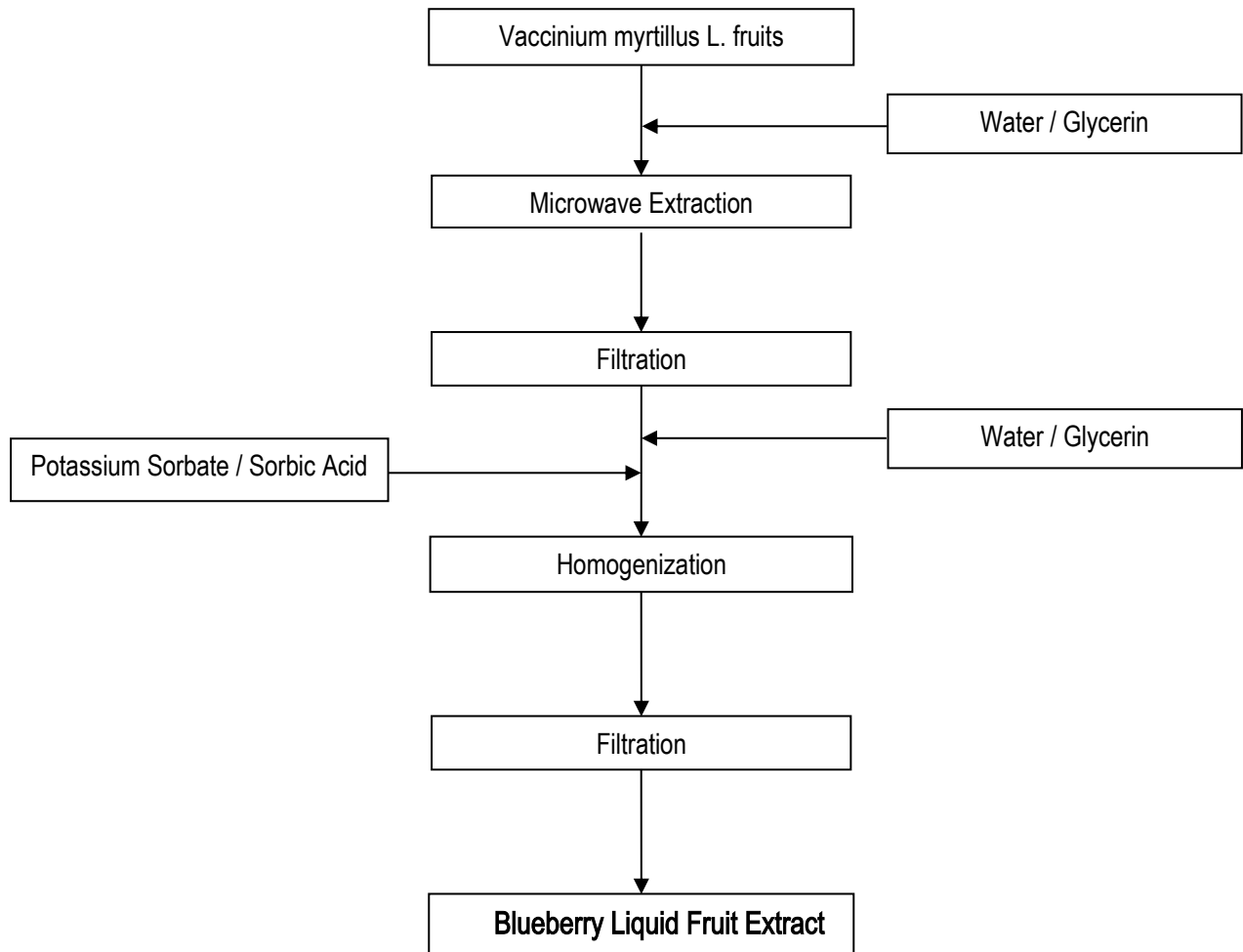
#### Challenge test

Conform at 28 days for A criterion according to NF EN ISO 11930 / Report Available

### Uses

#### Cosmetic application :

As an additive in gentle face tonics  
Soothing and calming formulations for sensitive or young skin  
After shaves  
Hair care from dull to greasy hair  
Shower gels



*The plants used for Blueberry Liquid Fruit Extract have been organically cultivated. Therefore pesticides, heavy metals or impurities are not expected*

**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

The analysis of the heavy metals is not performed in routine on each batch and is not part of the product's specifications.

**Residual solvents:**

Not expected

**Other impurities :**

\*These substances are not used as raw material and are not intentionally added to the product. Based on the manufacturing process, the above mentioned substances are not expected to be present. However, these substances are not a part of our routine analytical procedures and quality control system; therefore, they are not measured on a regular basis.

- Ethylene/Diethylene Glycol:

Diethylene Glycol: Glycerin used for the production of Blueberry Liquid Fruit Extract is compliant with the USP monograph (DEG: < 0.10%).

- Formaldehyde: Not added- not expected – not tested\*
- Nitrosamines: Not added- not expected – not tested\*
- VOC: Not added- not expected – not tested\*
- Nonylphenol, alkylphenol, phenol, nonoxynol components: Not added- not expected – not tested\*
- Phthalates: Not added- not expected – not tested\*

<b>Substance</b>	<b>CAS N°</b>
Dibutyl phthalate (DBP)	84-74-2
Diethylhexyl phthalate (DEHP)	117-81-7
Benzyl butyl phthalate (BBP)	85-68-7
Di-n-pentyl phthalate (DnPP)	131-18-0
bis(2-Methoxyethyl) phthalate (DMEP)	117-82-8
Diisopentylphthalate (DiPP)	605-50-5
n-pentyl isopentyl phthalate (DPP)	84777-06-0
Diisobutyl phthalate (DiBP)	84-69-5

- Glycol ethers:

Not added- not expected – not tested\*

<b>Substance</b>	<b>CAS N°</b>
2-methoxyethanol / ethylene glycol monomethyl ether (EGME)	109-86-4
2-methoxyethyl acetate / methylglycol acetate (EGMEA)	110-49-6
2-ethoxyethanol (EGEE)	110-80-5
2-ethoxyethyl acetate (EGEEA)	111-15-9
1,2-dimethoxyethane / ethylene glycol dimethyl ether (EGDME)	110-71-4
Oxybis(2-methoxyethyl) / dimethoxydiglycol (DEGDME)	111-96-6
1,2-bis(2-methoxyethoxy)ethane / triethylene glycol dimethyl ether (TEGDME)	112-49-2
2-butoxyethanol (EGBE)	111-76-2
2-(2-butoxyethoxy)ethanol (DEGBE)	112-34-5
2-(2-ethoxyethoxy)ethanol (DEGEE)	111-90-0

#### **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.

Blueberry Liquid Fruit Extract 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.

#### **VOC :**

Blueberry Liquid Fruit Extract does not contain one or more Volatile Organic Compounds (VOC) in compliance with the Swiss ordinance and the definition of California.

#### **Proposition 65 :**

The ingredients constituting Blueberry Liquid Fruit Extract are not known to the State of California to cause cancer or reproductive toxicity as listed under Proposition 65 State Drinking Water and Toxic Enforcement Act of which we regularly follow the updates.

#### **Palm Oil:**

We herewith confirm that palm oil and palm kernel oil are not used as raw materials and are not intentionally in Blueberry Liquid Fruit Extract, and that it is not produced from palm oil or palm kernel oil derived ingredients, with reference to the confirmation of our raw materials suppliers.

#### **Irradiation:**

We herewith confirm that Blueberry Liquid Fruit Extract has not been irradiated radioactively

### **Allergens – EU Cosmetic Regulation :**

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

<b>CAS-No.</b>	<b>Allergen</b>	<b>Content expected</b>
122-40-7	Amyl cinnamic aldehyde	Not expected
101-85-9	Amyl cinnamic alcohol	Not expected
105-13-5	Anisyl alcohol	Not expected
100-51-6	Benzyl alcohol	Not expected
120-51-4	Benzyl benzoate	Not expected
103-41-3	Benzyl cinnamate	Not expected
118-58-1	Benzyl salicylate	Not expected
104-55-2	Cinnamic aldehyde	Not expected
104-54-1	Cinnamic alcohol	Not expected
5392-40-5	Citral	Not expected
106-22-9	Citronellol	Not expected
91-64-5	Coumarin	Not expected
97-53-0	Eugenol	Not expected
4602-84-0	Farnesol	Not expected
106-24-1	Geraniol	Not expected
101-86-0	Hexyl cinnamaldehyde	Not expected
107-75-5	Hydroxycitronellal	Not expected
97-54-1	Isoeugenol	Not expected
80-54-6	Lilial	Not expected*
5989-27-5	d-Limonene	Not expected
78-70-6	Linalool	Not expected
31906-04-4	Lylal	Not expected*
111-12-6	Methyl heptine carbonate	Not expected
127-51-5	Methyl ionone alpha iso	Not expected
90028-68-5	Oakmoss	Not expected**
90028-67-4	Tree Moss	Not expected**

\* They are synthetic substances that do not occur in botanicals.

\*\* The substances are not expected to be part of the fruits of Vaccinium Myrtillus

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.



We herewith confirm below the contents according to the ISO 16128-1 and ISO 16128-2 standards (including formulation water) of Blueberry Liquid Fruit Extract is:

Natural content (%)	Derived natural origin content (%)*	Organic content (%)	Derived organic origin content (%)
50,4	99,4	8,0	8,0

\* : based on an index of natural origin = 1 for the ingredient Glycerin (Carbon 14 method).

These values are provided according to our interpretation of the standard ISO 16128, theoretical composition and information communicated by our suppliers.

However, this information is calculated according to our interpretation of the standard ISO 16128, theoretical composition and information communicated by our suppliers.

It is likely to evolve along the way of discussions with professional federations of cosmetic industry.

## II. REGULATORY INFORMATION

### **REACH:**

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.

Blueberry Liquid Fruit Extract is so called preparation composed of ingredients (named under REACH as substances).

INCI	CAS	EINECS	REACH status	Comment
Water	7732-18-5	231-791-2	/	/
Glycerin	56-81-5	200-289-5	Exempt	Annex V
Vaccinium Myrtillus Fruit Extract	84082-34-8	281-983-5	Exempt	Production <1T/yr
Potassium Sorbate	24634-61-5	246-376-1	Registered	01-2119950315-41
Sorbic Acid	110-44-1	203-768-7	Registered	01-2119950330-49

If in the future the amount of a substance produced by MADAR would exceed the 1T/year limit, we ensure its registration.

We do not anticipate any disruptions of this MADAR product supplied to our customers. However changes to the product portfolio may become necessary also for reasons not connected with REACH.

### **EU Cosmetic Regulation:**

We herewith confirm that, Blueberry Liquid Fruit Extract complies with the European Cosmetic Regulation EC 1223/2009.

- substances listed in Annexes II, III, IV and VI of the European Cosmetic Regulation 1223/2009 EC are not used as raw material and are not intentionally added

Botanical preparations which contain technically unavoidable traces or impurities of plant constituents listed in Annexes II or III are not affected by the exclusion or restriction of the European Regulation 1223/2009.

- Preservatives used are listed in Annex V of the European Cosmetic Regulation 1223/2009 EC:  
Potassium Sorbate: approx. 0.4 %  
Sorbic Acid: approx. 0.15%

### **Nanomaterial:**

Blueberry Liquid Fruit Extract is not a nano material and does not contain any nano material, according to the Cosmetic Regulation (EC) No 1223/2009 definition of a nano material: 'Nanomaterial' means an insoluble or bio-persistent and intentionally manufactured material with one or more external dimensions, or an internal structure, on the scale from 1 to 100 nm.

### **BSE/TSE:**

Blueberry Liquid Fruit Extract is originated from synthetic and plant raw material with reference to the confirmation of our raw materials suppliers

None of the ingredients used for the production of this product are of bovine, ovine, equine or porcine origin. Therefore, Bovine Spongiform Encephalopathy (BSE) / Transmitting Spongiform Encephalopathy (TSE) risk, as defined in the European Commission Decision 97/534./EC and EMEA/410/10, does not concern this product.

### **CITES:**

Blueberry Liquid Fruit Extract , does not contain endangered species (source CITES list) and is not subject to the Convention of Washington to our knowledge to date.

The plants raw materials used are not parts of Annexes I, II and III of the Convention of Washington.

### **Information about the packaging:**

According to information provided by our suppliers, we can confirm that packaging used for Blueberry Liquid Fruit Extract is conform with the following requirements:

- The packaging is made from HDPE (High Density PolyEthylene)
- is compliant with European REACH regulation CE 1907/2006
- is compliant with European Directive 94/62/CE on packaging and packaging waste
- is compliant to European regulation CE 10/2011 and conform for food use
- is free from animals products and derivatives, free of silicones, free of bisphenol A and phthalates and not concerned by nanotechnologies

### III. INFORMATION ON ANIMAL TESTING

Blueberry Liquid Fruit Extract confirms that since 1990, our 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 Corporation. MADAR Corporation 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.

### IV. ACTIVES and EFFECTS

#### **Main actives in the plant :**

- ⇒ Polyphenols
- ⇒ Fruits acids (AHA)
- ⇒ Saccharides (sucrose)

#### **Main actives in the extract :**

Not determined

### V. TOXICOLOGICAL DATA

#### Toxicity tests on the product

We herewith confirm that none NOAEL measure has been made on this product.

We do not see any danger in using Blueberry 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 Blueberry Liquid Fruit Extract, but according to literature, Glycerin and Vaccinium Myrtillus don't contain potentially toxic compounds and they are safe when used appropriately.

#### Toxicological profile of the ingredients

Bilberries (*Vaccinium myrtillus*) have been eaten for hundreds of years and no adverse effect has been reported.

#### ⇒ Human skin irritation :

Glycerin : Skin irritation studies on albino rabbit showed that no skin irritation appeared after 90 days of application <sup>(1)</sup>

#### ⇒ Mucous membrane irritation :

Glycerin : Eye irritation studies on albino rabbit showed that there was no measurable eye irritation. <sup>(1)</sup>

- ⇒ Sensitisation potential :  
Glycerin : Sensitization tests on guinea pigs showed that no sensitization occurred <sup>(1)</sup>
- ⇒ Cytotoxicity : No data available
- ⇒ Phototoxicity : No data available
- ⇒ Mutagenicity (e.g. Ames Test) :  
Vaccinium Myrtillus: No mutagenic effects were observed <sup>(3)</sup>
- ⇒ Carcinogenicity :  
Vaccinium Myrtillus: No carcinogenic effects were observed <sup>(3)</sup>
- ⇒ Acute toxicity :  
Glycerin: LD<sub>50</sub> (mice, oral) = 23 g/kg  
LD<sub>50</sub> (rats, oral) = 27.2 g/kg  
LD<sub>50</sub> (guinea pigs, oral) = 10 g/kg <sup>(1)</sup>  
  
Vaccinium Myrtillus: Consuming very large amounts may cause stomach upset and increase clotting times.<sup>(2)</sup>  
Dosages as high as 400mg/kg bw have been administered to rats without toxicity.<sup>(3)</sup>
- ⇒ Inhalation toxicity : No data available
- ⇒ Chronic toxicity :  
Vaccinium Myrtillus : None reported <sup>(2)</sup>
- ⇒ Reproduction toxicity : No data available

## Ecological data

Our product contains mainly Glycerin / Water vehicle:

- ⇒ The ecological information about Glycerin is <sup>(1)</sup>:  
Environmental toxicity : LC<sub>50</sub> (fish – 96 hours ) > 1000 mg/l  
EC<sub>50</sub> (Daphnia magna – 24 hours ) > 10 g/l  
EC<sub>50</sub> (Pseudomonias putida – 16 hours ) > 10 g/l  
Biodegradability : Totally biodegradable
- ⇒ Water hazard class: 1 (self classification)

## VI. CONCLUSION AND RECOMMENDATIONS

According to available information from test results or bibliography, we recommend to use the product at a maximum level of: 5% In leave on/rinse off products

**Contraindications:** None known

**Remarks:** None

## VII. REFERENCES

1. Comparative study of synthetic and natural Glycerin
2. Kathi J. Kemper; Longwood Herbal Tasl Force and the Center for Holistic Pediatric Education and Research, 1999; information regarding Bilberry (Vaccinium myrtillus)
3. Vaccinium myrtillus – Bilberry – Monograph-therapeutic uses in natural medicine – Alternative medicine review

*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.*

**Version:** 1  
**Date:** 03/20

This Product Information File replaces the earlier one dated 06/17

## **REACH STATEMENT**

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

### **Blueberry 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
Vaccinium Myrtillus Fruit Extract	84082-34-8	281-983-5	Exempt	Production <1T/yr
Potassium Sorbate	24634-61-5	246-376-1	Registered	01-2119950315-41
Sorbic Acid	110-44-1	203-768-7	Registered	01-2119950330-49

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.

#### **Non-warranty**

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

**BLUEBERRY LIQUID FRUIT EXTRACT**

Version	Revision Date:	Date of last issue:	Print Date :
1.1	10.05.2016	19.11.2015	18.03.2020
		Date of first issue:	
		19.11.2015	

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

**1.1 Product identifier**

Trade name : BLUEBERRY LIQUID FRUIT EXTRACT

Substance name : BOTANICAL EXTRACT

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

Use of the Sub-stance/Mixture : Manufacture of soap and detergents, cleaning and polishing 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 1425 655555

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

**1.4 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). TÜRKİYE: Sağlık Bakanlığı Ulusal Zehir Merkezi - 114

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**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification (REGULATION (EC) No 1272/2008)**

Not a hazardous substance or mixture.

**2.2 Label elements**

**Labelling (REGULATION (EC) No 1272/2008)**

Not a hazardous substance or mixture.



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

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**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.

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**SECTION 3: Composition/information on ingredients**

**3.2 Mixtures**

**Hazardous components**

Remarks : No hazardous ingredients

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**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.

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**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 carbon dioxide.
Unsuitable extinguishing media	: High volume water jet

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according to Regulation (EC) No. 1907/2006

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**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.

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**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.

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**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.

**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.

**SAFETY DATA SHEET**  
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Recommended storage temperature : 15 - 25 °C

Other data : Recommended storage temperature  
Stable under recommended storage conditions.

**7.3 Specific end use(s)**

Specific use(s) : Manufacture of chemical products

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**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/m3	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.

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**SECTION 9: Physical and chemical properties**

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

Appearance : clear, liquid

Colour : light yellow

Odour : characteristic

Odour Threshold : No data available

pH : 4.0 - 6.0, (20 °C)

Melting point : No data available

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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	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 1.115 - 1.145 g/cm <sup>3</sup> (20 °C)

Solubility(ies)	
Water solubility	: soluble
Solubility in other solvents	: not determined

Partition coefficient: n-octanol/water	: 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

## 9.2 Other information

No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

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**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

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**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

**Serious eye damage/eye irritation**

**Product:**

Remarks: No data available

**Respiratory or skin sensitisation**

**Product:**

Remarks: No data available

**Germ cell mutagenicity**

**Product:**

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Genotoxicity in vitro : Remarks: No data available

**Carcinogenicity**

**Product:**

Carcinogenicity - Assessment : No data available

**Reproductive toxicity**

**Product:**

Effects on fertility :  
Test substance: 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

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**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

**12.3 Bioaccumulative potential**

**Product:**

Bioaccumulation : Remarks: No data available

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#### 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

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### 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.

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### 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

#### 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

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**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

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**SECTION 15: Regulatory information**

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

Water contaminating class : WGK 1 slightly water endangering  
(Germany)

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

CH INV	: On the inventory, or in compliance with the inventory
DSL	: All components of this product are on the Canadian DSL
AICS	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory

**15.2 Chemical Safety Assessment**

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**SECTION 16: Other information**

**Full text of other abbreviations**

(Q)SAR - (Quantitative) Structure Activity Relationship; 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; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; DIN - Standard of the German Institute for Standardisation; 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; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; 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; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal 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; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; 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; TRGS - Technical Rule for Hazardous Substances; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative;

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DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice

**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



Date: 18.03.2020

**Product Name:** BLUEBERRY LIQUID FRUIT EXTRACT  
**Product Code:** FEBLUE  
**Specification:** 14/03/2019

Analy. Test Method No.	Characteristic	Specification Limits		Units
		Lower	Upper	
	REVISION NUMBER	1.0		
AC018000	ASPECT	CLEAR LIQUID		
AC018000	COLOUR	VERY PALE YELLOW TO YELLOW		
AC018000	COLOUR	POSSIBLE PINK NUANCE		
AC018000	ODOUR	CHARACTERISTIC		
FC0031A0	SPECIFIC GRAVITY (20°C)	1,115	1,145	
FC0032A0	REFRACTIVE INDEX (20°C)	1,385	1,415	
FC0064A0	pH VALUE (20°C)	4,0	6,0	
EC003000	WATER CONTENT	47,0	52,0	%
	KARL FISCHER			
JC0054B0	MOULDS/YEASTS	10 MAX CFU/G		
JC0054B0	TOTAL GERMS	100 MAX CFU/G		

Storage at low temperature (< 15°C) may cause some particles flocculation which are solubilised when the product is stored at room temperature before use.

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

We hereby certify that the plants used for this production are originated from certified organic culture according to last version of EEC Council Regulation for organic agriculture.



Date: 03.08.2018

To whom it may concern:

## **STATEMENT**

We hereby confirm that the below mentioned product is derived from non-animal sources. We further confirm that since 1990, this product has 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.

### **Blueberry Liquid Fruit Extract**

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