



Certificate of Analysis

Batch Details

Product Name: GRAPEFRUIT LIQUID FRUIT EXTRACT
Batch No: 4518806
Best Before End: Sept 2025

Quality Control Results

Method No.	Characteristic	Specification Limit		Value	Unit	Status
		Lower	Upper			
	Addendum 00	PASS OR FAIL		Pass		P
	REVISION NUMBER	2.0		Pass		P
AC018000	APPEARANCE FORM	LIQUID		Pass		P
AC018000	APPEARANCE CLARITY	CLEAR		Pass		P
AC018000	APPEARANCE COLOUR	VERY PALE YELLOW TO YELLOW		Pass		P
AC018000	ODOUR	CHARACTERISTIC		Pass		P
FC0031A0	SPECIFIC GRAVITY (20°C)	1.020	1.050	1.033		P
FC0032A0	REFRACTIVE INDEX (20°C)	1.355	1.385	1.370		P
FC0064A0	pH VALUE (20°C)	4.0	7.0	5.6		P
FC0028A0	DRY RESIDUE (2.5g-105°C-15h)	0.5	5.0	1.8	%	P
JC0054B0	MOULDS/YEASTS	10 MAX CFU/G		Pass		P
JC0054B0	TOTAL GERMS	100 MAX CFU/G		Pass		P

Product Information File – cosmetic ingredient

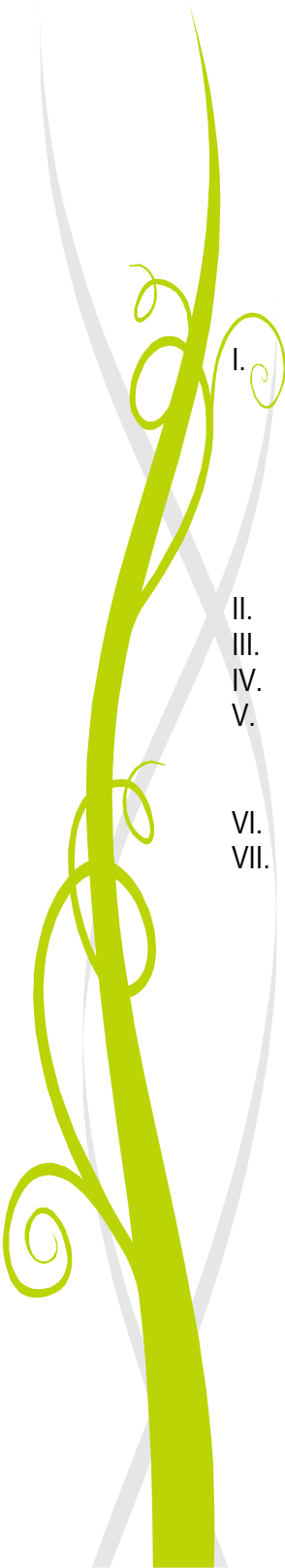
Product Name: **Grapefruit Liquid Fruit Extract**

PCPC INCI Name:

Water, Propylene Glycol, Citrus Grandis (Grapefruit) Fruit Extract

Aqua, Propylene Glycol, Citrus Grandis Fruit Extract

EU INCI Name:

- 
- A decorative graphic on the left side of the page, consisting of a thick green vertical stem with several thin, curly green vines extending from it, set against a light grey background.
- I. Product information
 - *Composition*
 - *Microbiological data*
 - *Product certifications*
 - *Manufacturing process – flow chart*
 - *Impurities, traces*
 - *Naturality – ISO16128*
 - II. Regulatory information
 - III. Information on animal testing
 - IV. Actives and effects
 - V. Toxicological data
 - *Toxicity tests on the product*
 - *Toxicological profile of the ingredients*
 - VI. Conclusion and recommendations
 - VII. References

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</u> (Yes / No)	<u>Concentration (%)</u> <i>based on theoretical composition</i>
Water	7732-18-5	231-791-2	Solvent	N	N/A	60 – 70 %
Propylene Glycol	57-55-6	200-338-0	Solvent	S	N/A	25 – 35 %
Citrus Grandis (Grapefruit) Fruit Extract	90045-43-5	289-904-6	Plant	V	Yes	1 – 10 % **
Potassium Sorbate	24634-61-5	246-376-1	Preservative	S	N/A	Approx. 0,5 %
Citric Acid	5949-29-1	611-842-9	Co-additive	V+B	Yes	Approx. 0,06 %

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

** Citrus Grandis (Grapefruit) Fruit Extract is expressed as fresh fruit

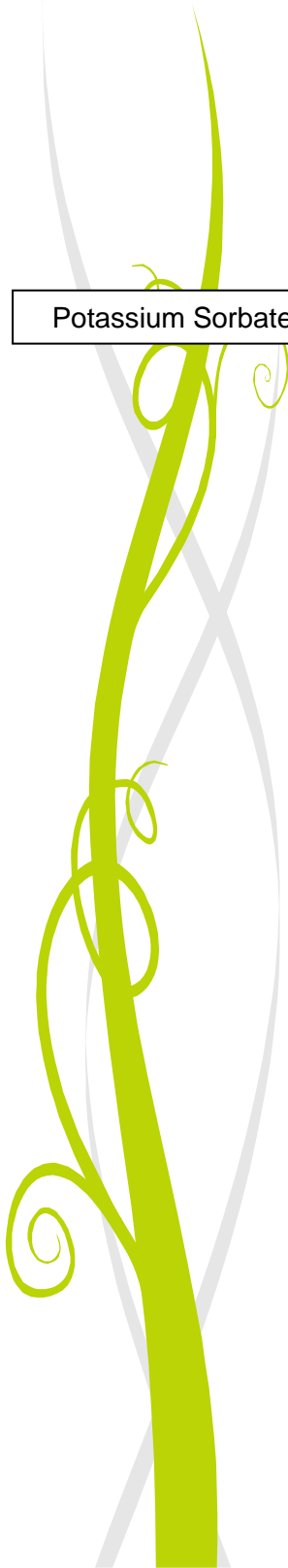
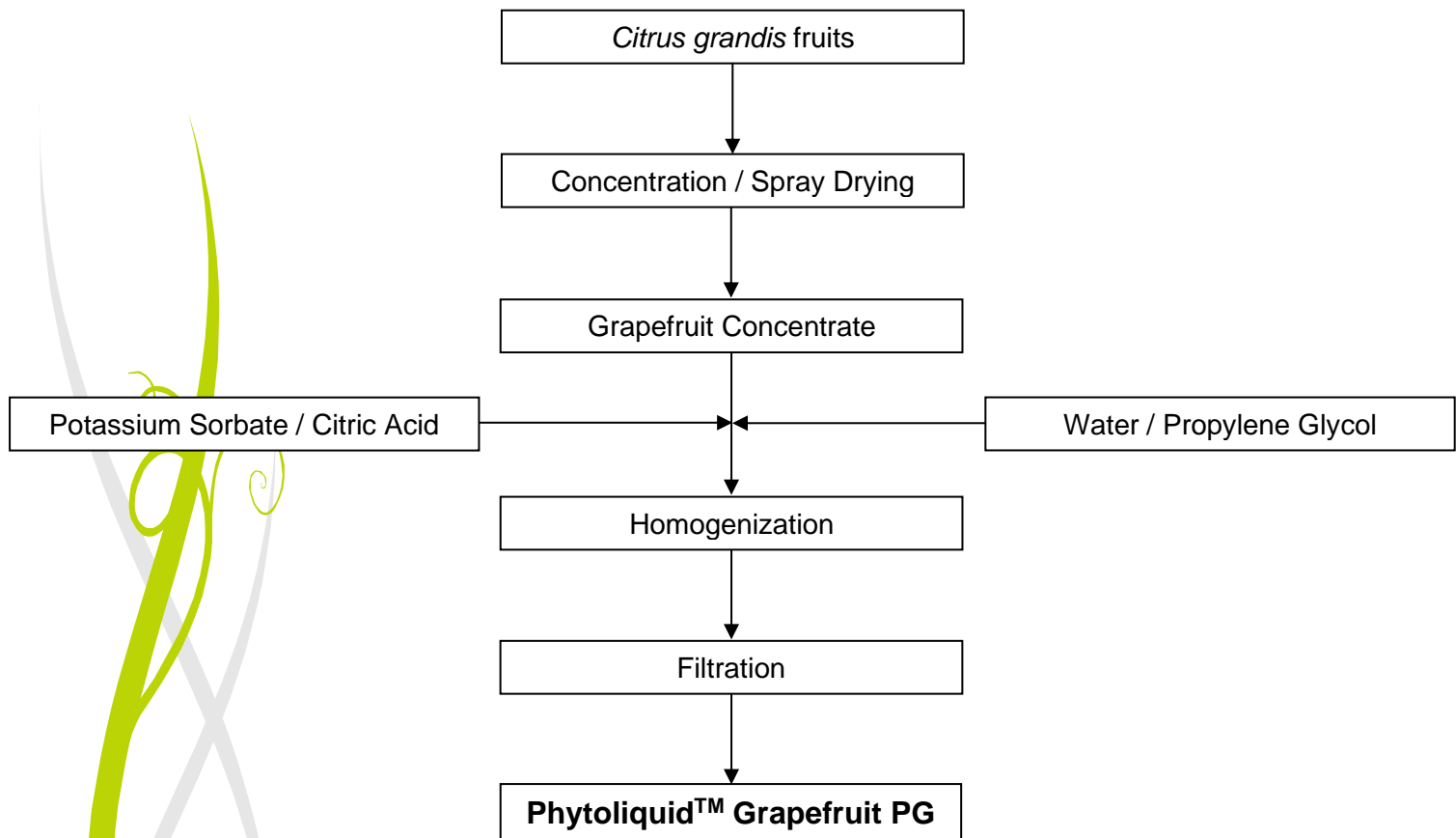
The value of the water content in the final selling specification (SAP specification) per batch will be slightly higher due to the water entry by the plant material. The definition of “water content” in selling spec is the total water composed of process and plant water. The “water content” in the PIF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

Microbiological Data

<u>Bacteria:</u>	< 100 cfu / g
<u>Moulds and yeasts:</u>	< 10 cfu / g
<u>Pathogenic Micro-organisms:</u>	Not tested

Product Certifications

Phytoliquid Grapefruit PG Art. N°NA21763 is Halal certified by HCS (Halal Certifying Services).



Impurities and traces below mentioned are considered technically unavoidable within the meaning of the European Cosmetic Regulation EC 1223/2009 according to information from our suppliers.

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. Conclusion by analogy

Furocoumarins:

Bergamottin (7380-40-7):	< 0,2 mg/kg *	Psoralen (66-97-7):	< 0,2 mg/kg *
Bergapten (484-20-8):	< 0,2 mg/kg *	Trioxalen (3902-71-4):	< 0,2 mg/kg *
7-Methoxycoumarin (531-59-9):	< 0,2 mg/kg *	Xanthotoxin (298-81-7):	< 0,2 mg/kg *
5,7-Dimethoxycoumarin (487-06-9):	< 0,2 mg/kg *	6-Methylcoumarin (Toncarine) (92-48-8):	< 0,2 mg/kg *
Imperatorin (482-44-0):	< 0,2 mg/kg *	SAME (5-geranoxo-7-methoxy-coumarine):	< 0,2 mg/kg *

* This value corresponds to the detection limit

analysis results (report available on request)

The analysis of the furocoumarins 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: Max. 350 ppm (not tested – conclusion by analogy)
Diethylene Glycol: Propylene Glycol used to produce Phytoliquid Grapefruit PG Art. N°NA21763 is compliant with the USP monograph (DEG: < 0.10%).

- Methanol: Not added – not expected – not tested*

- Formaldehyde: Not added – not expected – not tested*

- Nitrosamines: Not added – not expected – not tested*

- Nonylphenol, alkylphenol, phenol, nonoxynol components: Not added – not expected – not tested*

- Dioxanes: Not added – not expected – not tested*

- Phthalates: Not added – not expected – not tested*

Substance	CAS N°
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*

Substance	CAS N°
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

19-20 Sandehead Industrial Estate, Fordingbridge, Hampshire, SP6 1PA, UK

Tel: 01425 655555 Email: technical@madarcorporation.co.uk
Product Information File – Phytoliquid Grapefruit PG Art. N°NA21763

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.

Grapefruit Liquid Fruit Extract fulfils the requirement of Article 15 of the European Regulation 1223/2009 and its amendments.

According to the Article 17 of the European Regulation 1223/2009, botanical preparations which contain traces or technically unavoidable impurities of plant constituents listed as CMR in the European Regulation 1272/2008, are allowed if article 3 is respected. Thus, they are not concerned by the Article 15 of the European Regulation 1223/2009.

VOC:

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

However, VOC content is not a part of our routine analytical procedures and quality control system; therefore, they are not measured on a regular basis.

Proposition 65:

The ingredients constituting **Grapefruit 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 added in Grapefruit 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.

Petrochemicals derivatives:

We herewith confirm that Grapefruit Liquid Fruit Extract is not derived from petrochemicals raw materials.

However, according to our raw materials suppliers, Propylene Glycol (25 – 35 %) and Potassium Sorbate (Approx. 0,5 %) are used as raw materials and are derived from petrochemicals.

Irradiation:

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



Allergens – EU Cosmetic Regulation:

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

CAS-No.	Allergens	Content expected
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.

None of the 26 identified allergen perfume compounds 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.

This information is based on risk estimation which is based on botanical and phytomedicinal reference literature and conclusions by analogy.

Allergens – Food:

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

Allergens	Presence expected	Used in production site
Cereals containing gluten (i.e. wheat, rye, barley, oats, spelt, kamut or their hybrids) and products thereof	No	Yes
Crustaceans and products thereof	No	No
Eggs and products thereof	No	Yes
Fish and products thereof	No	Yes
Peanuts and products thereof	No	Yes
Soybeans and products thereof	No	Yes
Milk and products thereof (including lactose)	No	Yes
Nuts (i.e. almond, hazelnut, walnut, cashew, pecan, Brazil nut, pistachio nut, macadamia nut, Queensland nut) and products thereof	No	Yes
Celery and products thereof	No	No
Mustard and products thereof	No	No
Sesame seeds and products thereof	No	Yes
Lupin and products thereof	No	Yes
Molluscs and products thereof	No	Yes
Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg expressed or 10 mg/litre as SO ₂	No	Yes

*Most common food allergens according to EU Directive 2007/68/EC modifying Annex III bis of directive 2000/13/EC

None of the food allergens above listed is used as raw materials in the above mentioned Crodarom products. With reference to the confirmation of our raw materials suppliers, no other ingredient used in the composition of this product derives from any of the a.m. allergens.

Cross-contamination cannot be excluded considering that some of the raw materials used in our production site may derive from food allergens or contain them as impurities, but the risk is expected to be very low as adequate quality measures are implemented to limit the occurrence of contamination.

However, these allergens are not a part of our routine analytical procedures and quality control system (except the manufacturing protocol when used as ingredients). Therefore, their presence or absence are not measured on a regular basis.

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

Natural content (%)	Derived natural content (%)	Organic content (%)	Derived organic content (%)
69,4	69,5	0,0	0,0

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.



III. REGULATORY INFORMATION

REACH:

Our Supplier is committed to meet the requirements set out in the REACH (Registration Evaluation and Authorization of Chemicals) regulations and are working with their suppliers to ensure a continued supply of the below mentioned Crodarom product.

Grapefruit 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	/	/
Propylene Glycol	57-55-6	200-338-0	Registered	01-2119456809-23
Citrus Grandis (Grapefruit) Fruit Extract	90045-43-5	289-904-6	Exempt	Production < 1 T / year
Potassium Sorbate	24634-61-5	246-376-1	Registered	01-2119950315-41
Citric Acid	5949-29-1	611-842-9	Registered	01-2119457026-42

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

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

SVHC

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.

EU Cosmetic Regulation:

We herewith confirm that, Grapefruit 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.

- Preservative used is listed in Annex V of the European Cosmetic Regulation 1223/2009 EC:
Potassium Sorbate: Approx. 0,5 %

Furthermore, according to Annex V of the European Cosmetic Regulation No 1223/2009, the following preservatives are subject to restriction:

- Potassium Sorbate: Its maximum concentration in ready-to-use preparations is 0,6%.

Nanomaterial:

Grapefruit Liquid Fruit Extract is not a nanomaterial and does not contain any nanomaterial, according to the Cosmetic Regulation (EC) No 1223/2009 and French Decree n° 2012-232 from 17th of February 2012.

Microplastics:

Grapefruit Liquid Fruit Extract is not expected to contain microplastics with reference to the confirmation of our raw materials suppliers.

BSE/TSE:

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

None of the ingredients used to produce 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:

Grapefruit 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 Grapefruit 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 animal products and derivatives, free of silicones, free of bisphenol A and phthalates and not concerned by nanotechnologies



IV. INFORMATION ON ANIMAL TESTING

Our Supplier 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.

Crodarom 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.

V. ACTIVES and EFFECTS

Main actives in the plant:

- ⇒ Flavonoids
- ⇒ Vitamin C
- ⇒ Fruit acids (Malic, Citric acid)
- ⇒ Sugars (Sucrose)

Main actives in the extract:

No efficacy report available

Not determined

VI. TOXICOLOGICAL DATA

Toxicity tests on the product

We herewith confirm that no NOAEL measure has been made on this product.

We haven't carried out clinical studies on Grapefruit Liquid Fruit Extract but according to literature, Propylene Glycol and *Citrus grandis* doesn't contain potentially toxic compounds and they are safe when used appropriately.

Toxicological profile of the ingredients

CIR Expert Panel (2012) (1) concluded that propylene glycol was safe for use in cosmetic products at concentrations up to 50 %.

Grapefruit oil has the GRAS status (Generally Recognized as Safe). (2)

In a safety assessment of Sorbic Acid and Potassium Sorbate (Elder, 1988) (3), the CIR Expert Panel stated that these ingredients are safe as cosmetic ingredients.

The CIR Expert Panel (Panel) (4) concluded that citric acid is safe in the present practices of use and concentration.

⇒ Human skin irritation:

- Propylene Glycol: No skin reactions were present in any of the animals (rabbits, n=6, 100% PG, 72h) following removal of the patch. (5)
Minimally irritating on hairless mice (n=3, 100% PG), with a total score of 7 (maximum score = 77) (1)
- Grapefruit oil: Dermatological studies have indicated grapefruit oil to be nonirritating to humans. (2) (6)
- Potassium Sorbate: Not irritating (rabbits, n=3, 500 mg potassium sorbate mixed with 0.15 ml 0.9 % NaCl solution, semi-occlusive patch) (7)
- Citric Acid: Not a dermal irritant at concentrations up to 5% aqueous on human skin (n=20) (4)

⇒ Mucous membrane irritation:

- Propylene Glycol: Not irritating to eyes of rabbits (n=6, 100% PG, 96h) (5)
- Grapefruit oil: Expressed grapefruit oil is non-irritant. (6)
- Potassium Sorbate: Not irritating to eyes (rabbits, n=3, 100 mg potassium sorbate/eye) (7)
- Citric Acid: Not be considered irritating to the eyes according to EU criteria (rabbits, 10% and 30% aqueous solution, observation 14 days after treatment) (8) (9)

⇒ Sensitisation potential:

- Propylene glycol: Did not induced skin sensitising following LLNA assay (mice, n=4/dose, 50% and 100%) (2)
Did not induced sensitisation by a stick deodorant formulation containing 73% PG (n=101) (1)

Grapefruit oil:	Dermatological studies have indicated grapefruit oil to be nonsensitizing to humans. (2) (6)
Potassium Sorbate:	Did not induced skin sensitising following LLNA assay (guinea pigs, n=10/sex, 0.1% and 1%) (7)
Citric Acid:	Not considered a skin sensitizer (mice, n=4/dose, 5-25% in ethanol or water, LLNA assay) (4) (10)
⇒ Cytotoxicity:	No data available
⇒ Phototoxicity:	
Grapefruit oil:	Dermatological studies have indicated grapefruit oil to be nonphototoxic to humans. (2) May be phototoxic if used fresh. (6)
⇒ Genotoxicity:	
Propylene Glycol:	Not mutagenic (Ames test on <i>S. typhimurium</i> at a maximum concentration of 10000 µg/plate) No detectable aberrations in metaphase chromosomes from bone marrow (rats, n=15 males/dose, oral, up to 5000 mg/kg bw/d) (5)
Potassium Sorbate:	Not mutagenic (Ames test on <i>S. typhimurium</i> at a maximum concentration of 200 µg/plate) (7)
Citric Acid:	3000 µg/mL of citric acid induces cytotoxicity and micronuclei formation on lymphocytes peripheral human (50, 100, 200, 3000 µg/ml) (8) Not mutagenic (Ames test on <i>S. typhimurium</i>) No induction of chromosomal damage in bone marrow of rats fed up with 3000 mg/kg/d for 5 days (4) (9)
⇒ Carcinogenicity:	
Grapefruit oil:	Grapefruit oil has been reported to promote tumor formation on mouse skin by the primary carcinogen, 9,10-dimethyl-1,2-benzanthracene. (2)
Potassium Sorbate:	NOAEL (rats, oral, 0.1% in the diet or 0.3% in drinking water, 100 weeks) = 1400 mg/kg bw/d with no adverse effects observed (7)
Citric Acid:	No evidence of carcinogenicity (rats, n=20, 2000 mg/kg bw/d, 2-years study) (9)
⇒ Acute toxicity:	
Propylene Glycol:	LD ₅₀ (rats, oral) = 22000 mg/kg bw LD ₅₀ (rabbits, dermal, occlusive patch) > 2000 mg/kg bw (5)
Grapefruit oil:	Oral LD ₅₀ > 5 g/kg body wt in rats. (6)
Potassium Sorbate:	LD ₅₀ (rats, n=10, oral) = 10500 mg/kg bw (7)
Citric Acid:	LD ₅₀ (mice, n=5/sex/dose, oral) = 5400 mg/kg bw LD ₅₀ (rats, n=10, dermal) > 2000 mg/kg bw (8) LD ₅₀ (rats, n=10, oral and dermal) > 5000 mg/kg (10)
⇒ Inhalation toxicity:	No data available
⇒ Systemic toxicity:	
Propylene Glycol:	NOAEL (male rats, n=30, oral, concentration max. 1700 mg/kg bw/d, for 2 years) = 1700 mg/kg bw/d, this parameter is based on the absence of treatment related effects in high dose on animals (5)



Potassium Sorbate: NOAEL (rats, n=40 oral, 28 days) = 8600 mg/kg bw/d
This value is based on no overt clinical signs of toxicity, no mortalities, no-treatment related effects on food consumption and no changes in neurotoxicological measurements were observed during the study. (7)

Citric Acid: NOAEL (rats, oral, 2 years) = 1200 mg/kg bw/d. Slightly decreased growth was observed but no tissue abnormalities were found on examination of the major organs. (9)

⇒ Reproduction toxicity:

Propylene Glycol: NOAEL (mice and rats, n=20/dose, oral, on days 6 to 15 of gestation) = 1600 mg/kg bw/d, this value is based on the absence of effect on maternal of foetal survival and absence of significant foetal abnormalities (5)

Potassium Sorbate: NOAEL (rats, oral, two generation study) = 1000 mg/kg bw/d
This NOAEL is based on a 2-generation study, with different concentrations: 0, 300, 1000, 3000 mg/kg bw/d (n=30/sex/dose for generation 1, n=25/sex/dose for generation 2). (7)



VII. 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

VIII. REFERENCES

1. CIR. Safety Assessment of Propylene Glycol, Tripropylene Glycol, and PPGs as Used in Cosmetics. International Journal of Toxicology. 2012, Vol. 31, Supplement 2, pp. 245S-260S.
2. A. Leung, S. Foster,. Encyclopedia of Common Ingredients . Wiley Interscience. 2nd, 1996, pp. 286-287. Information regarding Grapefruit Oil.
3. CIR. Annual Review of Cosmetic Ingredient Safety Assessments:2005/2006. International Journal of Toxicology. 2008, Vol. 27, Supplement 1, pp. 77-142.
4. CIR. Safety Assessment of Citric Acid, Inorganic Citrate Salts, and Alkyl Citrate Esters as Used in Cosmetics. International Journal of Toxicology. 2014, Vol. 33, Supplement 2, pp. 16S-46S.
5. ECHA. Propane-1,2-diol. [En ligne] 2021. [Citation : 25 06 2021.] <https://echa.europa.eu/fr/registration-dossier/-/registered-dossier/16001>.
6. R. Tisserand, µT. Balacs,. Essential oil safety. Churchill Livingstone. 2002, p. 136 and 206. Information regarding Grapefruit.
7. ECHA. Potassium sorbate. [En ligne] [Citation : 05 07 2021.] <https://echa.europa.eu/fr/registration-dossier/-/registered-dossier/11008>.
8. ECHA. Citric acid. [En ligne] 2021. [Citation : 25 06 2021.] <https://echa.europa.eu/fr/registration-dossier/-/registered-dossier/15451>.
9. OECD. SIDS Initial Assessment Report for 11th SIAM on Citric Acid. 2000.
10. SCCS. Opinion of SCCS on Citric acid and Silver citrate. SCCS/1274/09. 2009.

Version: 0
Date: 02/2023

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



PHYTOLIQUID GRAPEFRUIT PG

Version
1.0

Revision Date:
05.12.2019

Date of last issue:
-

Print Date :
04.07.2022

Date of first issue:
05.12.2019

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

1.1 Product identifier

Product name : PHYTOLIQUID GRAPEFRUIT PG

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

Use of the Substance/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
SP6 1PA

Telephone : +441425 655 555

E-mail address : technical@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: GFL 1-877-898-7222. 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: Ambipar 0800 117 2020. 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

PHYTOLIQUID GRAPEFRUIT PG



Version 1.0
Revision Date: 05.12.2019

Date of last issue: -
Date of first issue: 05.12.2019
Print Date : 04.07.2022

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

Chemical nature : Cosmetics

Components

Remarks : No hazardous ingredients

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : When symptoms persist or in all cases of doubt seek medical advice.
- 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.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



PHYTOLIQUID GRAPEFRUIT PG

Version
1.0

Revision Date:
05.12.2019

Date of last issue: Print Date :
- 04.07.2022

Date of first issue:
05.12.2019

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

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.

PHYTOLIQUID GRAPEFRUIT PG

Version
1.0

Revision Date:
05.12.2019

Date of last issue: Print Date :
- 04.07.2022

Date of first issue:
05.12.2019

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.

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
Propylene glycol	57-55-6	TWA (particles)	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			
		TWA (Total vapour and particles)	150 ppm 474 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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

PHYTOLIQUID GRAPEFRUIT PG



Version 1.0
Revision Date: 05.12.2019

Date of last issue: -
Date of first issue: 05.12.2019
Print Date : 04.07.2022

Remarks : For prolonged or repeated contact use protective gloves.

Skin and body protection : Impervious clothing

Respiratory protection : No personal respiratory protective equipment normally required.

Protective measures : Wear suitable protective equipment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : clear, liquid

Colour : yellow

Odour : characteristic

Odour Threshold : No data available

pH : 4.0 - 7.0 (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 : 1.020 - 1.050 g/cm³ (20 °C)

Solubility(ies)

Water solubility : soluble

Solubility in other solvents : not determined

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

PHYTOLIQUID GRAPEFRUIT PG



Version 1.0
Revision Date: 05.12.2019

Date of last issue: -
Date of first issue: 05.12.2019
Print Date : 04.07.2022

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

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



PHYTOLIQUID GRAPEFRUIT PG

Version Revision Date:
1.0 05.12.2019

Date of last issue: Print Date :
- 04.07.2022
Date of first issue:
05.12.2019

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:

Genotoxicity in vitro : Remarks: No data available

Carcinogenicity

Product:

Carcinogenicity - Assess- : No data available
ment

STOT - single exposure

Product:

Assessment : No data available

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



PHYTOLIQUID GRAPEFRUIT PG

Version 1.0
Revision Date: 05.12.2019

Date of last issue: -
Date of first issue: 05.12.2019
Print Date : 04.07.2022

STOT - repeated exposure

Product:

Assessment : No data available

Aspiration toxicity

Product:

No data available

Further information

Product:

Remarks : Health injuries are not known or expected under normal use.

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

12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

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.

PHYTOLIQUID GRAPEFRUIT PG

Version
1.0

Revision Date:
05.12.2019

Date of last issue: Print Date :
- 04.07.2022

Date of first issue:
05.12.2019

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

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

DSL : All components of this product are on the Canadian DSL

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



PHYTOLIQUID GRAPEFRUIT PG

Version
1.0

Revision Date:
05.12.2019

Date of last issue: Print Date :
- 04.07.2022
Date of first issue:
05.12.2019

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

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; EC_x - Concentration associated with x% response; EL_x - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErC_x - 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 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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



PHYTOLIQUID GRAPEFRUIT PG

Version
1.0

Revision Date:
05.12.2019

Date of last issue: Print Date :
- 04.07.2022

Date of first issue:
05.12.2019

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

**Selling Specification**

Manufacturing site is certified according to ISO9001, EFfCI, ISO14001 and ISO45001 standards.

Date: 30.08.2023

Page: 1 of 2

PHYTOLIQUID GRAPEFRUIT PG

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	2.0		
AC018000	APPEARANCE FORM	LIQUID		
AC018000	APPEARANCE CLARITY	CLEAR		
AC018000	APPEARANCE COLOUR	VERY PALE YELLOW TO YELLOW		
AC018000	ODOUR	CHARACTERISTIC		
FC0031A0	SPECIFIC GRAVITY (20°C)	1.020	1.050	
FC0032A0	REFRACTIVE INDEX (20°C)	1.355	1.385	
FC0064A0	pH VALUE (20°C)	4.0	7.0	
FC0028A0	DRY RESIDUE (2.5g-105°C-15h)	0.5	5.0	%
JC0054B0	MOULDS/YEASTS	10 MAX CFU/G		
JC0054B0	TOTAL GERMS	100 MAX CFU/G		

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.

Future deliveries will be tested to this specification and the results reported on Certificate of Analysis

If you agree to accept this specification please complete the following section and return to the person named below. If we do not receive a reply from you within 14 days we will take this to indicate you have accepted the specification.