# **New Novel Products From**

# Corallina Officinalis Alba

# Marine Moisturising Factor 1

**# Snow White Coral Algae** 

**New Generation Biotech Products for Advanced Skin Care Formulations** 



#### CAMPO RESEARCH PTE LTD

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CAMPO® Multi-Purpose Cosmetic Base Chemicals & Active Ingredients

**CAMPO® Novel Functional Active Cosmetic Ingredient & Raw Materials** 



Campo Marine Moisturizing Factor 1

**Technical Specification (MMF1)** 

Material Safety Data Sheets (MMF 1)

Campo Marine Moisturizing Factor 2

**Technical Specification (MMF 2)** 

Material Safety Data Sheets (MMF 2)

#### **References**

#### IMPORTANT NOTICE

Specifications may change without prior notice. Information contained in this technical literature is believed to be accurate and is offered in good faith for the benefit of the customer. The company, however, cannot assume any liability or risk involved in the use of its natural products or their derivatives, since the conditions of use are beyond our control. Statements concerning the possible use are not intended as recommendations to use our products in the infringement of any patent. We make no warranty of any kind; expressed or implied, other than that the material conforms to the applicable standard specifications.

Ask about our Herbal Natural Products Chemistry Consultancy Services – Product Registration EEC/UK New Drug Development (NDA-US); Quasi-Drug Topicals (MOHW\_Japan); Development of Standards, Analysis & Profiles of Phytochemicals; Literature searches, Cultivation of Medicinal Plants, Clinical-Trials, Development of new uses for Phytochemicals and Extracts; Contract Research and Development Work in Natural Products for Novel Drugs, New Cosmetic Active Ingredients for Active Topica/OTC Cosmetic with functionality and Consumer-perceivable immediate-results, New Food Ingredients for Nutraceuticals & Functional Foods.



#### **CAMPO MARINE MOISTURIZING FACTOR 1 (MMF 1)**

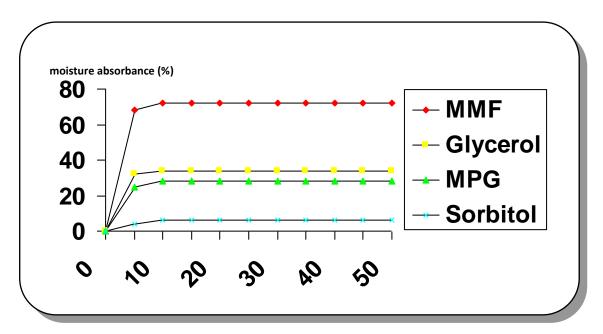
<u>Campo Marine Moisturising Factor 1</u> is a total isolate form of *Corallina officinalis alba* (Coral Seaweed). It is tissue cultured and propagated in biotechnology vats in a controlled laboratory environment. this total extract isolate affords a number of substances resembling the water soluble natural moisturising factors (NMF) of the horny layer of human skin.

Propagation of this unique species of coral algae occurs from fragments, which are broken off by wave action. It is believed that these moisturising factors participate in, or facilitate, the propagation of new individuals of the algae.

The highest content of NMF-like substances is afforded by these fragments (which are already in the process of developing into fully fledged individuals) when they are washed on to the shore and marooned on the beach during the ebb tide. It has been noted that these fragments afford the optimum concentrations of NMF-like substances.

This is believed to be due to the action of the strong Pacific sun on the broken propagating fragments which are being subjected to UV and IR radiation and heat induced dehydration. Other factors such as harsh chemical reactions may also trigger a similar response, similar to the action of soap and other anionic detergents on human skin.

A high throughput screening (HTS of the total extract, as part of a tertiary screening programme to find new Al's, revealed a number of new bio-active compounds, in addition to other more common compounds such as amino acids, urea, fructose, niacinamide, cinnamic acid esters, etc..



The most interesting of the many novel new bio-active engineered compounds are those analogues having a structural resemblance to compounds already of interest to the cosmetics formulator:

#### COMPOUNDS IDENTIFIED IN CAMPO MMF1

- **2-pyrrolidone-5-carboxylic acid** in various salt forms including the sodium salt (Sodium PCA, as listed in CTFA Cosmetic Ingredient Dictionary, 3rd ed., 1982, p268.)
- **lactates** in three salt forms including the sodium salt ( sodium lactate listed in CTFA Cosmetic Ingredient Dictionary, 3rd ed., p283, and DAB, p331 )
- **12-epi-scalaradial** like analogue. It is known that 12-epi-scalaradial, a marine natural product, previously known only and isolated from cacospongia spp., is a potent inhibitor of bee sting and other venoms.
- Spermidine
- Spermine
- 6-methoxy-N- (3-sulphopropyl)- quinoline (SPQ)

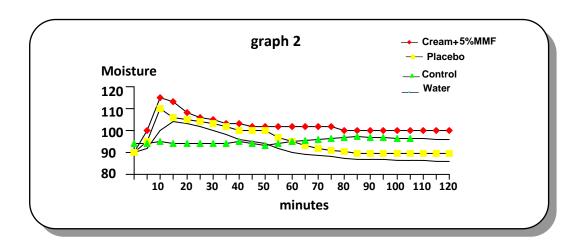
#### KNOWN PHYSIOLOGICAL EFFECTS OF ISOLATED COMPOUNDS

It is interesting to note that the lactate and PCA in the form of their sodium salts are well known for water bridging properties, and are widely used in cosmetics formulations for this moisturizing effect.

12-epi-scalaradial acts as a potent inhibitor of toxins.

**Spermine and spermidine** are polyamines with the biological function of protection of replicating DNA against oxidative injury. Their intercellular concentration is strictly correlated to normal and pathological cell growth and protein synthesis. Spermine plays an important role in the regulation of cellular proliferation and differentiation, whilst it also facilitates regeneration of long term potentiation and protects replicating DNA against damage by singlet oxygen.

**SPQ** has an inferred biological function of minimising interference of physiological anions (and anionic detergents).



# CAMPO RESEARCH Pte Ltd TECHNICAL SPECIFICATION

PRODUCT Name (Campo Research) Other Trade Names (Campo Research)	CAMPO MARINE MOISTURISING FACTOR 1 CORAL ALGAE MMF 1 EXTRACT
CTFA TRADE NAME	MARINE MOISTURISING FACTOR 1
Existing CTFA/INCI Name	Corallina Officinalis Extract (and) Water/Aqua (and) Propylene Glycol
Chinese Translation	珊瑚藻(CORALLINA OFFICINALIS)提取物水(WATER /AQUA) 丙二醇 (PROPYLENE GLYCOL)
CAMPO PRODUCT # HS Code:	<b>95-153A</b> 1302.19.0000
CFTA Monograph ID:	7736 – Corallina Officinalis Extract 9423 – Aqua (Water) 2621 – Propylene Glycol
CAS# CAS# EU	89997-92-2 – Corallina Officinalis Extract 89997-92-2 (EU) – Corallina Officinalis Extract 7732-18-5 – Aqua (Water) 7732-18-5 (EU) – Aqua (Water) 55-57-6 – Propylene Glycol 55-57-6 (EU) – Propylene Glycol
EINECS Number and Name EINECS# EU	289-730-0 (1) – Corallina Officinalis Extract 289-730-0 – Corallina Officinalis Extract (EU) 231-791-2 – Aqua (Water) 231-791-2 (EU) – Aqua (Water) 200-338-0 – Propylene Glycol 200-338-0 (EU) – Propylene Glycol
EINECS Number and Name EINECS# EU European Commission—Health & Consumer Cosmetics—Cosing	Corallina Officinalis Extract <a href="http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=search.details_v2&amp;id=33034">http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=search.details_v2&amp;id=33034</a> Corallina Officinalis Extract – 289-730-0 (EU)
	Aqua (Water) <a href="http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction">http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction</a> <a href="mailto:search.details_v2&amp;id=31959">search.details_v2&amp;id=31959</a> <a href="mailto:Aqua">Aqua - 231-791-2 (EU)</a>
DATECHA COTA	Propylene Glycol <a href="http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction">http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction</a> <a href="mailto:search.details-v2&amp;id=37269">=search.details-v2&amp;id=37269</a> <a href="mailto:Propylene Glycol">Propylene Glycol – 200-338-0 (EU)</a>
BATCH/LOT #	See COA Batch Lot Corallina officinalis alba
SPECIES	Syn: Corallina Officinalis Extract
PARTS USED	Thyllae
RAW MATERIAL - ORIGIN	SOUTH PACIFIC
COMMENTS	Total dissolution and dispersion in water. *Shake or agitate well before use
	A Quality Management System, compliant to the International Standard ISO 9001, was used to manufacture and test this material.

\*Please take note that all specifications are liable to changes without prior notice.

<b>Specification Parameter Analysis</b>	Specification Range	Result	Methods
Physical Form	Liquid to Soft Paste	Conforms	Visual
Color	Milky White	Conforms	Visual
Odor	Slight characteristics	Conforms	Olfactory
Specific Gravity (20deg.C)	1.010 - 1.100	See COA	USP XXIX/Paar,DMA35
Refractive Index (20deg.C)	1.400 - 1.450	See COA	USP XXIX/DGF IV C (52)
pH(20°C) (100% Concentrate)	5.00 - 8.00	See COA	USP XXIX/DGF H III (92)
Carrier Menstrual (Vehicle)			
Water	50 - 85%	See COA	-
Propylene Glycol	25 - 40%	See COA	-
Water Solubility	-	Conforms	-
Dry Residue (160deg.C/ 2hours.)	1 - 15%	See COA	Mettler 16J
Saponification Value	-	=	-
Viscosity	-	=	-
Preservation	None	Conforms	Pflanzaniaschuttal 1989
Pesticide Content	None	Conforms	USP XXIX/Ph.Eur.6.12(97)
Total Germs	<100 Cfu/ml - Non-Pathogenic	Conforms	USP XXIX/Ph.Eur.2.6.12(97)
Total Yeast/Mold	< 100 cfu/ ml	Conforms	USP XXIX/Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	< 0.005 ppm	Conforms	USP XXIX/Ph.Eur.2.6.12(97)

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CAMPO RESEARCH USA, INC SAN DEIGO CA 92111, & Manhattan, New York City, USA
CAMPO RESEARCH s.r.o., Brno, Czech Republic
CAMPO RESEARCH Pvt. Ltd, CHENNAI, INDIA

# MATERIAL SAFETY & CONSUMER SAFETY TESTING LABS. DIV. OF JTC KAMPOYAKI SINGAPORE EMERGENCY MATERIAL SAFETY / ACCIDENTAL RELEASE CENTER Contact:

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Campo Marine Moisturizing Factor 1 ©.

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### "(SAFETY DATA SHEET – compliant to GHS)"

TO EC **DIRECTIVE** 91/155/EEC, **CONFIRMS** EC REGULATION NO#1272/2008, AMENDED EC REGULATION NO#790/2009 and Complies to The EU Cosmetic Products Regulation (Regulation (EC) No 1223/2009) effective on July 2013., and to EU Commission Regulation No.358/2014/9 of 9th April 2014 amending Annexes II and V, to EU Regulation No No.1223/2009 of The European Parliament and of The Council on Cosmetic products, (Effective Date 31st October 2014) AND to US DEPT.OF LABOR-Occupational Safety & Health Admin directives and compliant to Globally Harmonized System of Classification and Labeling of Chemicals (hereinafter referred to as "the GHS")., and Complies and Confirms to the Requirements of State of California Proposition 65.

A Quality Management System, compliant to the International Standard ISO 9001, was used to manufacture and test this material.

http://www.osha.gov/dsg/hazcom/ghs.html

http://www.unece.org/trans/danger/publi/ghs/ghs\_welcome\_e.html

http://www.hc-sc.gc.ca/ahc-asc/intactiv/ghs-sgh/index-eng.php

DATE OF FIRST ISSUE February 10th 1992-Reviewer -

Dr Balasubramaniam PhD

DATE OF LATEST REVISION Nov 10th 1996- Rev'wer-

Dr Fergus Jes .G.Velasquez Bsc. Med Tech, MD February 10<sup>th</sup> 2012 – Reviewer=Joshua Teo

February 5<sup>th</sup> 2013 – Reviewer = Balasubramaniam M PhD

23<sup>rd</sup> March 2014 - Joshua Teo, Balasubramaniam M

PhD & Oksana Nemchenko MD

12<sup>th</sup> February 2015 - Joshua Teo BSc.Chem, Balasubramaniam M PhD & Oksana Nemchenko

MD

15th May 2016 - Joshua Teo BSc.Chem,

Balasubramaniam M PhD & Oksana Nemchenko

MD

PRODUCT AND COMPANY IDENTIFICATION

AMENDED NO#790/2009)and Compliant

COMMERCIAL NAME: CAMPO MARINE MOISTURISING FACTOR 1

OTHER TRADE NAME: CAMPO CORAL ALGAE MMF 1 EXTRACT

LATIN NAME: Corallina officinalis alba

INCI NAME/CTFA ADOPTED NAME: Corallina Officinalis Extract (and) Water/Aqua (and)

Propylene Glycol

Chinese Translation 珊瑚藻(CORALLINA OFFICINALIS)提取物

水(WATER/AQUA)

丙二醇 (PROPYLENE GLYCOL)

INTERNATIONAL CHEMICAL CORALLINA OFFICINALIS EXTRACT

IDENTIFICATION AQUA (WATER)

(EC REGULATION NO#1272/2008 PROPYLENE GLYCOL

to the GHS

MANUFACTURER: CAMPO RESEARCH Pte Ltd

(cGMP MFG. FACILITIES): Hudson Industrial Bldg., #05-02,

14, New Industrial Road, Singapore 536203.

EMERGENCY TELEPHONE NUMBERS: (65)-63833631/(65)-63228503 (Singapore)

2. HAZARDS INDENTIFICATION

NOT CLASSIFIED AS DANGEROUS ACCORDING DIVISION 1.6; NON-HAZARDOUS TO DIRECTIVE 67/548/EEC OR ITS AMENDMENTS. NO HAZARD STATEMENT

O DIRECTIVE 07/346/EEC OR 115 AMENDMENTS. NO HAZARD STATEMEN

**HAZARD CLASS and CATEGORY CODE(s)** 

HAZARD STATEMENT CODE(s) PICTOGRAM : NONE

(EC REGULATION NO#1272/2008 No GHS Pictogram (Totally Non-Hazardous)

AMENDED NO#790/2009) and compliant to

Division 1.6; NO HAZARD STATEMENT

the GHS PICTOGRAM: NONE

GHS CLASSIFICATION: No GHS Pictogram (Totally Non-Hazardous)

This material is Non-hazardous according Division 1.6: No Hazard Statement.

To UN-GHS Criteria.

GHS LABEL ELEMENTS: No GHS Pictogram (Totally Non-Hazardous)

Division 1.6: No Hazard Statement.

3. COMPOSITION / INFORMATION ON

INGREDIENTS

TOTAL EXTRACT ISOLATE OF THE LIVING
FORM OF CORALLINA OFFICINALIS ALBA
Corallina Officinalis Extract

CTFA Monograph ID: 7736 – Corallina Officinalis Extract

9423 – Aqua (Water) 2621 – Propylene Glycol

CAS NO# 89997-92-2 – Corallina Officinalis Extract

CAS NO# EU 89997-92-2 (EU) – Corallina Officinalis Extract

7732-18-5 – Aqua (Water) 7732-18-5 (EU) – Aqua (Water) 55-57-6 – Propylene Glycol 55-57-6 (EU) – Propylene Glycol

CAS NO# (CAS Name) 89997-92-2 – Corallina Officinalis Extract

(EC REGULATION NO#1272/2008 7732-18-5 – Aqua (Water) AMENDED NO#790/2009)and compliant 55-57-6 – Propylene Glycol

to the GHS

EINECS Number and Name 289-730-0 (1) – Corallina Officinalis Extract

EINECS# EU 289-730-0 – Corallina Officinalis Extract (EU)

231-791-2 – Aqua (Water) 231-791-2 (EU) – Aqua (Water) 200-338-0 – Propylene Glycol 200-338-0 (EU) – Propylene Glycol

EINECS# (EINECS Name) 289-730-0 - Corallina Officinalis Extract

(EC REGULATION NO#1272/2008 231-791-2 – Water (Aqua) AMENDED NO#790/2009) and compliant 200-338-0- Propylene Glycol

to the GHS

**EINECS Number and Name** 

EINECS# EU

European Commission-Health & Consumer Cosmetics-

Cosing

Corallina Officinalis Extract

http://ec.europa.eu/consumers/cosmetics/cosing/index.cf

m?fuseaction=search.details v2&id=33034

Corallina Officinalis Extract – 289-730-0 (EU)

Aqua (Water)

http://ec.europa.eu/consumers/cosmetics/cosing/index.cf

m?fuseaction=search.details\_v2&id=31959

Aqua – 231-791-2 (EU)

Propylene Glycol

http://ec.europa.eu/consumers/cosmetics/cosing/index.cf

m?fuseaction=search.details v2&id=37269

Propylene Glycol – 200-338-0 (EU)

RISK PHRASES

SAFETY PHRASES 25-26

**GHS CLASSIFICATION:** 

This material is Non-hazardous according

To UN-GHS Criteria.

None Not Mandatory

PICTOGRAM : NONE

GHS LABEL ELEMENTS: No GHS Pictogram (Totally Non-Hazardous)

Division 1.6: No Hazard Statement.

4. FIRST AID MEASURES

EYE CONTACT: Wash with water or standard eye wash solution. Seek

medical advice, if irritation occur and persist.

ORAL INGESTATION: Edible in small quantity (10 gms) without adverse

effects.

Wash with water or shower.

5. FIRE FIGHTING MEASURERS

SKIN CONTACT:

NON-COMBUSTIBLE AND PRESENTS NO

SPECIAL FIRE HAZARD.

EXTINGUISHING MEDIA: Treat as oil fire when store in HDPE drums with CO2,

dry foam or dry chemical.

Liquid to Soft Paste

PROTECTIVE EQUIPMENTS FOR FIGHTERS: Standard Equipments.

6. ACCIDENTAL RELEASE MEASURES

ABSORB ONTO AN INERT MATERIAL AND

SCRAPE UP. REMOVE RESIDUE BY SCRUBBING

WITH HOT WATER OR DETERGENT SOLUTION.

7. HANDLING AND STORAGE

STORE IN SEALED CONTAINERS UNDER

NORMAL COOL, DRY WAREHOUSING

CONDITIONS.

8. EXPOSURE AND PERSONAL PROTECTION

IN ACCORDANCE WITH GOOD INDUSTRIAL

PRACTICE AND HANDLING USING STANDARD

EYE PROTECTION.

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM: COLOUR:

COLOUR: Milky White
ODOUR: Slight characteristic

BOILING POINT: 100 ° C

MELTING POINT: VISCOSITY: FLASH POINT: > 160 °C FLAMMABILITY SOLID/GAS: N/A **AUTO FLAMMABILITY:** N/A SPECIFIC REFRACTIVE: 1.400 - 1.450 **EXPLOSIVE PROPERTIES:** N/A pH: (100% Concentrate) 5.00 - 8.00**OXIDIZING PROPERTIES:** N/A VAPOUR PRESSURE: N/A DENSITY: 1.010 - 1.100WATER SOLUBILITY: Total dissolution/ dispersion OTHER SOLUBILITY: In most cosmetic solvents **BULK DENSITY:** PARTITION COEFFICIENT: (OCTANOL/WATER) **EXPLOSIVE LIMITS:** STABILITY AND REACTIVITY 10. THERMAL DECOMPOSITION: Stable under normal conditions of use. 11. TOXICOLOGICAL DATA Animal Tests Last Done 1992, as requirements of the then EC DIRECTIVE 91/155/EEC ORAL: LD50 > 36,000 MG/KG (Body Wt.) Rat Essentially Non-Toxic and Edible in Small Quantity. DERMAL: Expected To Be Essentially Non Toxic. INHALATION: Slight Ethanolic Sting – irritation SPECIFIC CONCENTRATION LIMITS 36,000 MG/KG (Body Wt.); CATEGORY 5 M-FACTORS Essentially Non-Toxic and Edible in Small Quantity. (EC REGULATION NO#1272/2008 AMENDED NO#790/2009) compliant to the GHS. TOXIC EFFECTS: SKIN: Primarily Irritation Index (PII) = 0.0 (Non-Irritating -Skintex), Not A Primarily Irritant. Non-irritant / Non-sensitizer as per Repeated Patch Insult Test on 50 Human volunteers. Human Repeated Patch Test 48 hours: 50/50 completely non-irritating / non-erythema causing ingredient at 10% concentrate in water on 50 human volunteers EYE: Very Mild/Minimal - Not A Transient Conjunctival Irritant at 10% concentrate in water (Eyetex-Eyetex classification). Summarized toxicological data as shown here are formation bounded under Non-Disclosure Agreement with various clients as when these Toxicological Data were established or their exclusive uses. 12. ECOLOGICAL INFORMATION **BIODEGRATION:** Expected To Be Ultimately Biodegradable.

FISH TOXICITY: No Data **BACTERIAL & VIRAL TOXICITY:** No data WGK CLASS: WGK (Self Classification) DISPOSAL CONDITIONS 13. DISPOSE OFF ACCORDING TO A RECOGNISED METHOD OF CHEMICAL WASTE DISPOSAL. TRANSPORT INFORMATION UN NUMBER#: N/A UN NAME: Not Assigned IMDG CODE/CLASS: Not Hazardous IMDG CODE PAGE NO. N/A ICAO/IATA AIR CLASS: Non-Hazardous ICAO/IATA AIR CLASS PACKING GROUP: N/A RID/ADR CLASS: Non-Hazardous ADNR CLASS: Non-Hazardous **LABELLING:** (EC REGULATION NO#1272/2008 AMENDED NO#790/2009) and compliant to the GHS. PICTOGRAM SIGNAL WORD CODE(s): No GHS Pictograms (Totally Non-Hazardous) **HAZARD STATEMENT CODE(s):** Division 1.6; No Hazard Statement SUPPLEMENTARY HAZARD **STATEMENT CODE(s):** Similar Division 1.6; No Hazard Statement REGULATORY INFORMATION 15. OCCUPATIONAL EXPOSURE LIMITS: N/A U.S. State of California Proposition 65 None (Exempted from CA Prop 65 Register) **INGREDIENTS Presence** EU Commission Regulation No.358/2014/9 of 9th "Contains No Parabens and nor contains any April 2014 amending Annexes II and V, to EU Branched Chain Parabens".(EU Regulation No.358/2014/9 of 9<sup>th</sup> April 2014) Regulation No No.1223/2009 of The European Parliament and of The Council on Cosmetic products OTHER INFORMATION 16. This format and information is compiled by Kampoyaki This information is based on today's knowledge of the Novel Natural Product Chemistry/ Novel Drug raw materials used. Discovery cGMP Labs Kobe, Japan; for Campo Research, Kyoto and Singapore. \*Please take note that all specifications are liable to changes without prior notice.

Campo Moisturizing Factor 1©.

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#### CAMPO™ CORAL ALGAE MMF 2 EXTRACT

Likewise, Campo™ Marine Moisturising Factor 2 is a novel entity isolated from the living form of Corallina officinalis alba (Coral Seaweed). It serves to provide protective structural firmness on the corium layer through the bio-active ingredients' ability to cross link with the constituent structural proteins present thereby forming the basis of water balance, hydro-osmotic barrier of the skin. It assists in improving the tensile strength of the skin and is effective in alleviating dry skin conditions.

Trade Name: Campo Coral Algae MMF 2 Extract
Generic Name: Corallina officinalis alba extract

Product number: 95-153/B

#### **Typical properties:**

Appearance: Clear Colorless – Turbid

Odour: Characteristic- faint

**pH:** 5.0 - 8.0

**Specific gravity (20°C):** 1.010 – 1.100

**Refractive index(20°C):** 1.355 – 1.400

**Dry residue:** 1 - 15%

Sodium content: 2-8%

Nitrogen content: 1.5 - 3.0%

# CAMPO RESEARCH Pte Ltd TECHNICAL SPECIFICATION

PRODUCT Name (Campo Research) Other Trade Names (Campo Research)	CAMPO MARINE MOISTURISING FACTOR 2 CORAL ALGAE MMF 2 EXTRACT
CTFA TRADE NAME	MARINE MOISTURISING FACTOR 2
Existing CTFA/INCI Name	Corallina Officinalis Extract (and) Water/Aqua (and) Propylene Glycol
Chinese Translation	珊瑚藻(CORALLINA OFFICINALIS)提取物 水(WATER /AQUA) 丙二醇 (PROPYLENE GLYCOL)
CAMPO PRODUCT #	95-153B
HS Code:	1302.19.0000
CFTA Monograph ID:	7736 – Corallina Officinalis Extract 9423 – Aqua (Water) 2621 – Propylene Glycol
CAS# CAS# EU	89997-92-2 – Corallina Officinalis Extract 89997-92-2 (EU) – Corallina Officinalis Extract 7732-18-5 – Aqua (Water) 7732-18-5 (EU) – Aqua (Water) 55-57-6 – Propylene Glycol 55-57-6 (EU) – Propylene Glycol
EINECS Number and Name EINECS# EU	289-730-0 (1) – Corallina Officinalis Extract 289-730-0 – Corallina Officinalis Extract (EU) 231-791-2 – Aqua (Water) 231-791-2 (EU) – Aqua (Water) 200-338-0 – Propylene Glycol 200-338-0 (EU) – Propylene Glycol
EINECS Number and Name EINECS# EU European Commission—Health & Consumer Cosmetics—Cosing	Corallina Officinalis Extract <a href="http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=sear-ch.details-v2&amp;id=33034">http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=sear-ch.details-v2&amp;id=31959</a> Aqua (Water) <a href="http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=sear-ch.details-v2&amp;id=31959">http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=sear-ch.details-v2&amp;id=31959</a> Aqua – 231-791-2 (EU)
	Propylene Glycol <a href="http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=sear-ch.details_v2&amp;id=37269">http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=sear-ch.details_v2&amp;id=37269</a> Propylene Glycol – 200-338-0 (EU)
BATCH/LOT #	See COA Batch Lot
SPECIES	Corallina officinalis alba
	Syn: Corallina Officinalis Extract
PARTS USED	Thyllae
RAW MATERIAL - ORIGIN	South Pacific
APPLICATION	As additive in "moisturising" - lotions, -tonics, -creams
STORAGE	Cool, dark and in closed containers, when stored accordingly stable for
	max. 1 year.
COMMENTS	Total dissolution and dispersion in water.  *Shake or agitate well before use

A Quality Management System, compliant to the International Standard ISO 9001, was used to manufacture and test this material.
*Please take note that all specifications are liable to changes without prior notice.

Specification Parameter Analysis	Specification Range	Result	Methods
Physical Form	Viscous Liquid	Conforms	Visual
Color	Clear Colorless- Turbid	Conforms	Visual
Odor	Characteristic faint	Conforms	Olfactory
Specific Gravity (20deg.C)	1.010 - 1.100	See COA	USP XXIX/Paar,DMA35
Refractive Index (20deg.C)	1.355 - 1.400	See COA	USP XXIX/DGF IV C (52)
pH(20°C) (100% Concentrate)	5.00 - 8.00	See COA	USP XXIX/DGF H III (92)
Carrier Menstrual (Vehicle)			
Water	50 - 85%	See COA	-
Propylene Glycol	25 - 40%	See COA	-
Saponification Value	-	-	-
Viscosity	-	-	Mettler 16J
Water Solubility	Soluble	Conforms	-
Preservation	None	Conforms	-
Pesticides	None	Conforms	Pflanzaniaschuttal 1989
Dry Residue (160deg.C/ 34min)	1 - 15%	See COA	USP XXIX/Ph.Eur.6.12(97)
Total Germs	<100 Cfu/ml - Non-Pathogenic	Conforms	USP XXIX/Ph.Eur.2.6.12(97)
Total Yeast/Mold	< 100 cfu/ ml	Conforms	USP XXIX/Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	< 0.005 ppm	Conforms	USP XXIX/Ph.Eur.2.6.12(97)

CAMPO RESEARCH Pte. Ltd, SINGAPORE
CAMPO RESEARCH USA, INC SAN DEIGO CA 92111, & Manhattan, New York City, USA
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CAMPO RESEARCH Pvt. Ltd, CHENNAI, INDIA

MATERIAL SAFETY & CONSUMER SAFETY TESTING LABS. DIV. OF JTC KAMPOYAKI SINGAPORE

EMERGENCY MATERIAL SAFETY / ACCIDENTAL RELEASE CENTER Contact:

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## "(SAFETY DATA SHEET – compliant to GHS)"

**CONFIRMS** TO EC **DIRECTIVE** 91/155/EEC, EC REGULATION NO#1272/2008, AMENDED EC REGULATION NO#790/2009 and Complies to The EU Cosmetic Products Regulation (Regulation (EC) No 1223/2009) effective on July 2013., and to EU Commission Regulation No.358/2014/9 of 9th April 2014 amending Annexes II and V, to EU Regulation No No.1223/2009 of The European Parliament and of The Council on Cosmetic products, (Effective Date 31<sup>st</sup> October 2014) AND to US DEPT.OF LABOR-Occupational Safety & Health Admin directives and compliant to Globally Harmonized System of Classification and Labeling of Chemicals (hereinafter referred to as "the GHS")., and Complies and Confirms to the Requirements of State of California Proposition 65.

A Quality Management System, compliant to the International Standard ISO 9001, was used to manufacture and test this material.

http://www.osha.gov/dsg/hazcom/ghs.html

http://www.unece.org/trans/danger/publi/ghs/ghs\_welcome\_e.html

http://www.hc-sc.gc.ca/ahc-asc/intactiv/ghs-sgh/index-eng.php

DATE OF FIRST ISSUE February 10th 1992-Reviewer -

Dr Balasubramaniam PhD

DATE OF LATEST REVISION Dec. 20th 1996- Rev'wer-

Dr Fergus Jes .G. Velasquez Bsc. Med Tech, MD February 10<sup>th</sup> 2012 – Reviewer=Joshua Teo

February 5<sup>th</sup> 2013 – Reviewer =

Balasubramaniam M PhD

23<sup>rd</sup> March 2014 - Joshua Teo, Balasubramaniam M

PhD & Oksana Nemchenko MD

12th February 2015 - Joshua Teo BSc.Chem,

Balasubramaniam M PhD & Oksana Nemchenko MD

15th May 2016 - Joshua Teo BSc.Chem,

Balasubramaniam M PhD & Oksana Nemchenko MD

PRODUCT AND COMPANY IDENTIFICATION

COMMERCIAL NAME: CAMPO CORAL ALGAE MMF2 EXTRACT

OTHER TRADE NAME: MARINE MOISTURISING FACTOR 2

LATIN NAME: Corallina officinalis alba

CTFA ADOPTED NAME /INCI NAME: Corallina Officinalis Extract (and) Water/Aqua (and)

Propylene Glycol

Chinese Translation 珊瑚藻(CORALLINA OFFICINALIS)提取物

水(WATER/AQUA)

丙二醇 (PROPYLENE GLYCOL)

INTERNATIONAL CHEMICAL CORALLINA OFFICINALIS EXTRACT

IDENTIFICATION AQUA (WATER)
(EC REGULATION NO#1272/2008 PROPYLENE GLYCOL

(EC REGULATION NO#1272/2008 PROPYLENE GLYCO AMENDED NO#790/2009) and Compliant

to the GHS

Campo Marine Moisturizing Factors (mmf) 15 **CAMPO RESEARCH Pte Ltd** MANUFACTURER: (cGMP MFG. FACILITIES): Hudson Industrial Bldg., #05-02, 14, New Industrial Road, Singapore 536203. **EMERGENCY TELEPHONE NUMBERS:** (65)-63833631/(65)-63228503 (Singapore) HAZARDS INDENTIFICATION 2. NOT CLASSIFIED AS DANGEROUS ACCORDING **DIVISION 1.6: NON-HAZARDOUS** TO DIRECTIVE 67/548/EEC OR ITS AMENDMENTS. NO HAZARD STATEMENT HAZARD CLASS and CATEGORY CODE(s) HAZARD STATEMENT CODE(s) PICTOGRAM: NONE No GHS Pictogram (Totally Non-Hazardous) (EC REGULATION NO#1272/2008 Division 1.6; NO HAZARD STATEMENT AMENDED NO#790/2009) and compliant to the GHS PICTOGRAM: NONE **GHS CLASSIFICATION:** No GHS Pictogram (Totally Non-Hazardous) This material is Non-hazardous according Division 1.6: No Hazard Statement. To UN-GHS Criteria. No GHS Pictogram (Totally Non-Hazardous) **GHS LABEL ELEMENTS:** Division 1.6: No Hazard Statement. COMPOSITION / INFORMATION ON **INGREDIENTS** TOTAL EXTRACT ISOLATE OF THE LIVING FORM OF CORALLINA OFFICINALIS ALBA Corallina Officinalis Extract 7736 - Corallina Officinalis Extract CTFA Monograph ID: 9423 - Aqua (Water) 2621 - Propylene Glycol 89997-92-2 - Corallina Officinalis Extract CAS NO# 89997-92-2 (EU) – Corallina Officinalis Extract CAS NO# EU 7732-18-5 – Aqua (Water) 7732-18-5 (EU) – Aqua (Water) 55-57-6 - Propylene Glycol 55-57-6 (EU) – Propylene Glycol 89997-92-2 - Corallina Officinalis Extract CAS NO# (CAS Name) 7732-18-5 – Aqua (Water) (EC REGULATION NO#1272/2008 55-57-6 - Propylene Glycol AMENDED NO#790/2009) and compliant to the GHS 289-730-0 (1) - Corallina Officinalis Extract **EINECS Number and Name** EINECS# EU

289-730-0 – Corallina Officinalis Extract (EU)

231-791-2 – Aqua (Water) 231-791-2 (EU) – Aqua (Water) 200-338-0 - Propylene Glycol 200-338-0 (EU) - Propylene Glycol

289-730-0 - Corallina Officinalis Extract **EINECS# (EINECS Name)** 

231-791-2 - Water (Aqua) (EC REGULATION NO#1272/2008 200-338-0- Propylene Glycol AMENDED NO#790/2009) and compliant

to the GHS

Corallina Officinalis Extract **EINECS Number and Name** 

**EINECS# EU** http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm ?fuseaction=search.details v2&id=33034 European Commission-Health & Consumer Cosmetics-Corallina Officinalis Extract – 289-730-0 (EU) Cosing Aqua (Water) http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm ?fuseaction=search.details v2&id=31959 Aqua – 231-791-2 (EU) Propylene Glycol http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm ?fuseaction=search.details v2&id=37269 Propylene Glycol - 200-338-0 (EU) RISK PHRASES None SAFETY PHRASES 25-26 Not Mandatory PICTOGRAM: NONE **GHS CLASSIFICATION:** This material is Non-hazardous according To UN-GHS Criteria. **GHS LABEL ELEMENTS:** No GHS Pictogram (Totally Non-Hazardous) Division 1.6: No Hazard Statement. FIRST AID MEASURES EYE CONTACT: Wash with water for 15 minutes or standard eye wash solution. Seek medical advice, if irritation occur and **ORAL INGESTION:** If symptoms persist consult a doctor SKIN CONTACT: Wash with water or shower. FIRE FIGHTING MEASURERS NON-COMBUSTIBLE AND PRESENTS NO SPECIAL FIRE HAZARD. **EXTINGUISHING MEDIA:** CO2, dry foam or dry chemical. PROTECTIVE EQUIPMENTS FOR FIGHTERS: Standard Equipments. ACCIDENTAL RELEASE MEASURES ABSORB ONTO AN INERT MATERIAL AND SCRAPE UP. REMOVE RESIDUE BY SCRUBBING WITH HOT WATER OR DETERGENT SOLUTION. HANDLING AND STORAGE STORE IN SEALED CONTAINERS UNDER NORMAL COOL, DRY WAREHOUSING CONDITIONS. EXPOSURE AND PERSONAL PROTECTION IN ACCORDANCE WITH GOOD INDUSTRIAL PRACTICE AND HANDLING USING STANDARD EYE PROTECTION. PHYSICAL AND CHEMICAL PROPERTIES Viscous liquid PHYSICAL FORM: COLOUR: Turbid cloudy to clear colorless ODOUR: Characteristic- faint **BOILING POINT: MELTING POINT:** 

	VISCOSITY:	-
	FLASH POINT:	-
	FLAMMABILITY SOLID/GAS:	N/A
	AUTO FLAMMABILITY:	N/A
	SPECIFIC REFRACTIVE:	1.200 - 1.450
	EXPLOSIVE PROPERTIES:	N/A
	bH: (100% Concentrate)	5.00 – 8.00
	OXIDIZING PROPERTIES:	N/A
	VAPOUR PRESSURE:	N/A
	DENSITY:	1.010 - 1.100
	WATER SOLUBILITY:	Soluble
	OTHER SOLUBILITY:	-
	BULK DENSITY:	-
	PARTITION COEFFICIENT:	-
,	OCTANOL/WATER)	
	EXPLOSIVE LIMITS:	-
	STABILITY AND REACTIVITY	
	THERMAL DECOMPOSITION:	Stable under normal conditions of use.
11 T	TOXICOLOGICAL DATA	Animal Tests Last Done 1992, as requirements of the then
		EC DIRECTIVE 91/155/EEC
	DRAL:	LD50 > 36,000 MG/KG (Body Wt.) Rat
		Essentially Non-Toxic and Edible in Small Quantity.
	DERMAL:	Expected To Be Essentially Non Toxic.
I	NHALATION:	Slight Ethanolic Sting – irritation
	SPECIFIC CONCENTRATION LIMITS	36,000 MG/KG (Body Wt.); CATEGORY 5
	M-FACTORS	Essentially Non-Toxic and Edible in Small Quantity.
	EC REGULATION NO#1272/2008	2000 m o man Quantity
,	AMENDED NO#790/2009) compliant to	
	he GHS.	
<u> </u>	TOXIC EFFECTS:	
	SKIN:	Primarily Irritation Index (PII) = 0.0 ( Non- Irritating -
	JEH (	Skintex ), Not A Primarily Irritant.
		Non-irritant / Non-sensitizer as per Repeated Patch Insult
		Test on 50 Human volunteers.
		Test on 50 Human volunteers.
		Human Repeated Patch Test 48 hours:
		50/50 completely non-irritating / non-erythema causing
		ingredient at 10% concentrate in water on 50 human
		volunteers
		Volumeers
F	EYE:	Very Mild/Minimal - Not A Transient Conjunctival
		Irritant at 10% concentrate in water (Eyetex - Eyetex
		classification).
		Cimodification j.
		Summarized toxicological data as shown here are
		formation bounded under Non-Disclosure Agreement with
		various clients as when these Toxicological Data were
		established or their exclusive uses.
		communica or men exemptive mich.
12 E	ECOLOGICAL INFORMATION	
	BIODEGRATION:	Expected To Be Ultimately Biodegradable.
F	FISH TOXICITY:	No Data

	BACTERIAL & VIRAL TOXICITY:	No data
	WGK CLASS:	WGK (Self Classification)
13	DISPOSAL CONDITIONS	
	DISPOSE OFF ACCORDING TO A RECOGNISED	
	METHOD OF CHEMICAL WASTE DISPOSAL.	
14	TRANSPORT INFORMATION	
	UN NUMBER# :	N/A
	UN NAME:	Not Assigned
	IMDG CODE/CLASS:	Not Hazardous
	IMDG CODE PAGE NO.	N/A
	ICAO/IATA AIR CLASS:	Non-Hazardous
	ICAO/IATA AIR CLASS PACKING GROUP:	N/A
	RID/ADR CLASS:	Non-Hazardous
	ADNR CLASS:	Non-Hazardous
	LABELLING:	
	(EC REGULATION NO#1272/2008	
	AMENDED NO#790/2009) and compliant to	
	the GHS.	
	PICTOGRAM SIGNAL WORD CODE(s):	No GHS Pictograms (Totally Non-Hazardous)
	HAZARD STATEMENT CODE(s):	Division 1.6; No Hazard Statement
	SUPPLEMENTARY HAZARD	
	STATEMENT CODE(s):	Similar Division 1.6; No Hazard Statement
15	REGULATORY INFORMATION	
	OCCUPATIONAL EXPOSURE LIMITS:	N/A
	U.S. State of California Proposition 65	None (Exempted from CA Prop 65 Register)
	INGREDIENTS Presence	
	EU Commission Regulation No.358/2014/9 of 9 <sup>th</sup>	"Contains No Doughous and non contains any Droughod
	April 2014 amending Annexes II and V, to EU	"Contains No Parabens and nor contains any Branched Chain Parabens".(EU Regulation No.358/2014/9 of 9 <sup>th</sup>
	Regulation No No.1223/2009 of The European	April 2014)
	Parliament and of The Council on Cosmetic products	April 2014)
	Tarnament and of the council on cosmetic products	
16	OTHER INFORMATION	
	This former and information is seen that the second	This information is board on to be board of the
	This format and information is compiled by Kampoyaki	This information is based on today's knowledge of the raw
	Novel Natural Product Chemistry/ Novel Drug	materials used.
	Discovery cGMP Labs Kobe, Japan;	*Dlagge take note that all anguiffections are liable to
	for Campo Research, Kyoto and Singapore.	*Please take note that all specifications are liable to changes without prior notice.
		changes without prior notice.

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