CAMPO BETA-GLUCAN

Beta-Glucan Superoxide dismutase (SOD) Cosmetic concentrate (Low Molecular Weight)

CAMPO RESEARCH PTE LTD

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CAMPO® Multi-Purpose Cosmetic Base Chemicals & Active Ingredients

CAMPO® Novel Functional Active Cosmetic Ingredient & Raw Materials

INDEX

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.

INDEX

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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 Beta-Glucan

Campo Beta-Glucan Superoxide dismutase (SOD) Cosmetic concentrate (Low Molecular Weight)

CAMPO researchers had developed an innovative techniques of utilizing **Beta Glucan SUPEROXIDE DISMUTASE (SOD) Cosmetic concentrate** in topical cosmetics and topical health products (for external use).

Beta Glucan (SOD) Cosmetic concentrate are phyto-chemically derived from Tricholoma matsutake Singer.

Beta Glucan (SOD) Cosmetic concentrate is micro-emulsion of the total extract of Tricholma matsutake, composed of the following components of per 100mg

1) SuperOxide Dismustase 4000units/mg	**23mg**	23%
2) Huperzine A	**10mg**	10%
3) Hydroxycinnamic acids (HCAs)	**02mg**	02%
4) Naturally occurring Phyto-porphyrins	**05mg**	05%
5) Naturally 1,6 B-D Glucan	**50mg**	50%
6) Naturally occuring 1,3 B-D Glucan	**09mg**	09%
7) Water	**qs**	qs

Beta Glucan (SOD) Cosmetic concentrate protects oxygen-metabolizing cells against harmful effects of superoxide free-radicals ((Petkau *et al*. 1975; Fridovich 1972, 1973; Lavelle *et al*. 1973; Paschen and Weser 1973)).

Beta Glucan (SOD) Cosmetic concentrate does not cause any irritation or anaphylaxis. **Beta Glucan (SOD) Cosmetic concentrate** protects hyaluronate against depolymerization by free-radicals, (Malmström *et al*. (1975) & McCord (1974), and are indicated that exogenous SOD might have an anti-inflammatory effect (Salin and McCord 1975)..

Beta Glucan SUPEROXIDE DISMUTASE (SOD) Cosmetic concentrate, when dissolved in emulsion phase, it can also transport ***huge volumes of oxygen*** to tissues activating tissue breathing processes and tissue penetration for other active compounds. The O^{2-} ***ion***, which has been considered important in aging, lipid peroxidation and the peroxidative hemolysis of red blood cells (Fee and Teitelbaum 1972), is formed by the univalent reduction of O_2 during various enzymatic reactions or by ionizing radiation. (See also Fee *et al*. 1975). There is also superoxide radical formation during leukocyte phagocytosis (Allen *et al*. 1974; DeChatelet *et al*. 1974).

Cosmetics containing **Beta Glucan (SOD) Cosmetic concentrate** are hypoallergenic and feature biostimulating and regenerative actions. Topical Health products for external use, which are based on **Beta Glucan (SOD) Cosmetic concentrate** have anti-irritant and anti-inflammatory actions and accelerate regenerative healing processes.

Beta Glucan (SOD) Cosmetic concentrate is a micro-emulsion vehicle. This SOD Concentrate keeps the skin moist, wrinkle-free, smooth, and youthful looking. SOD Concentrate has been shown to stimulate skin cell growth and assist in healing wounds, burns,sunburns, and damaged skin.

Problem areas, dry, cracking, red skin improves quickly. Heals fever blisters and shingles quickly, and in conjunction with Beta 1,3/1,6 Glucan, reoccurrence is minimal. The inherent principle Beta 1,3/1-6 Glucan helps increase the activity of the langerhans cells of the skin to repair damage caused by environmental elements.

Reduces skin irritations, rashes, redness, and inflammation
Soothes dry, cracking skin
Aids in the rejuvenation and youthfulness of the skin
Treats skin blemishes
Heals wounds
Heals cold sores, fever blisters and shingles
Heals nail fungus

Ingredient Description:

Beta Glucan (SOD) Cosmetic concentrate is a micro-emulsion vehicle

Beta Glucan (SOD) Cosmetic concentrate is for formulation of effectively therapeutical topical cosmetics and medical products for external use.

Characteristics

Beta Glucan (SOD) Cosmetic concentrate is a highly concentrated aqueous submicronic emulsion with lecithin or non ionic surfactant as an emulsifier.

Organoleptic and physicochemical properties of the emulsion - Beta Glucan (SOD) Cosmetic concentrate

Appearance	Amber Golden Brown Liquid
pH	from 5.5 to 7.0
Medium size, mkm	from 0.1 to 0.5
Specific Gravity	0.970 – 1.090
Colloid stability	stable.
Solubility of molecular oxygen - with oxygen pressure 760 mm Hg with oxygen pressure 120 mm Hg	 18-20 cm ³/100 ml of the emulsion. - 3.5- 4.0 cm ³/100 ml of the emulsion.
Storage time	2 years.
Storage temperature Multiple freezing and thawing are admissible	0 - +35 ° C.

Biological efficiency of **Beta Glucan (SOD) Cosmetic concentrate** base

Beta Glucan (SOD) Cosmetic concentrate has been developed as a result of scientific laboratory research works and trials of a variety of compounds. The studies and analysis of these works have shown that **Beta Glucan (SOD) Cosmetic concentrate** have effects on the skin which may be summarized as follows:

1. Rejuvenescent effect

The **Beta Glucan (SOD) Cosmetic concentrate** has a pronounced influence on the activity of skin cells and on the production of the main, functionally important albumins of collagen, elastin and keratin, content and speed of regeneration of which depends on age.

Action of **Beta Glucan (SOD) Cosmetic concentrate** on the skin increases content of collagen and elastin in derma and reduces the synthesis speed and accordingly content of keratin of epidermis.

2. The influence on the metabolism of keratinocytes.

A long-term action (30 days) of the **Beta Glucan(SOD)Cosmetic concentrate** on the skin has shown a pronounced stimulation of the metabolism of keratinocytes manifesting in the activation of the nuclei of these cells with appearance of active nucleoli inside. Besides, the ultrastructure of skin cells has not changed. These tests have also shown that there is no any accumulation of **Beta Glucan (SOD)Cosmetic concentrate** in the skin, liver and spleen.

***3.* Beta Glucan (SOD) Cosmetic concentrate *as a carrier of bioactive substances*.**

Beta Glucan(SOD)Cosmetic concentrate facilitates penetration of biologically active substances (vitamins, extracts, medical additions, etc.) into the skin increasing their effectiveness.

For example, the injection of **Beta Glucan(SOD)Cosmetic concentrate** in conjunction with FINALGON (vascular expanding product used for the treatment of strains and pains in joints) increases penetration the Finalgon into the skin tissues and strengthens the effectiveness of the preparation.

4.* Beta Glucan(SOD)Cosmetic concentrate *in sun protection products.

The **Beta Glucan(SOD)Cosmetic concentrate** has manifested very well as a component of sun protection cosmetics. **Beta Glucan(SOD)Cosmetic concentrate** not only increases the effectiveness of UVA-filters raising sun protection factor of the examined cosmetics but it also ensures the decrease of skin surface temperature for 1.5-2.0° C, eliminates irritation and preserves the skin from sun burn.

5.* Beta Glucan(SOD)Cosmetic concentrate *as a wound healing preparation

Beta Glucan(SOD)Cosmetic concentrate has manifested its wound healing action due to its ability to provide "aeration" to skin cells accelerating reparative process. Studying of **Beta Glucan(SOD)Cosmetic concentrate** as an antipyretic preparation has shown its exclusive effectiveness, particularly in conditions of oxygen aeration.

The application of **Beta Glucan(SOD)Cosmetic concentrate** for treatment burns of third "B" degree (the highest degree) in conditions of an active oxygen aeration

during 3 days before necrotomy and during 3 days after necrotomy leads to the following**:** the elimination of the area and depth burn and physiological reparation of burned tissues on the first stage (before necrotomy) and the acceleration of burn wound healing on the next stage.

The analysis of all experimental results of the application **Beta Glucan(SOD)Cosmetic concentrate** indicates variety mechanisms of its biological action on skin cells as follows:

- Activates the "aeration" of skin cells.
- It cooperates with special cells of organisms, due to its corpuscular structure with particles of 100 nm diameter.
- It is able to dissolve in a lipophilic region of biological membranes that ensure an "anesthetic-like" action on cellular membranes protecting them against unfavorable influences.
- It stimulates the metabolism of keratinocytes (skin cells).
- It has wound healing and counterburn actions.
- It facilitates the penetration of any biologically active substances (for example, vitamins, extracts, medical additions) into the skin and increases their effectiveness.

The histological expertise of skin biopsies after using Aquaftem has found out a biological activity of the preparations that manifested in fibrohistiocytic reaction of subepidermic sections and in increasing of mitotic activity in a basal layer of the derma.

Cosmetics based on **Beta Glucan(SOD)Cosmetic concentrate**

Creams for face and neck.

Intensively moisturize the skin, eliminate small wrinkles, stimulate the processes of tissue breathing. Contain various bioadditions. Effectively nourish and regenerate skin cells.

Hair Balsams.

Have a pronounced action on hair follicle, stimulate hair's growth, eliminate pellicles.

Cosmetic Milks.

Have a purifying action, hydrate the skin, eliminate small wrinkles, nourish the skin, contribute to the metabolism in skin cells.

After Shave Creams.

Effectively moisturize the skin, have astringent and disinfectant actions, have a wound healing effect.

Suntanning and sun protection products.

Ensure the acceleration of suntan, prevent from sun burn, contribute to regeneration of natural skin moisture, stimulate the metabolism.

Hand creams.

Have a wound healing action, intensively moisturize and nourish the skin of hands, improve its elasticity.

Body and Bust balsams.

Have regenerative and moisturizing actions, stimulate cellular metabolism, improve elasticity and turgor of the skin.

Foot Creams.

Intensively moisturize the skin, eliminate its dryness and small fractures, have a wound healing action.

Depigmentary creams.

Eliminate sunspots and pigmentary spots, moisturize and nourish the skin.

Creams Around Eyes.

Eliminate small wrinkles, moisturize the skin, improve its elasticity, hypoallergenic.

Cleansing milk for aging skin.

This milk gently removes impurities from the skin and soothes the skin.

Milk-tonic for aging skin.

This liquid oil-free emulsion is specially formulated for aging skin. It moisturizes the skin and prevents loss of moisture.

Regenerative day cream-gel.

This cream activates the exchange of proteins and lipids in skin cells. This process results in softer, more elastic skin.

Regenerative night cream-gel for aging skin.

This light regenerative cream actively slows the aging process of the skin and accelerates cell renewal. It improves the complexion and increases the firmness of the skin.

The use of the **Beta Glucan(SOD)Cosmetic concentrate** allows to enrich the cosmetics with a number of advantages giving them a pronounced individuality.

Method of use in cosmetics

The **Beta Glucan(SOD)Cosmetic concentrate** is added to a prior prepared gel base, stirred at 20-30° C, then bioactive additions, preservative and perfume are added, and everything is stirred until it becomes homogeneous. In case of using **Beta Glucan(SOD) Cosmetic concentrate** in combination with a fatty emulsion base it must be prepared with non- ionic surfactants compatible with **Beta Glucan(SOD)Cosmetic concentrate**. The end forms of the products containing **Beta Glucan(SOD) Cosmetic concentrate** must be packed in opaque hermetic packaging with a small bottle-neck. It is not recommended to use packaging with a large bottle-neck.

The manufacture of the cosmetics with **Beta Glucan(SOD)Cosmetic concentrate** is possible in the conditions of traditional cosmetic and pharmaceutical production.

The addition of **Beta Glucan(SOD)Cosmetic concentrate** as an active ingredient cosmetics can be accorded as high performance skin care products on the level of world elite class.

Medical products based on **Beta Glucan(SOD)Cosmetic concentrate**

The Company produces various topical preparations for external use with **Beta Glucan(SOD)Cosmetic concentrate** These wound healing and counterburn preparations dissolve and transport large quantities of molecular oxygen into the tissues of wound surface that contributes to wound purification and intensifies transportation of biologically active additions into tissues. Due to this, a semi-permeable fat-soluble film is created preventing second infecting and facilitating granulation sprouting. The efficiency of these medicines increases in the conditions of hyperbaric oxygenation (increased portion pressure of oxygen).

Inclusion bactericidal additions in these medical products allows to make very effective medicines for treatment of infected wounds and burns

Beta Glucan(SOD)Cosmetic concentrate

Beta Glucan(SOD)Cosmetic concentrate are a blend of molecules comprised of carbon and flourine atoms, though they may contain other atoms such as oxygen, nitrogen, and even bromine. They are chemically inert and resistant to thermal and radiation damage. They have been considered in the use for manufacture of a blood substitute because they act as solvents for all common gases. Approximately 45mL of oxygen will dissolve in 100mL of a perfluorocarbon liquid. Carbon Dioxide is approximately 2.5 times more soluble than is oxygen.

1) Beta Glucan(SOD)Cosmetic concentrate that Enhances Wound Healing Processes

ABSTRACT:

Beta Glucan(SOD)Cosmetic concentrate as a newly developed proprietary formulation has been shown to enhance the process of wound healing. It is a micro-emulsion that contains materials of biologicalorigin. The ability of various **Beta Glucan(SOD)Cosmetic concentrate** compounds to dissolve and release oxygen has been recognized as potentially very beneficial, spurring their use in the development of various systematically administered blood substitutes. The same properties are to be utilized in order to supply oxygen to a damaged tissue, to support its healing process. Initial animal experiments have demonstrated the efficacy of the new formulation, with **Beta Glucan(SOD)Cosmetic concentrate** supplying the needed oxygen and the added biological substances cell functions. Additional work now under way, including further animal tests and clinical trials, aims at the ultimate commercialization of this development.
University research project.

2) Cosmetic applications

Beta Glucan(SOD)Cosmetic concentrate exhibit a unique combination of properties that includes:

- Can be used in Color Product for enhanced color lasting, notably foundations and lipsticks.

- Does not interfere with the normal functions of the skin; it does not clog the pores, it does not interfere with normal perspiration or with the pH barrier.
- Has a unique emollient feel.
- Is non-greasy, easy to use, not an irritant, non-sensitizing, odorless.
- Enhances appearance, smoothness and softness of the skin.

Applications

Beta Glucan(SOD)Cosmetic concentrate find many applications in the cosmetic industry where its addition to formulations can enhance protective and film forming properties. It is possible to obtain very stable emulsions in glycerol, diglycerol and other polyhydric emulsifying agents.

3) Medical applications of the Beta Glucan (SOD) Cosmetic concentrate liquids

Contrast imaging agents

For ultra-sound, coronary-scanning applications.

Key properties: Excellent toxicological profile; "opaque" to ultra-sound; low body-retention time.

Liquid breathing

As liquid gas-transport media, especially in the treatment of respiratory distress syndrome in neo-natal infants.

Key properties Excellent toxicological profile; high oxygen and carbon dioxide solvency; low body-retention time.

Wound healing

As a liquid gas-transport medium (usually oxygen and carbon dioxide) to promote healing of wounds to the skin such as scars, leg ulcers and radiation burns.

Key properties: Excellent toxicological profile; high gas solvency; low body-retention time; high radiation stability.

Other applications

Including: eye surgery; percutaneous transluminal coronary angioplasty; drug-delivery systems; organ storage; perfusion of organs.

Key properties: High solvency for oxygen and carbon dioxide; excellent toxicological profile.

Characteristics

Beta Glucan(SOD)Cosmetic concentrate have the following physical characteristics:

* High solubility for gases particularly oxygen
* Non flammability
* Excellent chemical and thermal stability
* Non-toxic

CAMPO RESEARCH Pte Ltd
TECHNICAL SPECIFICATION

PRODUCT Name (Campo Research) **Other Trade Names (Campo Research)**	**CAMPO BETA-GLUCAN SUPEROXIDASE** Beta-Glucan, Tricholoma Matsutake Singer Extract
EXISTING INCI NAME	Tricholoma Matsutake Extract (AND) Aqua (Water)
Chinese Translation	松口蘑（TRICHOLOMA MATSUTAKE）提取物 水 AQUA (WATER)
CAMPO PRODUCT # **HS Code:**	**2000/10/0055-101 (Liquid)** 1302.19.0000
CTFA Monograph ID:	18255 – Tricholoma Matsutake Extract 9423 – Aqua (Water)
CAS# CAS# EU	N/A – Tricholoma Matsutake Extract N/A (EU) – Tricholoma Matsutake Extract 7732-18-5 – Aqua (Water)
EINECS Number and Name EINECS# EU	N/A – Tricholoma Matsutake Extract N/A (EU) – Tricholoma Matsutake Extract 231-791-2 – Aqua (Water)
EINECS Number and Name EINECS# EU European Commission–Health & Consumer Cosmetics–Cosing	Tricholoma Matsutake Extract http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=search.details_v2&id=59810 Tricholoma Matsutake Extract – N/A (EU) Aqua (Water) http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=search.details_v2&id=31959 Aqua – 231-791-2 (EU)
BATCH/LOT	**See COA Batch Lot**
SPECIES	Tricholoma Matsutake Singer
PARTS USED	Whole mushroom-Freezed dried
RAW MATERIAL - ORIGIN	Korea
CONCENTRATION	1kg extract = 80.00 kg Matsutake (dried)
COMMENTS	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**	**Results**	**Methods**
Physical Form	Liquid	Conforms	Visual
Colour	Amber Golden Brown Liquid	Conforms	Visual
Odour	Characteristic minimal	Conforms	Olfactory
Specific Gravity(20deg.C)	0.970- 1.090	See COA	USP XX IX/Paar,DMA35
Refractive Index(20deg.C)	1.350 - 1.400	See COA	USP XX IX/DGF IV C (52)
pH(20°C) (10% Aqueous)	5.50 – 7.50	See COA	USP XX IX/DGF H III (92)
Water Solubility	Water 6-10%	See COA	-
Colloid stability	Stable	-	-
Medium size,mkm	0.1 - 0.5	-	-
NCAL/Potentiograph	3.55 – 4.15	See COA	-
Dry Residue (160deg.C /2hrs)	-	-	Mettler 16J
Solubility of molecular oxygen	18-20cm³/100ml of the		

760mm Hg Solubility of molecular oxygen 760mm Hg	emulsion 3.5-4.0cm³/100ml of the emulsion		
Total solids/LAMP	34.0 – 36.0%	See COA	-
Preservation	None	Conforms	-
Pesticide Content	None	Conforms	Pflanzaniaschuttal 1989
Total Germs	<Nil Cfu/ml - Non-Pathogenic	-	USP XX IX/Ph.Eur.2.6.12(97)
Total Yeast/Mold	Nil Cfu/ml	-	USP XX IX/Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	<0.001 ppm	-	USP XX IX/Ph.Eur.2.6.12(97)
Storage time	2 years		
Storage temperature	0-35ºC		

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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 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	Dec. 20th 1996- Rev'wer- Dr Fergus Jes .G.Velasquez Bsc. Med Tech, MD **February 10th 2012 – Reviewer=Joshua Teo** **February 5th 2013 – Reviewer – Dr Balasubramaniam M, PhD** **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**
1	PRODUCT AND COMPANY IDENTIFICATION	
	COMMERCIAL NAME: OTHER TRADE NAME:	**CAMPO BETA-GLUCAN SUPEROXIDASE** Beta-Glucan, Tricholoma Matsutake Singer Extract
	LATIN NAME:	*Tricholoma Matsutake Singer Extract*
	INCI NAME:	Tricholoma Matsutake Extract (AND) Aqua (Water)
	Chinese Translation	松口蘑（TRICHOLOMAMATSUTAKE）提取物 水 AQUA (WATER)
	INTERNATIONAL CHEMICAL IDENTIFICATION ***(EC REGULATION NO#1272/2008 AMENDED NO#790/2009)and Compliant to the GHS***:	**TRICHOLOMA MATSUTAKE EXTRACT AQUA / WATER**
	EPA (USA) GENERIC NAME:	Vegetable Extract

	MANUFACTURER : (cGMP MFG. FACILITIES) :	**CAMPO RESEARCH Pte Ltd** **Level 30, 6 Battery Road** **Singapore 049909**.
	EMERGENCY TELEPHONE NUMBERS:	(65)-63833631/(65)-63228503 (Singapore)
2	HAZARDS INDENTIFICATION	
	NOT CLASSIFIED AS DANGEROUS ACCORDING TO DIRECTIVE 67/548/EEC OR ITS AMENDMENTS.	DIVISION 1.6; NON-HAZARDOUS NO HAZARD STATEMENT
	HAZARD CLASS and CATEGORY CODE(s)	PICTOGRAM : NONE
	HAZARD STATEMENT CODE(s) ***(EC REGULATION NO#1272/2008 AMENDED NO#790/2009)*** **and compliant to the GHS**	No GHS Pictogram (Totally Non-Hazardous) Division 1.6; NO HAZARD STATEMENT
	GHS CLASSIFICATION : This material is Non-hazardous according To UN-GHS Criteria.	PICTOGRAM : NONE No GHS Pictogram (Totally Non-Hazardous) Division 1.6: No Hazard Statement.
	GHS LABEL ELEMENTS:	No GHS Pictogram (Totally Non-Hazardous) Division 1.6: No Hazard Statement.
3	COMPOSITION / INFORMATION ON INGREDIENTS	
	100 PERCENT CARBON-DIOXIDE GAS EXTRACTED TRICHOLOMA MATSUTAKE MYCELIUM/PLANT PARTS COMPONENTS EXTRACTED IN DIONISED WATER CARRIER	**Tricholoma Matsutake (S) Extract** Tricholoma Matsutake Extract
	CTFA Monograph ID:	18255 – Tricholoma Matsutake Extract 9423 – Aqua (Water)
	CAS# CAS# EU	N/A – Tricholoma Matsutake Extract N/A (EU) – Tricholoma Matsutake Extract 7732-18-5 – Aqua (Water)
	CAS NO# (CAS Name) ***(EC REGULATION NO#1272/2008 AMENDED NO#790/2009)and compliant to the GHS***	**7732-18-5 - Aqua / Water**
	EINECS Name and Number EINECS# EU	N/A – Tricholoma Matsutake Extract N/A (EU) – Tricholoma Matsutake Extract 231-791-2 – Aqua (Water)
	EINECS# (EINECS Name) ***(EC REGULATION NO#1272/2008 AMENDED NO#790/2009) and compliant to the GHS***	**231-791-2 – Aqua / Water**
	EINECS Name and Number EINECS# EU European Commission-Health & Consumer Cosmetics-Cosing	Tricholoma Matsutake Extract http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=search.details_v2&id=59810 Tricholoma Matsutake Extract – N/A (EU) Aqua (Water) http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=search.details_v2&id=31959

		Aqua – 231-791-2 (EU)
	RISK PHRASES	
	SAFETY PHRASES 25-26	None Not Mandatory
	GHS CLASSIFICATION : This material is Non-hazardous according To UN-GHS Criteria.	**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 quantities
	SKIN CONTACT:	Wash with water or shower.
5	FIRE FIGHTING MEASURERS	
	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.
	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.	
9	PHYSICAL AND CHEMICAL PROPERTIES	
	PHYSICAL FORM:	Liquid
	COLOUR:	Amber golden brown
	ODOUR:	Characteristic minimal
	BOILING POINT:	-
	MELTING POINT:	-
	VISCOSITY:	-
	FLASH POINT:	-
	FLAMMABILITY SOLID/GAS:	N/A
	AUTO FLAMMABILITY:	N/A
	SPECIFIC REFRACTIVE:	1.350 - 1.400
	EXPLOSIVE PROPERTIES:	N/A
	pH: (100% Concentrate)	5.50 - 7.50
	OXIDIZING PROPERTIES:	N/A
	VAPOUR PRESSURE:	N/A
	DENSITY:	0.970 - 1.090
	WATER SOLUBILITY:	Soluble
	OTHER SOLUBILITY:	In Most Cosmetic Solvents
	BULK DENSITY:	-
	PARTITION COEFFICIENT: (OCTANOL/WATER)	-

	EXPLOSIVE LIMITS:	-
10	STABILITY AND REACTIVITY	
	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:	
	INHALATION:	Expected To Be Essentially Non Toxic. Slight Ethanolic Sting – irritation
	SPECIFIC CONCENTRATION LIMITS M-FACTORS *(EC REGULATION NO#1272/2008 AMENDED NO#790/2009)* compliant to the GHS.	36,000 MG/KG (Body Wt.); CATEGORY 5 Essentially Non-Toxic and Edible in Small Quantity.
	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:	Maybe potentially harmful to microorganism (bacteria, germs and viruses)
	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 INGREDIENTS Presence	**None (Exempted from CA Prop 65 Register)**
	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	**"Contains No Parabens and nor contains any Branched Chain Parabens".**(EU Regulation No.358/2014/9 of 9th April 2014)
16	OTHER INFORMATION	
	USES AS A COSMETIC ADDITIVE	Anti-acne products : 0.5 - 5 % After shave preparation : 0.2 - 03 % Skin-care preparations : 0.5 - 2.0 % Hair-care preparations : 0.5 - 1.5 % Anti-Perspirant & Deodorant : 0.25 - 0.5 %
	This format and information is compiled by Novel Natural Product Chemistry/ Novel Drug Discovery cGMP Labs Kobe, Japan; for Campo Research Pte Ltd, Kyoto and Singapore.	*__Please take note that all specifications are liable to changes without prior notice.__

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