

Abaricus Blazei Murill



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CAMPO® Multi-Purpose Cosmetic Base Chemicals & Active Ingredients

CAMPO® Novel Functional Active Cosmetic Ingredient & Raw Materials



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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.

Welcome - [<http://campo-research.com/>]

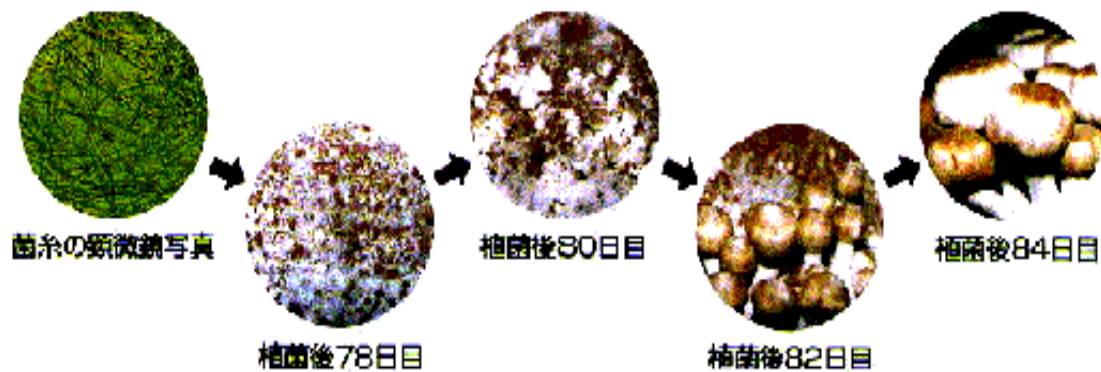
Haircare Suncare Skincare Eyecare Bath Slimming Ingredients Help

non-listed ingredients enquiry cosmetics ingredients what's new in campo best seller ingredient INCI/CTFA names distributor enquiry new innovations contacting us formularies press releases expert enquiry our profile MSDS

CAMPO RESEARCH
ACTIVE INGREDIENTS

Campo Novel Active Cosmetic Ingredients. The Ingredients That Impart Consumer Perceivable Functional Activities To Your Cosmetic End Products !!!

24 hrs. campo@pub1.lpn.vocaltec.com support@campo-research.com



PRODUCT INFORMATION

Agaricus blazei Murill, in a novel mushroom extract for cosmetic formulations is well-known and being in use as an excellent skin care agent for skin-whitening and anti-aging properties when incorporated in quality line Skin-care topical formulations of consumer perceivable results Agaricus blazei Murill extract aids skin repair; is substantively penetrative of skin cells to stimulate and assist collagen production; builds up immune resistance of skin; lightens the skin -especially freckles, darken pigmentation facial areas and brown spots; and strengthening the skin with optimized improved firmness and elasticity.

Technical Specification

Product Name	Campo Agaricus blazei Murril Extract
Product Number	97.58667
Species Used	Agaricus blazei Murill
Parts used	Mycelium
INCI Name	Mushroom (Agaricus blazei Murill) Extract
Appearance	Clear colorless liquid solution
Odour	Slight characteristic
PH value	4.5 - 7.5
Specific gravity	1.010 - 1.350
Refractive Index	1.200 - 1.500

What is Agaricus Blazei Murill?

Agaricus originates from Piedade, which is located in the suburbs of Sao Paulo, Brazil. The climatic conditions in Piedade include temperatures that soar to 35°C during the day and dip to between 20°C and 25°C at night, with a humidity that averages 80 %. The place also experiences regular squall toward evening. Agaricus thrives only under these conditions, suggesting that its survival be significantly affected by these external conditions.

Some 30 years ago, a US researcher noted that the rate of occurrence of adult diseases in the Piedade region is extremely low, and found that it was because of the Agaricus that was a part of the regular diet of the inhabitants of this area.

Around the same time, Agaricus was introduced to Japan. Dr. Shoji Shibata, who at the time was a professor in the Pharmacological Department of Tokyo University, and Dr. Tetuo Ikegawa of the National Cancer Center, jointly researched the pharmacological effects of Agaricus. The research results were released at the general convention of the Japan Pharmacological Association and the Japan Cancer Association. The experience with mice verified that the polysaccharide *f*Agglucan contained in Agaricus significantly activated the immune system.

As Agaricus grows only in certain conditions, its production in Brazil remained unstable. Moreover, Agaricus was mostly consumed locally, and importing it into Japan was extremely difficult. Despite efforts in Japan over many years to cultivate Agaricus under artificial conditions, it proved extremely difficult, and failed to guarantee a stable production output. However, in 1992, Kyowa Engineering -a Hi-biotech-firm within-Japan Tobacco Corp.'s Group of Bio-Tech. Companies achieved a world first when it successfully mass-produced Agaricus by taking advantage of the company's biotechnological expertise. Consequently, the company was able to provide a stable supply of Agaricus to the health food market

Dry ABM Ingredients	Water 7.5 %	Protein 36.7 %	Fat 3.4 %	Fiber 6.8 %	Ash 7.3%	Sugar 38.3 %
Phosphor 939mg/100g	Iron 18.2mg/100g	Calcium 41.6mg/100g	Vitamin B1 0.48mg/100g	Vitamin B2 2.84mg/100g	Ergosterol 354mg/100g	Niacin 40.9mg/100g



Results of Agaricus Experiments using Guinea Pigs

The table below shows the results of tests on anti cancer properties of Agaricus conducted on guinea pigs at the Medical Department of Tokyo University, the National Cancer Center Laboratory and Tokyo College of Pharmacy.

Name of fungus	Daily dosage	Rate of complete recovery	Anti cancer effect
Agaricus blazei Murill	10mmg	90.0%	99.4%
Grifola umbellate	10mmg	90.0%	98.5%
Phellinus yucateensis	30mmg	87.5%	96.5%
Phellinus igniarius	30mmg	66.7%	87.4%
Lenzites betulina	30mmg	57.1%	70.2%
Tricholoma matsutake	30mmg	55.5%	91.3%
Lentinus edodes	30mmg	54.5%	80.7%
Coriolus versicolor	30mmg	50.0%	77.5%
Pleurotus ostreatus	30mmg	45.5%	75.3%
Elfringia applanata	30mmg	45.5%	64.9%
Fomitopsis pincicola	30mmg	33.3%	61.2%
Fomitopsis cytisna	30mmg	30.3%	44.2%
Pholiota nameko	30mmg	30.0%	86.5%
Flammulina velutipes	30mmg	30.0%	81.1%
Ganoderma Lucidum	30mmg	20.0%	77.8%

(Remarks)

The table shows that Agaricus blazei Murill produced high results for both a complete recovery and for its anti cancer effect. The experiment used guinea pigs of between five and six weeks old, which is equivalent to 15 and 16 years old in human terms.

Vaccinating sarcoma 180 (a type of cancer cell) into the femur of these guinea pigs normally causes cancer to spread to the entire body over four to five weeks, resulting in the death of almost all these animals. The fungus extract was first administered 24 hour later when the cancer cells were firmly embedded in the animals' tissues, and the process continued for 10 consecutive days. The results were then recorded four to five weeks later. The experiment was repeated on groups of between five and ten Guinea pigs, which were each given a different fungus extract. The mean values taken from these experiments were expressed as percentages.

The anti cancer effect rate represents the percentage of guinea pigs which fully recovered from the cancer induced by an initial vaccination of sarcoma 180 and in whom a second vaccination of sarcoma 180 failed because the cancer cells could not be successfully embedded.

From these results, it was deduced that the fungus extract (component primarily comprising a high-molecular polysaccharide) activates the immunity of normal biological tissue, so that even when a virus or other external factors enter the tissue, macrophage and interferon production within the tissue is vitalized to prevent the multiplication, metastasis and reoccurrence of cancer cells.

Gastronomic Effects of Agaricus Blazei Murill



The polysaccharide contained in Agaricus blazei Murill vitalizes production of interferon and interleukin in small animals (guinea pigs). This effect indirectly functions to destroy or prevent the proliferation of cancer cells. This refers to a cytosine inducing effect. Moreover, the experiments conducted by the researchers named above proved that this effect can also prevent viruses and other external factors from entering the tissue.

Clinical results obtained in collaboration with university researchers and hospitals since the report on the anti cancer effect of Agaricus blazei Murill was released at the general convention of the Japan Cancer Association in 1980 proved that although many fungi polysaccharide only effect solid cancer and polysaccharide of Agaricus blazei Murill is effective against Ehrlich*s ascites carcinoma sigmoid colonic cancer, ovarian cancer, breast cancer, lung cancer, and liver cancer as well as against solid cancer.

The results of the experiments suggest that it also activate metabolism by revitalizing normal biological tissue.

Digestive enzymes such as amylase tyrosine martase and the protease contained in fungus also enhance digestion. Furthermore, tyrosinase, an enzyme that oxidizes tyrosine and produces melanin, has a hypotensive effect.

It was only recently that melanin protein - which is effective in the production of semen, hair and egg white - was discovered in Agaricus blazei Murill.

Gastronomic Effect of Agaricus blazei Murill and Related Elements



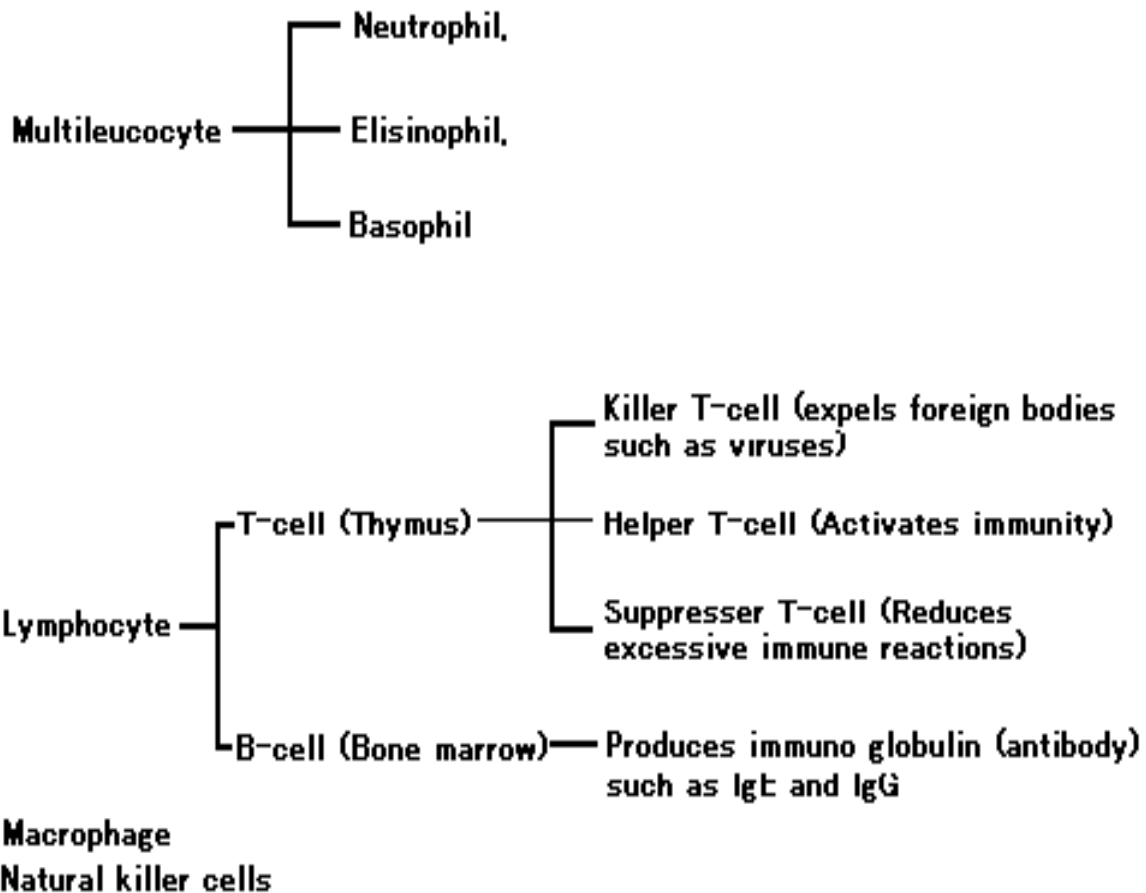
Cultivation factory

Examples of Gastronomic Effect and Treatment	Researched Elements
Anti tumor effect (Sarcoma 180/mice, IP method) Agaricus blazei Murill activates macrophage, immunocytes such as complements reticuloendothelial system, acts to induce cytosine such as interferon as well as BRM, and prolongs the biological life through its immunological effects.	Polysaccharides β-(1-3)-D-Glucan, β-(1-6) D-Glucan protein compounds, acid heteroglucan, Xyloglucan, heteroglucan protein compounds, RAN protein compounds glycoprotein (lectin), etc.
Cancer prevention effect Effect of absorbing and discharging cancerous materials	Dietary fiber Non digestive β-D-Glucan, heteropolysaccharide, chitin
Reducing blood glucose	Polysaccharide (β-D-Glucan) Polysaccharide protein compounds, RNA compounds
Hypotensive effect, reducing cholesterol, reducing arteriosclerosis	Dietary fiber and unsaturated fatty acid such as linolic acid composing lipid
The Chemical Times,ISSN 0285-2446 Kanto Chemical Co., inc., 1989, No.1(131 Volumes in all) extract from P.12.P21 Takashi Mizuno: Phamacological and Gastronomic Effects of Fungi and its Applications	

Immunity and Agaricus blazei Murill

Living organisms are equipped with immunity system, which expels pathogens, toxic chemicals and tumors cells generated through mutation. When tumors cells attach to form a simple protein lump, microorganisms such as bacteria decompose it. Thanks to this function, which is called immunity, bodies can maintain their health by fighting off harmful microorganisms, stopping them from entering tissue or discharging them from tissue.

Leucocytes form the core of the immunity, and are classified as follows.



When their immune systems work properly, humans remain healthy. However, the immune systems in many people are weakened by stress, poor eating habits and pollution, such as air pollution. These people can suffer from a number of diseases.

It is widely believed that cancer is caused by a decline in the immune system caused by aging and other factors. It is also known that atopic dermatitis, asthma, pollinosis and rheumatism result from an excessive immune reaction. The AIDS virus destroys immune cells and triggers diseases.

To keep the immune system functioning properly, it is vital to follow the practices listed below:

Do not allow yourself to be overcome with stress.

Avoid fatigue and get enough sleep.

Do not smoke or drink excessively.

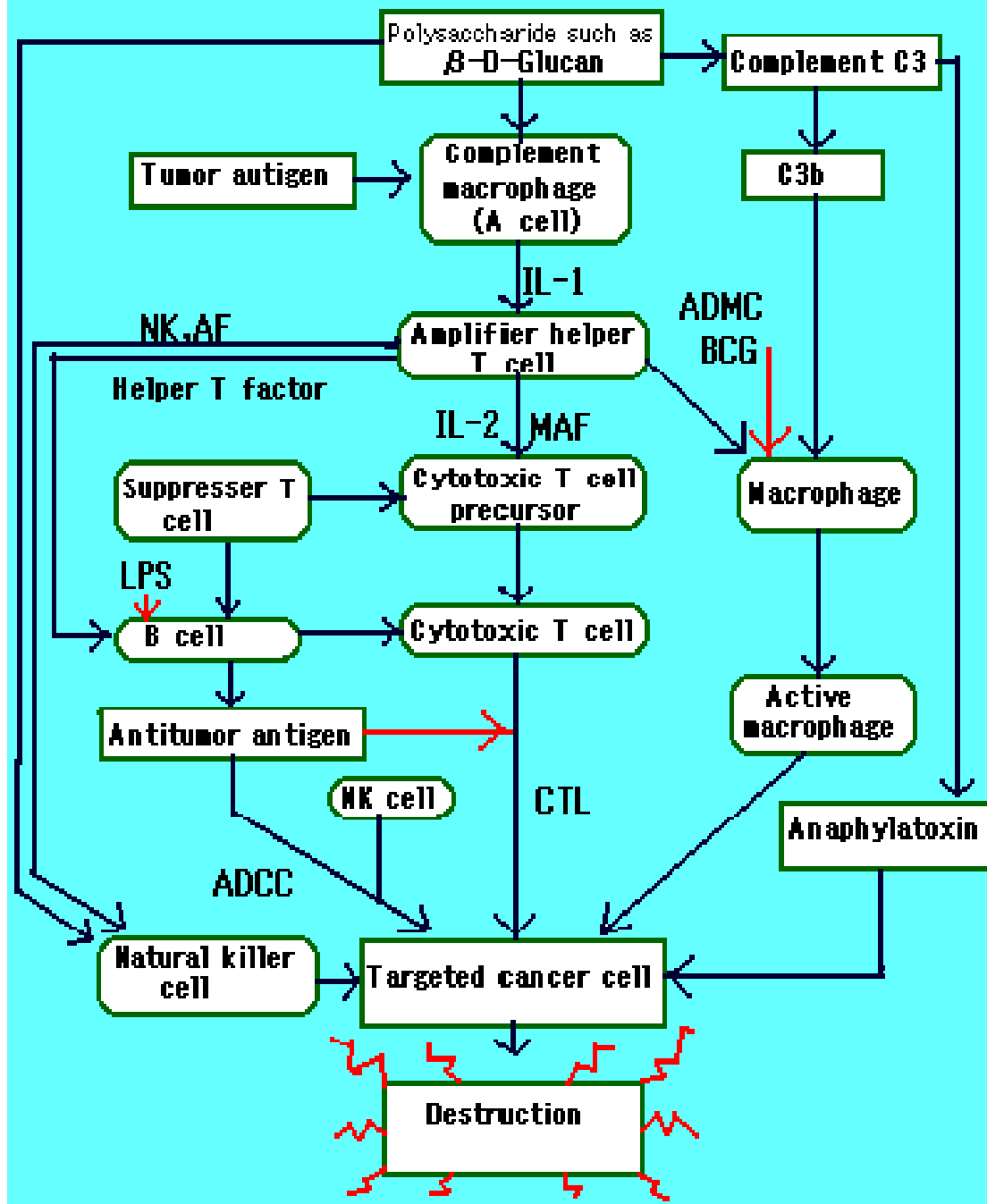
Maintain a balanced diet.

Take moderate exercise.

However, adopting all of these habits can be quite difficult.

Agaricus blazei Murill, which is enjoying growing attention, contains a large amount of polysaccharide, which is believed to enhance immunity. It does not only bolster immunity but reduces excessive immune reactions to maintain a balance. Of all fungi, Agaricus blazei Murill is particularly rich in polysaccharides, and has shown particularly strong results in treating and preventing cancer. We believe that Agaricus blazei Murill is the ideal food and active topical for skincare for the people of today, who are exposed to a difficult living environment.

Carrier Immunity Mechanism of Polysaccharides, such as β -D-Glucan



**CAMPO RESEARCH Pte Ltd
TECHNICAL SPECIFICATION**

PRODUCT Name (Campo Research) Other Trade Names (Campo Research)	CAMPO AGARICUS BLAZEI MURILL EXTRACT AGARICUS BLAZEI MURILL EXTRACT
CTFA TRADE NAME Existing CTFA / INCI Name	Mushroom (Agaricus Blazei Murill) Extract Agaricus Blazei (Mushroom) Extract (and) Aqua (Water) (and) Propylene Glycol
Chinese Translation	拔拉氏蘑菇 (AGARICUS BLAZEI) 提取物 水 AQUA (WATER) 丙二醇 (PROPYLENE GLYCOL)
CAMPO PRODUCT # HS Code:	97.58667 1302.19.0000
CTFA Monograph ID:	15469 – Agaricus Blazei (Mushroom) Extract 9423 –Aqua (Water) 2621 – Propylene Glycol
CAS# CAS# EU	N/A – Agaricus Blazei (Mushroom) Extract N/A – Agaricus Blazei Extract 7732-18-5 – Aqua (Water) 55-57-6 – Propylene Glycol
EINECS Number and Name EINECS# EU	N/A – Agaricus Blazei (Mushroom) Extract N/A – Agaricus Blazei Extract 231-791-2(1) –Aqua (Water) 200-338-0 – Propylene Glycol
EINECS Number and Name EINECS# EU European Commission–Health & Consumer Cosmetics–Cosing	Agaricus Blazei (Mushroom) Extract <a href="http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=se
arch.details_v2&id=54431">http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=se arch.details_v2&id=54431 Agaricus Blazei Extract – N/A (EU) Aqua (Water) <a href="http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=se
arch.details_v2&id=31959">http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=se arch.details_v2&id=31959 Aqua – 231-791-2 (EU) Propylene Glycol <a href="http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=se
arch.details_v2&id=37269">http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=se arch.details_v2&id=37269 Propylene Glycol – 200-338-0 (EU)
BATCH/LOT #	See COA Batch Lot
SPECIES	Agaricus Blazei Murill Mushroom Syn: Agaricus Blazeii Extract
METHOD OF MFG.	Isolation of Agaricus Blazei Murill
RAW MATERIAL - ORIGIN	Brazil
CONCENTRATION	
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.

<u>Specification Parameter Analysis</u>	<u>Specification Range</u>	<u>Results</u>	<u>Methods</u>
Physical Form	Liquid	Conforms	Visual
Color	Clear Colorless Liquid	Conforms	Visual
Odor	Characteristic - Faint	Conforms	Olfactory

Specific Gravity (20deg.C)	1.000 - 1.080	See COA	USP XX IX/Paar, DMA35
Refractive Index (20deg.C)	1.200 - 1.500	See COA	USP XX IX/DGF IV C (52)
pH (20deg.C.) (100% concentrate)	4.5 - 7.5	See COA	USP XX IX/DGF H III (92)
Solvents (S)	Carbon dioxide gas, and Water-deionised at Critical Temperature (minus -6° C)		
Dry Residue (160deg.C/35Min)	15-45	See COA	Mettler 16J
Carrier Menstrual (Vehicle)			Campo Method
Water & PG Content	45 – 65%	See COA	10-2305-032
Water Solubility		Conforms	
Viscosity @ 20deg.C(m PaS)	-	-	-
Saponification Value BS684	-	-	-
Pesticide Content	Nil	Conforms	Pflanzaniaschuttal 1989
Total Germs	<100 CFU/ml - non-pathogenic	Conforms	USP XX IX/Ph.Eur.2.6.12(97)
Total Yeast/Mold	<100 CFU/ml	Conforms	USP XX IX/Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	<0.0005 ppm	Conforms	USP XX IX/Ph.Eur.2.6.12(97)

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 CAMPO RESEARCH CANADA LTD, TORONTO, CANADA

MATERIAL SAFETY & CONSUMER SAFETY TESTING LABS.
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Campo Agaricus Blazei Murill Extract ©.

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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 ISSUE	Aug. 26th 1997- Rev'wer- Dr Fergus Jes .G.Velasquez Bsc. Med Tech, MD
DATE OF LATEST REVISION	Mr Jimmy Kee, 30th June 2003 Mr Teo SH 5th Jan 2004 Balasubramaniam M,PhD 21st August 2007 Mr Joshua Teo, 21 Jan 2011 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: LATIN NAME:	CAMPO AGARICUS BLAZEII MURILL EXTRACT AGARICUS BLAZEII EXTRACT Agaricus blazei Murill
INCI NAME: Chinese Translation	Agaricus Blazeii (Mushroom) Extract 撥拉氏蘑菇 (AGARICUS BLAZEII) 提取物 水 (WATER(AQUA)) 丙二醇 (PROPYLENE GLYCOL)
INTERNATIONAL CHEMICAL IDENTIFICATION <i>(EC REGULATION NO#1272/2008 AMENDED NO#790/2009)and Compliant to the GHS:</i>	AGARICUS BLAZEII (MUSHROOM) EXTRACT WATER(AQUA) PROPYLENE GLYCOL
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 IDENTIFICATION	
<p>NOT CLASSIFIED AS DANGEROUS ACCORDING TO DIRECTIVE 67/548/EEC OR ITS AMENDMENTS.</p> <p>HAZARD CLASS and CATEGORY CODE(s)</p> <p>HAZARD STATEMENT CODE(s) <i>(EC REGULATION NO#1272/2008 AMENDED NO#790/2009) and compliant to the GHS</i></p> <p><u>GHS CLASSIFICATION :</u> This material is Non-hazardous according To UN-GHS Criteria.</p> <p><u>GHS LABEL ELEMENTS:</u></p>	<p>DIVISION 1.6; NON-HAZARDOUS NO HAZARD STATEMENT</p> <p>PICTOGRAM : NONE</p> <p>No GHS Pictogram (Totally Non-Hazardous Division 1.6; NO HAZARD STATEMENT</p> <p>PICTOGRAM : NONE No GHS Pictogram (Totally Non-Hazardous) Division 1.6: No Hazard Statement.</p> <p>No GHS Pictogram (Totally Non-Hazardous) Division 1.6: No Hazard Statement.</p>
3 COMPOSITION / INFORMATION ON INGREDIENTS	
<p>POLYSACHARRIDES β-D-GLUCAN PROTEIN COMPOUND RESIDUES SOLUBILISED IN PURIFIED WATER</p> <p>CTFA Monograph ID:</p> <p>CAS# CAS# EU</p> <p>CAS NO# (CAS Name) <i>(EC REGULATION NO#1272/2008 AMENDED NO#790/2009)and compliant to the GHS</i></p> <p>EINECS Name and Number EINECS# EU</p> <p>EINECS# (EINECS Name) <i>(EC REGULATION NO#1272/2008 AMENDED NO#790/2009) and compliant to the GHS</i></p> <p>EINECS Name and Number EINECS# EU European Commission–Health & Consumer Cosmetics–Cosging</p>	<p>Agaricus Blazei (Mushroom) Extract</p> <p>15469 – Agaricus Blazei (Mushroom) Extract 9423 – Water 2621 – Propylene Glycol</p> <p>N/A – Agaricus Blazei (Mushroom) Extract N/A – Agaricus Blazei Extract 7732-18-5 – Aqua (Wayer) 55-57-6 – Propylene Glycol</p> <p>N/A – Agaricus Blazei Extract 7732-18-5 – Aqua (Water) 55-57-6 – Propylene Glycol</p> <p>N/A – Agaricus Blazei (Mushroom) Extract N/A – Agaricus Blazei Extract 231-791-2(1) – Aqua (Water) 200-338-0 – Propylene Glycol</p> <p>N/A – Agaricus Blazei Extract 231-791-2(1) – Water (Aqua) 200-338-0 – Propylene Glycol</p> <p>Agaricus Blazei (Mushroom) Extract http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=search.details_v2&id=54431 Agaricus Blazei Extract – N/A (EU)</p> <p>Aqua (Water) http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=search.details_v2&id=31959 Aqua – 231-791-2 (EU)</p> <p>Propylene Glycol http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=search.details_v2&id=37269 Propylene Glycol – 200-338-0 (EU)</p>

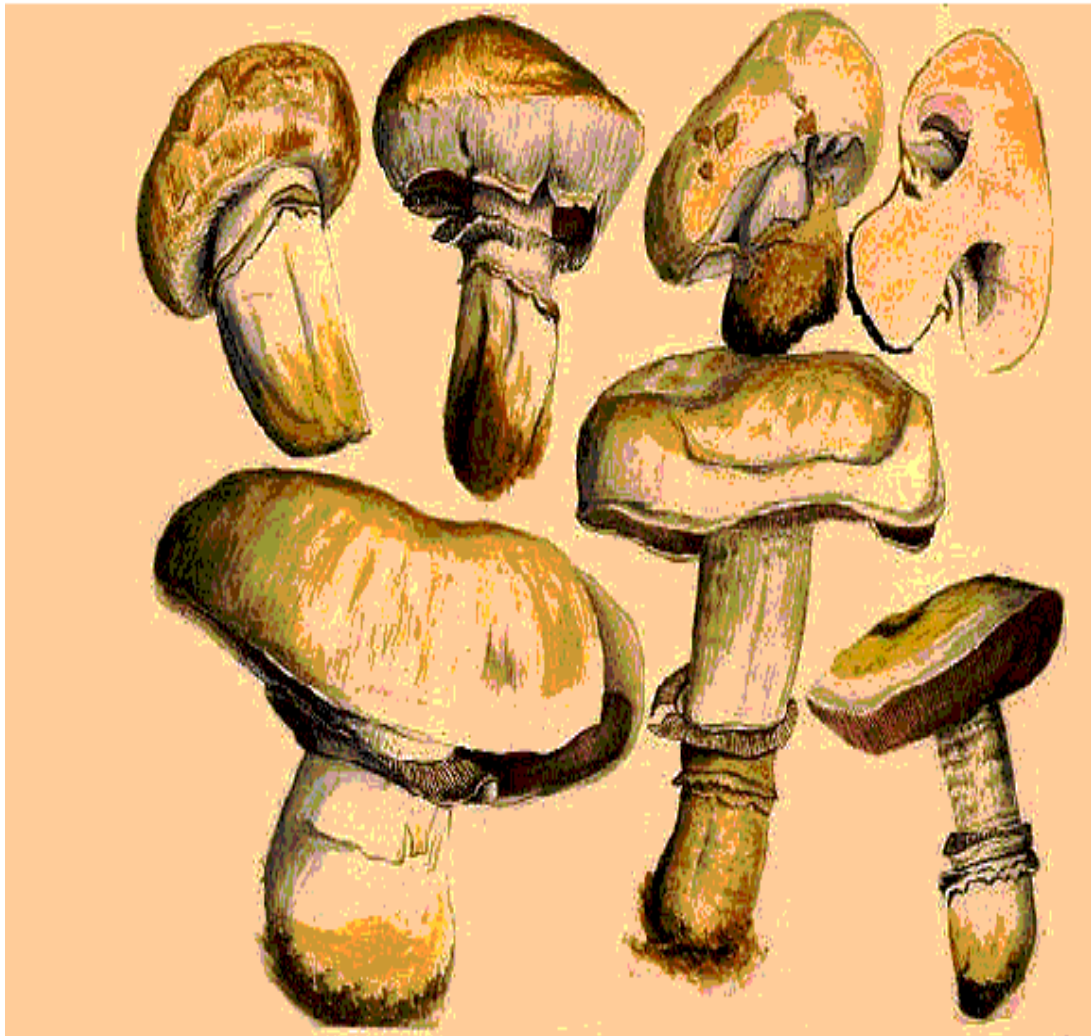
	RISK PHRASES SAFETY PHRASES 25-26	None Not Mandatory
	<u>GHS CLASSIFICATION :</u> This material is Non-hazardous according To UN-GHS Criteria.	PICTOGRAM : NONE
	<u>GHS LABEL ELEMENTS:</u>	No GHS Pictogram (Totally Non-Hazardous) Division 1.6: No Hazard Statement.
4	FIRST AID MEASURES	
	EYE CONTACT:	Wash with water for 15 minutes or standard eye wash solution. Seek medical advice, if irritation occur and persist.
	ORAL INGESTION:	Immediately seek medical attention if large amount is ingested.
	SKIN CONTACT:	Wash with water or shower.
5	FIRE FIGHTING MEASURES	
	COMBUSTIBLE BUT 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:	Clear Colorless
	ODOUR:	Characteristic- faint
	BOILING POINT:	< 190 deg. cent.
	MELTING POINT:	-
	VISCOSITY:	-
	FLASH POINT:	99°C
	FLAMMABILITY SOLID/GAS:	N/A
	AUTO FLAMMABILITY:	N/A
	SPECIFIC REFRACTIVE:	1.200 - 1.500
	EXPLOSIVE PROPERTIES:	N/A
	pH: (100% Concentrate)	4.5 - 7.5
	OXIDIZING PROPERTIES:	N/A
	VAPOUR PRESSURE:	-
	DENSITY:	1.010 - 1.350
	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	<p>Animal Tests Last Done 1992, as requirements of the then EC DIRECTIVE 91/155/EEC</p> <p>ORAL: LD50 > 20,000 MG/KG (Body Wt.) Rat Essentially Non-Toxic and Edible in Small Quantity.</p> <p>DERMAL: Expected To Be Essentially Non Toxic.</p> <p>INHALATION: N/A 20,000 MG/KG (Body Wt.) Rat Essentially Non-Toxic and Edible in Small Quantity.</p> <p>SPECIFIC CONCENTRATION LIMITS M-FACTORS <i>(EC REGULATION NO#1272/2008 AMENDED NO#790/2009)</i> compliant to the GHS.</p> <p style="background-color: black; color: white;">TOXIC EFFECTS:</p> <p>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.</p> <p>EYE: Human Repeated Patch Test 48 hours: 50/50 completely non-irritating / non-erythema causing ingredient at 10% concentrate in water on 50 human volunteers Very Mild/Minimal-not A Transient Conjunctival Irritant at 10% concentrate in water(Eyetex Classification).</p> <p><i>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.</i></p>
12	ECOLOGICAL INFORMATION	<p>BIODEGRATION: Expected To Be Ultimately Biodegradable.</p> <p>FISH TOXICITY: No Data</p> <p>BACTERIAL & VIRAL TOXICITY: No data</p> <p>WGK CLASS: WGK (Self Classification)</p>
13	DISPOSAL CONDITIONS	DISPOSE OFF ACCORDING TO A RECOGNISED METHOD OF CHEMICAL WASTE DISPOSAL.
14	TRANSPORT INFORMATION	<p>UN NUMBER# : N/A</p> <p>UN NAME: Not Assigned</p> <p>IMDG CODE/CLASS: Not Hazardous</p> <p>IMDG CODE PAGE NO. N/A</p> <p>ICAO/IATA AIR CLASS: Non-Hazardous</p> <p>ICAO/IATA AIR CLASS PACKING GROUP: N/A</p> <p>RID/ADR CLASS: Non-Hazardous</p> <p>ADNR CLASS: Non-Hazardous</p> <p>LABELLING: <i>(EC REGULATION NO#1272/2008 AMENDED NO#790/2009)</i> and compliant to the GHS.</p> <p>PICTOGRAM SIGNAL WORD CODE(s): No GHS Pictograms (Totally Non-Hazardous)</p> <p>HAZARD STATEMENT CODE(s): Division 1.6; No Hazard Statement</p> <p>SUPPLEMENTARY HAZARD STATEMENT CODE(s): Similar Division 1.6; No Hazard Statement</p>
15	REGULATORY INFORMATION	<p>OCCUPATIONAL EXPOSURE LIMITS: N/A</p> <p>U.S. State of California Proposition 65 INGREDIENTS Presence None (Exempted from CA Prop 65 Register)</p> <p>EU Commission Regulation No.358/2014/9 of “Contains No Parabens and nor contains any</p>

<p>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</p>	<p>Branched Chain Parabens".(EU Regulation No.358/2014/9 of 9th April 2014)</p>
<p>16 OTHER INFORMATION</p>	
<p>USES AS A COSMETIC ADDITIVE</p>	<p>3 - 50%</p>
<p>This format and information is compiled by Kampoyaki Novel Natural Product Chemistry/ Novel Drug Discovery cGMP Labs Kobe, Japan; for Campo Research, Kyoto and Singapore.</p>	<p>*Please take note that all specifications are liable to changes without prior notice.</p>

Campo Agaricus Blazei Murill Extract ©.

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Drawing by Julius Schäffer (1882-1944)

Agaricus blazei *Murill.*

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