Campo Kinetin



"Sun Aged Skin's Anti-Oxidant for perceptive immediate Wrinkle Reduction"



CAMPO RESEARCH PTE LTD

Level 30, 6 Battery Road, Singapore 049909

Tel: (65) 63833203 / 202 / 63833631

Direct Fax (65) 63833632 / 63834034

Email: sales@campo-research.com Website: http:///www.campo-research.com

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.



CAMPO KINETIN

INCI NAME: KINETIN
Molecular formula: C10H9N5O
Molecular weight: 215.21

CAS: adenine, N-6 furfuryl

CAS NO#: 525-79-1 EINECS # 208-382-2 CAS NO#: 9001-54-1 EINECS # 232-614-1

KINETIN (KINERASE, ADENINE, N6-FURFURYL)

Kinetin as the effective Active Ingredient for a "Sun Aged Skin's Anti-Oxidant for preceptive immediate Wrinkle Reduction."

The available clinical evidence is that people taking kinetin all had better skin. In skin cells growth, kinetin delays damage that occurs over time. In animals, kinetin is produced by oxidative damage and seems to trigger several defenses against it.

There is reasonably good evidence for this, therefore, kinetin might protect against the damage caused by the sun, which is the main source of old-looking skin and which might cause damage via oxidation. Kinetin improves the skin's ability to be a barrier against water loss.

A study was performed with three groups of subjects, taking either 1% kinetin (which is in Kinerase), 0.05% kinetin, and 0.01% kinetin. The effectiveness of kinetin can be demonstrated by the 1% group showing more improvement than the .01% group. Essentially all of the subjects reported improvement after 24 weeks. 92% reported an improvement in the texture of their skin, 80% reported an improvement in color, 75% improved in blotchiness, an 81% improved in fine wrinkles.

Kinetin is physiologically extraordinary active in correcting skin-wrinkles due to aging.

Kinetin is now widely used in cosmetics as an Anti-wrinkle magic treatment ingredient.

Campo's Kinetin is isolated from a natural source - Young Coconut endospermum and Young Coconut Juice

Kinetin from DNA

Kinetin was first synthesized chemically from DNA. It turns out that cells can follow this same route of synthesis (Barciszewski, 1997, FEBSL). Suppose DNA is oxidized. (Actually, there is a hydroxyl radical oxidation at the carbon 5' of the deoxyribose residue.) Oxidation is not good for the DNA. This oxidation creates a substance called furfural. Furfural is not good. However, furfural can be degraded to kinetin. This gets rid of the furfural, and the kinetin protects the DNA. According to Barciszewski, the kinetin initiates a repair sequence on the DNA (which is good).

This locates kinetin in the nucleus of the cell (where the DNA is). Barciszewski (1996) found kinetin in the cell outside the nucleus.

The hydroxylation comes from the hydroxyl radical, which usually comes from hydrogen peroxide, which usually comes from superoxide. This means that kinetin is produced in response to this class of free radicals, which are call the three oxides.

Hydrogen Peroxide and Superoxide

To tie things together, if DNA is oxidized by the hydroxyl radical, which probably came from hydrogen peroxide, the breakdown product is converted to something that defends the cell against hydrogen peroxide.

If Kinetin was produced only from the oxidation of DNA, the defense against hydrogen peroxide would get started only once damage has occurred. Furthermore, presumably not that much kinetin would be produced. Barciszewski found kinetin outside of DNA (albeit in coconut). This suggests that the cell has other methods of producing kinetin, which are activated to fight against hydrogen peroxide.

Kinetin can also attach itself to copper, in which case it catalyzes the breakdown of superoxide to hydrogen peroxide (Goldstein, 1991, FRRC; Inoue, 1986, Barja, 1993, FRRC). Kinetin also directly stimulates SOD (superoxide dismutase), which also breaks superoxide down to hydrogen peroxide. (Kurepa, 1997, PCP). This may sounds primitively backwards, but actually kinetin is making hydrogen peroxide. But it fits together in a way. Hydrogen peroxide is not as dangerous as superoxide, so this action is good. Meanwhile, hydrogen peroxide is often (usually) created from superoxide. So kinetin could be thought of as just generally reducing the activity of the three oxides.

Skin

One theory of skin aging is that it is caused by free radicals. The free-radical theorists point their finger at the three oxides. And everyone agrees that ultraviolet radiation from the sun is the primary reason for skin looking old. Ultraviolet rays cause wrinkles, pigmented spots, and cancer.

Evidence demonstrates that UV radiation influences the three oxides. For example, one study (Maeda, 1991, PP) looked at the effects of exposing the hairless mouse to ultraviolet rays. SOD was increased after 6 weeks, but thereafter it steadily declined. [Glutathione peroxidase remained elevated.] SOD, as you might recall, protects the cell against superoxide by converting it to hydrogen peroxide.

In another study using constant UV radiation (Okada, 1994, JDS), SOD again was initially increased but then returned to normal levels. Catalase activity, however, was "suppressed." Catalase is an enzyme that converts hydrogen peroxide to molecular oxygen and water. Okada

suggests that continual exposure to UV radiation may overwhelm the capacity of the cell for eliminating hydrogen peroxide/superoxide.

Conclusion

The evidence seems plausible that kinetin might protect the cell against damage from the three oxides. One view of aging in skin, which receives reasonable support, is that the three oxides cause aging. This is tied to the sun, because UV rays from the sun increase the three oxides.

Therefore, it is possible that applying kinetin to your skin would mobilize your skin's defenses against the three oxides. This might delay aging over time. It is suppose it might also provide some fast relief to beleaguered cells who were low in their defense against the three oxides.

Kinetin (adenine, N-6 furfuryl), the active ingredient in Campo Kinetin, is a highly potent growth factor that, along with other plant-growth substances, promotes cell division and ensures orderly growth and development of plants. In a study published in Biochemical and Biophysical Research, kinetin delayed or prevented a range of cellular changes associated with in vitro aging of human skin cells, including alterations in cell morphology, growth rate, size, cytoskeletal organization, macromolecular synthetic activity and accumulation of lipofuscin aging pigments.

Equally important, the study showed that kinetin did not alter the maximum in vitro life span of human skin cells or their ability to multiply in culture. Thus, kinetin was devoid of activities associated with cellular immortalization, malignant transformation and carcinogenesis.





Campo Kinetin 75% Liquid for Cosmetic



Product No: 2001-03-02-1

Product Specification

Botanical Name: Cocos nucifera L

Existing INCI Name: Kinetin (and) Cocos Nucifera (Coconut) Fruit Extract Parts used: Freezed Dried Young Coconut Fruit Endospermum &

Coconut Juice

INCI Name, Others: KINETIN

Appearance: Clear Flowing Liquid

Color: Colorless to slight yellowish tint

Specific Gravity: 1.000 - 1.100Refractive Index: 1.250 - 1.480pH @20 deg.C (10% solution): 4.5. - 8.5Water Content: < 25%

Solubility: Readily soluble in water

Uses: Anti-Wrinkles Topical Treatment Cosmetics

and Skin-Wrinkles Corrector Cosmetics

Usage Level: 0.001 - 10%

CAMPO RESEARCH Pte Ltd TECHNICAL SPECIFICATION

PRODUCT Name (Campo Research) **CAMPO KINETIN 75% CONC. - LIQUID** Other Trade Names (Campo Research) Kinerase Proposed INCI Name: Campo Kinetin (AND) Cocos Nucifera (Coconut) Fruit Extract CTFA TRADE NAME Kinetin Kinetin; Cocos Nucifera (Coconut) Fruit Extract Existing INCI Name(s) Chinese Translation 激动素 (KINETIN) 椰子 (COCOS NUCIFERA) 果提取物 CAMPO PRODUCT # 2001-03-02-1 HS Code: 1302.19.0000 CTFA Monograph ID 9882 - Kinetin 8658 - Cocos Nucifera (Coconut) Fruit Extract CAS# 525-79-1 / 9001-54-1 - Kinetin CAS# EU 525-79-1 (EU) - Kinetin N/A – Cocos Nucifera (Coconut) Fruit Extract 8001-31-8 (EU) - Cocos Nucifera Fruit Extract **EINECS Number and Name** 208-382-2(1) / 232-614-1(1) - Kinetin 208-382-2 (EU) - Kinetin **EINECS# EU** N/A – Cocos Nucifera (Coconut) Fruit Extract 232-282-8 (EU) – Cocos Nucifera Fruit Extract **EINECS Number and Name** EINECS# EU http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction= search.details v2&id=78076 European Commission-Health & Kinetin – 208-382-2 (EU) Consumer Cosmetics-Cosing Cocos Nucifera Fruit Extract http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction= search.details_v2&id=55633 Cocos Nucifera Fruit Extract – 232-282-8 (EU) BATCH/LOT# See COA Batch Lot **SPECIES** Cocos nucifera Syn: Cocos nucifera Linn. PARTS USED Freezed Dried Young Coconut Fruit Endospermum & Coconut Juice **RAW MATERIAL - ORIGIN JAPAN** 75% Kinetin, Natural Metabolite - Ex-Freezed Dried Young Coconut CONCENTRATION Fruit Endospermum & 25% Coconut Juice **COMMENTS** May experience jelly like substance – shake or agitate well 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	<u>Methods</u>
Physical Form	Clear Flowing Liquid	Conforms	Visual
Colour	Colourless to slight yellowish tint	Conforms	Visual
Odour	Almost odorless	Conforms	Olfactory

Specific Gravity (20°C)	1.000-1.100	See COA	USP XXIX/Paar,DMA35
Refractive Index (20°C)	1.250-1.480	See COA	USP XXIX/DGF IV C (52)
pH(20deg.C.) (100% concentrate)	4.50 - 8.50	See COA	USP XXIX/DGF H III (92)
Amino Acids	-	See COA	-
Porosity	-	-	-
Solubility	Soluble	Conforms	
Germanium Organic	-	See COA	USP XXIX / Ph.Eur.2.6.12(97)
Strontium Organic	-	See COA	USP XXIX / Ph.Eur.2.6.12(97)
Selenium Organic	-	See COA	USP XXIX / Ph.Eur.2.6.12(97)
Zinc Complex Organic	-	See COA	USP XXIX / Ph.Eur.2.6.12(97)
Mercury	-	See COA	USP XXIX / Ph.Eur.2.6.12(97)
Arsenic	=	See COA	USP XXIX / Ph.Eur.2.6.12(97)
Other Trace Element	-	See COA	-
Dry Residue (160deg.C/34Min)	N/A	-	Mettler 16J
Preservation	None	Conforms	-
Pesticide Content	None	Conforms	Pflanzaniaschuttal 1989
Total Germs	<10 CFU/ml - non- pathogenic	Conforms	USP XXIX / Ph.Eur.2.6.12(97)
Total Yeast/Mold	Nil	Conforms	USP XXIX / Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	<0.05 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
CAMPO RESEARCH s.r.o., Brno, Czech Republic
CAMPO RESEARCH Pvt. Ltd, CHENNAI, INDIA
CAMPO RESEARCH CANADA LTD, TORONTO, CANADA

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

EMERGENCY MATERIAL SAFETY / ACCIDENTAL RELEASE CENTER Contact:

Emergency Tel.no: +(65)-63833202/<u>63833631(24hours</u>) /63228551/63228503 Emergency Fax No: +(65)-<u>63833632(24hours</u>),63824680, 63228558 EMAIL: msds911@campo-research.com

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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

February 10th 1992-Reviewer -

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

INTERNATIONAL CHEMICAL

(EC REGULATION NO#1272/2008

IDENTIFICATION

DATE OF FIRST ISSUE

	Dr Balasubramaniam PhD
DATE OF LATEST REVISION	Dec. 10th 1996- Rev'wer- Dr Fergus Jes .G. Velasquez Bsc. Med Tech, MD Mr Jimmy Kee, 30 th June 2003 Mr Teo SH 5 th Jan 2004 Balasubramaniam M,PhD 21 st August 2007 Mr Joshua Teo, 21 Jan 2011 February 5 th 2013 – Reviewer – Dr Balasubramaniam M, PhD 12 th February 2015 - Joshua Teo BSc. Chem, Balasubramaniam M PhD & Oksana Nemchenko MD 15 th May 2016 - Joshua Teo BSc. Chem, Balasubramaniam M PhD & Oksana Nemchenko MD
1 PRODUCT AND COMPANY IDENTIFICATION	
COMMERCIAL NAME:	CAMPO KINETIN 75% CONCONCENTRATED LIQUID For Cosmetics
OTHER TRADE NAME:	Kinerase
LATIN NAME:	Cocos nucifera Linn.
INCI NAME: (PROPOSED) Existing INCI Name(s)	Kinetin (AND) Cocos Nucifera (coconut) Extract KINETIN COCOS NUCIFERA (COCONUT) FRUIT EXTRACT
Chinese Translation	激动素 (KINETIN) 椰子(COCOS NUCIFERA)果提取物

KINETIN

COCOS NUCIFERA (COCONUT) EXTRACT

AMENDED NO#790/2009) and Compliant

to the GHS

EPA (USA) GENERIC NAME: Kinetin

MANUFACTURER: **CAMPO RESEARCH PTE LTD**

(cGMP MFG. FACILITIES): Level 30, 6 Battery Road, SINGAPORE 049909.

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

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) Division1.6; NO HAZARD STATEMENT

GHS CLASSIFICATION: PICTOGRAM: NONE

This material is Non-hazardous according

To UN-GHS Criteria.

No GHS Pictogram (Totally Non-Hazardous)

Division 1.6: No Hazard Statement.

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

Division 1.6: No Hazard Statement.

COMPOSITION / INFORMATION ON

INGREDIENTS

100 PERCENT CARBON DIOXIDE GAS **EXTRACTION OF 75% OF COCONUT** KINETIN NATURAL METABOLITE -Ex-FREEZED DRIED FROM YOUNG COCONUT FRUIT ENDOSPERMUM SECRETION OF WATER-INSOLUBLE FREEZED-DRIED COMPONENTS & 25% COCONUT JUICE RECONSTITUTED.

Kinetin, Cocos Nucifera (coconut) Extract

CTFA Monograph ID: 9882 - Kinetin

8658 - Cocos Nucifera (Coconut) Fruit Extract

CAS#

525-79-1 / 9001-54-1 - Kinetin CAS# EU

525-79-1 (EU) - Kinetin

N/A – Cocos Nucifera (Coconut) Fruit Extract 8001-31-8 (EU) – Cocos Nucifera Fruit Extract

CAS NO# (CAS Name) 525-79-1- Kinetin

(EC REGULATION NO#1272/2008 AMENDED NO#790/2009) and compliant

to the GHS

8001-31-8- Cocos Nucifera Fruit Extract

EINECS Name and Number 208-382-2(1) / 232-614-1(1) - Kinetin

EINECS# EU 208-382-2 (EU) - Kinetin

N/A – Cocos Nucifera (Coconut) Fruit Extract 232-282-8 (EU) - Cocos Nucifera Fruit Extract

EINECS# (EINECS Name) 208-382-2 - Kinetin

(EC REGULATION NO#1272/2008 AMENDED NO#790/2009) and compliant

to the GHS

232-282-8 - Cocos Nucifera Fruit Extract

EINECS Name and Number Kinetin EINECS# EU

European Commission-Health & Consumer

Cosmetics-Cosing

http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=search.details v2&id=78076

Kinetin - 208-382-2 (EU)

Cocos Nucifera Fruit Extract

http://ec.europa.eu/consumers/cosmetics/cosing/inde x.cfm?fuseaction=search.details v2&id=55633 Cocos Nucifera Fruit Extract – 232-282-8 (EU)

RISK PHRASES None

SAFETY PHRASES 25-26 Not Mandatory

<u>GHS CLASSIFICATION:</u> PICTOGRAM: NONE

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.

4 FIRST AID MEASURES

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

Seek medical advice, if irritation occur and persist.

Edible in small quantity (10 gms) without adverse

effects.

SKIN CONTACT: Wash with water or shower.

5 FIRE FIGHTING MEASURERS

ORAL INGESTATION:

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.

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. USE

OF PROTECTIVE MASK FOR DUST

PARTICLES.

9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM: Clear Flowing Liquid

COLOUR: Colorless to slight yellowish tint

ODOUR: Almost odorless

BOILING POINT: MELTING POINT: VISCOSITY: FLASH POINT: FLAMMABILITY SOLID/GAS: N/A

AUTO FLAMMABILITY: N/A

SPECIFIC REFRACTIVE: 1.250 - 1.480
EXPLOSIVE PROPERTIES: N/A
pH: (100% Concentrate) 4.50 - 8.50
OXIDIZING PROPERTIES: N/A
VAPOUR PRESSURE: N/A
SPECIFIC GRAVITY / DENSITY: 1.000-1.100

WATER SOLUBILITY: Soluble

OTHER SOLUBILITY: **BULK DENSITY:** PARTITION COEFFICIENT: (OCTANOL/WATER) **EXPLOSIVE LIMITS:** STABILITY AND REACTIVITY THERMAL DECOMPOSITION: Stable under normal conditions of use. Animal Tests Last Done 1992, as requirements of 11 TOXICOLOGICAL DATA the then EC DIRECTIVE 91/155/EEC LD50 > 36,000 MG/KG (Body Wt.) Rat ORAL: Essentially Non-Toxic and Edible in Small Quantity. Expected To Be Essentially Non Toxic. DERMAL: Slight Ethanolic Sting – irritation INHALATION: 36,000MG/KG (Body Wt.); CATEGORY 5 SPECIFIC CONCENTRATION LIMITS Essentially Non-Toxic and Edible in Small M-FACTORS 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 formally bounded under Non-Disclosure Agreement with various clients as when these Toxicological Data were established or their exclusive uses. **DISPOSAL CONDITIONS** DISPOSE OFF ACCORDING TO A RECOGNISED METHOD OF CHEMICAL WASTE DISPOSAL. ECOLOGICAL INFORMATION **BIODEGRATION:** Expected To Be Ultimately Biodegradable. No Data FISH TOXICITY: **BACTERIAL & VIRAL TOXICITY:** No data WGK CLASS: WGK (Self Classification) 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. No GHS Pictograms (Totally Non-Hazardous)

	PICTOGRAM SIGNAL WORD CODE(s): HAZARD STATEMENT CODE(s):	Division 1.6; No Hazard Statement
	SUPPLEMENTARY HAZARD	Similar Division 1.6; No Hazard Statement
15	STATEMENT CODE(s): REGULATORY INFORMATION	
16	OCCUPATIONAL EXPOSURE LIMITS: OTHER INFORMATION	N/A
	USES AS A COSMETIC ADDITIVE	0.01 - 10.0 %
	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.	*Please take that all specifications are liable to change without prior notice

Campo Kinetin 75% Conc. - Liquid ©.

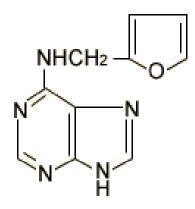
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Campo Kinetin Purum Powder for Cosmetics

KINETIN

Adenine, N-6 furfuryl

Molecular formula: C10H9N5O Molecular weight: 215.21 Product No: 2001-03-02



Product Specification

INCI Name: KINETIN

Botanical Name: Cocos nucifera L

Parts used: Freezed Dried Young Coconut fruit Endospermum & Juice

Properties: White crystal or white crystalline powder,

Melting point: 266-276 Deg. C

Solubility: Easily soluble in dilute acid (dilute Lactic Acid or weak Alpha-

Hydroxy Acids) and dilute alkali, but hardly soluble in water,

alcohol, ether and acetone.

Uses: Anti-Wrinkles Topical Treatment Cosmetics

and Skin-Wrinkles Corrector Cosmetics

Usage Level: 0.0005 - 1%

Specifications:

Campo Kinetin 95%

Assay: 95%

Melting point: 258-260 deg C

Loss on drying: 0.5%

Campo Kinetin 98%

Assay: 98%

Melting point: 262-264 deg.C

Loss on drying: 0.3%

Packing: 10kg/drum

Monthly: 50kg/month

CAMPO RESEARCH Pte Ltd TECHNICAL SPECIFICATION

PRODUCT Name (Campo Research)	CAMPO KINETIN PURUM POWDER 98%
	For Cosmetics
Other Trade Names (CampoResearch)	Kinetin
CTFA TRADE NAME (Proposed)	CAMPO KINETIN PURUM POWDER 98%
Existing INCI Name	Kinetin
Chinese Translation	激动素(KINETIN)
Chinese Translation	版约 余(KINETIN)
CAMPO PRODUCT #	2001-03-02
HS Code:	1302.19.0000
CTFA Monograph ID:	9882 – Kinetin
CAS#	525-79-1 / 9001-54-1 — Kinetin
CAS# EU	525-79-1 / 9001-34-1 - Kinetin
CAS# EU	323-79-1 (EO)
EINECS Number and Name	208-382-2(1) / 232-614-1(1) – Kinetin
EINECS# EU	208-382-2 (EU) – Kinetin
EINECS Number and Name	Kinetin
EINECS# EU	http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseacti
European Commission–Health &	on=search.details_v2&id=78076
Consumer Cosmetics-Cosing	Kinetin – 208-382-2 (EU)
BATCH/LOT #	See COA Batch lot
SPECIES	Cocos nucifera
D. I. D. W. G. L. L. G. L.	Syn: Cocos nucifera Linn.
PARTS USED	Freezed Dried Young Coconut Fruit Endospermum
DAW MATERIAL ORIGIN	& Fractionated insoluble components of Young Coconut Juice
RAW MATERIAL - ORIGIN	JAPAN 1000 Kind
CONCENTRATION	100% Kinetin
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.
	L 22 222

Specification Parameter Analysis	Specification Range	Results	<u>Methods</u>
Physical Form	White Crystal or Fine	Conforms	Visual
	White Crystalline Powder		
Colour	White to Slight Yellowish	Conforms	Visual
	Buff		
Odour	Almost Odorless	Conforms	Olfactory
Specific Gravity (20°C)	1.010 -1.100 (1 gram	See COA	USP XXIX/Paar,DMA35
(1 gm dissolved in 10 ml water)	dissolved in 10 ml water)		
Refractive Index (20°C)	-	-	USP XXIX/DGF IV C (52)
pH(20deg.C.) (100%	N/A	-	USP XXIX/DGF H III (92)
concentrate)			
Amino Acids	-	See COA	-
Porosity	-	-	-
Solubility	Water Soluble (With	Conforms	
	Slight Cloudiness)		
Germanium Organic	-	See COA	USP XXIX/Ph.Eur.2.6.12(97)
Strontium Organic	-	See COA	USP XXIX/Ph.Eur.2.6.12(97)
Selenium Organic	-	See COA	USP XXIX/Ph.Eur.2.6.12(97)

Zinc Complex Organic	-	See COA	USP XXIX/Ph.Eur.2.6.12(97)
Mercury	-	See COA	USP XXIX/Ph.Eur.2.6.12(97)
Arsenic	-	See COA	USP XXIX/Ph.Eur.2.6.12(97)
Other Trace Element	-	See COA	-
Dry Residue (160deg.C/34Min)	N/A	-	Mettler 16J
Preservation	None	Conforms	-
Pesticide Content	None	Conforms	Pflanzaniaschuttal 1989
Total Germs	<10 CFU/ml - non-	Conforms	USP XXIX/Ph.Eur.2.6.12(97)
	pathogenic		
Total Yeast/Mold	Nil	Conforms	USP XXIX/Ph.Eur.2.6.12(97)
Heavy Metals(Total)As,Pb,Hg	<0.05 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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MATERIAL SAFETY & CONSUMER SAFETY TESTING LABS.
DIV. OF JTC KAMPOYAKI SINGAPORE
JEDGENCY MATERIAL SAFETY / ACCIDENTAL BELEASE CENTER

EMERGENCY MATERIAL SAFETY / ACCIDENTAL RELEASE CENTER Contact:

Emergency Tel.no: +(65)-63833202/<u>63833631(24hours</u>) /63228551/63228503 Emergency Fax No: +(65)-<u>63833632(24hours</u>),63824680, 63228558 EMAIL: msds911@campo-research.com

Campo Kinetin Purum Powder 98%©.

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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

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	Dr Balasubramaniam PhD
DATE OF LATEST REVISION	Dec. 10th 1996- Rev'wer- Dr Fergus Jes .G. Velasquez Bsc. Med Tech, MD February 10 th 2012 – Reviewer=Joshua Teo February 5 th 2013 – Reviewer – Dr Balasubramaniam M, PhD 12 th February 2015 - Joshua Teo BSc. Chem, Balasubramaniam M PhD & Oksana Nemchenko MD 15 th May 2016 - Joshua Teo BSc. Chem, Balasubramaniam M PhD & Oksana Nemchenko MD
1 PRODUCT AND COMPANY	

1 PRODUCT AND COMPANY	Balasubramaniam M PhD & Oksana Nemchenko MD 15 th May 2016 - Joshua Teo BSc. Chem, Balasubramaniam M PhD & Oksana Nemchenko MD
IDENTIFICATION COMMERCIAL NAME (Processed)	CAMPO KINETIN DUDUM DOMPED 000/
COMMERCIAL NAME: (Proposed) OTHER TRADE NAME:	CAMPO KINETIN PURUM POWDER 98% For Cosmetics
LATIN NAME:	Cocos Nucifera Linn.
INCI NAME:	Kinetin
Chinese Translation	激动素 (KINETIN)
INTERNATIONAL CHEMICAL IDENTIFICATION (EC REGULATION NO#1272/2008 AMENDED NO#790/2009) and Compliant to the GHS:	KINETIN
EPA (USA) GENERIC NAME:	Kinetin
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 DIVISION 1.6; NON-HAZARDOUS ACCORDING TO DIRECTIVE 67/548/EEC OR NO HAZARD STATEMENT

ITS AMENDMENTS.

HAZARD CLASS and CATEGORY CODE(s) PICTOGRAM: NONE

HAZARD STATEMENT CODE(s) 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

GHS CLASSIFICATION: PICTOGRAM: NONE

This material is Non-hazardous according

No GHS Pictogram (Totally Non-Hazardous)

To UN-GHS Criteria. Division 1.6: No Hazard Statement.

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

Kinetin

Division 1.6: No Hazard Statement.

3 COMPOSITION / INFORMATION ON

INGREDIENTS

100 PERCENT CARBON DIOXIDE GAS EXTRACTION OF COCONUT KINETIN NATURAL METABOLITE -Ex-FREEZED DRIED FROM YOUNG COCONUT FRUIT

ENDOSPERMUM & COCONUT JUICE SECRETION OF WATER-INSOLUBLE FREEZED-DRIED COMPONENTS.

CTFA Monograph ID: 9882 – Kinetin

CAS# 525-79-1 / 9001-54-1 – Kinetin CAS# EU 525-79-1 (EU) – Kinetin

CAS NO# (CAS Name) 525-79-1 – Kinetin

(EC REGULATION NO#1272/2008 AMENDED NO#790/2009)and compliant

to the GHS

EINECS Name and Number 208-382-2(1) / 232-614-1(1) – Kinetin

EINECS# EU 208-382-2 (EU) – Kinetin

EINECS# (EINECS Name) 208-382-2 – Kinetin

(EC REGULATION NO#1272/2008 AMENDED NO#790/2009) and compliant

to the GHS

EINECS Name and Number Kinetin

EINECS# EU http://ec.europa.eu/consumers/cosmetics/cosing/index.

European Commission–Health & Consumer cfm?fuseaction=search.details v2&id=78076

Cosmetics–Cosing Kinetin – 208-382-2 (EU)

RISK PHRASES None

SAFETY PHRASES 25-26 Not Mandatory

GHS CLASSIFICATION: PICTOGRAM: NONE

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 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. SKIN CONTACT: FIRE FIGHTING MEASURERS 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. PROTECTIVE EQUIPMENTS FOR Standard Equipments. FIGHTERS: 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. USE OF PROTECTIVE MASK FOR DUST PARTICLES. PHYSICAL AND CHEMICAL PROPERTIES PHYSICAL FORM: White Crystal or Fine white crystalline powder COLOUR: White to slight yellowish buff Almost odorless ODOUR: **BOILING POINT: MELTING POINT:** VISCOSITY: FLASH POINT: FLAMMABILITY SOLID/GAS: N/A **AUTO FLAMMABILITY:** N/A SPECIFIC REFRACTIVE: **EXPLOSIVE PROPERTIES:** N/A N/A **OXIDIZING PROPERTIES:** N/A VAPOUR PRESSURE: N/A DENSITY: (1 gm dissolved in 10 ml water) 1.010 -1.100 WATER SOLUBILITY: Hardly soluble but dispersible Easily soluble in weak dilute acid (dilute Lactic Acid OTHER SOLUBILITY: or weak diluted Alpha -Hydroxy Acids) or weak dilute Alkali, 10 parts of weak diluted acids pH 5.5 – 6.0 or weak diluted Alkali pH 7.5 to 8.5 **BULK DENSITY:** PARTITION COEFFICIENT: (OCTANOL/WATER) **EXPLOSIVE LIMITS:** TABILITY AND REACTIVITY Stable under normal conditions of use. THERMAL DECOMPOSITION: Animal Tests Last Done 1992, as requirements of the 11 TOXICOLOGICAL DATA then EC DIRECTIVE 91/155/EEC ORAL: Essentially Non-Toxic and Edible in Small Quantity.

DERMAL: Expected To Be Essentially Non Toxic INHALATION: N/A SPECIFIC CONCENTRATION LIMITS MG/KG (Body Wt.); CATEGORY 5 Essentially Non-Toxic and Edible in Small Quantity. **M-FACTORS** (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 EYE: Very mild / minimal- not a transient conjunctival irritant at 3% concentrate in water (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. **ECOLOGICAL INFORMATION BIODEGRATION:** Expected to be ultimately biodegradable. FISH TOXICITY: No data **BACTERIAL & VIRAL TOXICITY:** No data WGK CLASS: WGK (Self classification) **DISPOSAL CONDITIONS** 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 PAGES NO. N/A ICAO/IATA AIR CLASS: Non-Hazardous ICAO/IATA AIR CLASS PACKING GROUP: N/A Non-Hazardous RID/ADR CLASS: 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) Division 1.6; No Hazard Statement **HAZARD STATEMENT CODE(s):** SUPPLEMENTARY HAZARD Similar Division 1.6; No Hazard Statement **STATEMENT CODE(s):** REGULATORY INFORMATION OCCUPATIONAL EXPOSURE LIMITS: N/A OTHER INFORMATION USES AS A COSMETIC ADDITIVE 0.01 - 50.0 % This format and information is compiled by *Please take note that all specifications are liable Kampoyaki Novel Natural Product Chemistry/ to changes without prior notice. Novel Drug Discovery cGMP Labs Kobe, Japan; for Campo Research, Kyoto and Singapore.

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