

COCREATE GLOBAL TECHNOLOGIES PRIVATE LIMITED
U21009KA2023PTC179006

Registered address: L73, Attic Space, 15th Cross Road, HSR Layout,
Bangalore Urban- 560102, Karnataka .
Email: info@scimplify.com
Website:www.scimplify.com



Vit K2 Menaquinone 0.2% (TDS)

General Information

Description

Microencapsulated vitamin K2 all-trans MK-7

Empirical formula: C46H64O2
Molecular mass: 649 g/mol

SEAC Approval Information

Property	Description	Pelican Reference Number	Usage
SEAC Approval Category	Food		WORLD

Packaging Transport Storage

Storage / Distribution Conditions

Property	Target	Min	Max	UoM	Delivery Condition	UN Code	Usage
Transport Temperature		10	30	°C			WORLD
Storage Temperature		10	25	°C			WORLD
Shelf Life Total Days		720		day(s)			WORLD
Shelf Life Total Months		24		month(s)			WORLD
Shelf Life on Delivery Days		540		day(s)			WORLD
Shelf Life on Delivery Months		18		month(s)			WORLD

Transport Temperature
Ambient

Shelf Life Total Days
From date of production

Shelf Life Total Months
From date of production

Shelf Life on Delivery Days
Remaining shelf life on delivery

Shelf Life on Delivery Months
Remaining shelf life on delivery

Additional Storage / Delivery Conditions

Clean, dry, dark, not stored and or transported with incompatible Food an/or Non Food Material.

Storage conditions described are valid for unopened/sealed packaging only. After opening, close and eliminate the air contained in the bag, seal and consume in the shortest time

Packaging Material

Format: Aluminium laminated bags with inner liners

Food-contact packaging material must be food-grade and comply with all relevant foods packaging and migration legislation.

Component List

Ingredient list

Hierarchy Level	Identifier	Component Description	Value	UoM	Usage
1	Acacia Senegal Gum	Active ingredient	30.0000	%	WORLD
1	Sucrose	Active ingredient	40.0000	%	WORLD
1	menaquinone (vitamin k2)	Active ingredient	0.2000	%	WORLD
1	Maize starch	Active ingredient	18.0000	%	WORLD
1	Calcium phosphate tribasic	Active ingredient	4.0000	%	WORLD
1	medium chain triglycerides (palm oil)	Active ingredient	3.0000	%	WORLD
1	Water	Active ingredient	4.8000	%	WORLD

Additional Information

Vitamin K2 MK-7 ≥ 0.2 %
Sucrose/Sugar 30-50 %
Acacia gum 20-40 %
Corn starch 15-30 %
Tricalcium phosphate ≤ 4 %
Medium chain triglycerides 1-5 %
Palm kernel Water ≤ 5 %

Sensory Examination

Unprepared

Sensoric Examination

Property	Method	Cr	Usage
Appearance	UMA-5588	X	WORLD
Colour	UMA-5588		WORLD
Odour	UMA-5590		WORLD
Texture	UMA-5588		WORLD

Appearance

A White to yellow powder without lump, conform to standard.

Colour

White to yellow powder, Conform to standard

Odour

Typical, No Odor. Conform to standard.

Texture

Free flowing, free from lumps, Conform to standard.

Defects / Foreign Material

Foreign Material Critical

Property	Max	UoM	Method	Cr	Usage
Total Foreign Material Critical (2)	0	No./25kg	UMA-5588	X	WORLD

Foreign Material Major

Property	Max	UoM	Method	Cr	Usage
Total Foreign Material Major (2)	0	No./25kg	UMA-5588		WORLD

Foreign Material Minor

Property	Max	UoM	Method	Cr	Usage
Total Foreign Material Minor (2)	0	No./25kg	UMA-5588		WORLD

Reference Text

Foreign Material Definitions

Foreign material is defined as any object/material which may become part of the product being produced, which is not designed to be part of such product Foreign Materials

Classification:

1. Critical - Those foreign materials that are hazardous in food, that can potentially cause harm to the consumer.
2. Major - Those foreign materials that are not hazardous in food at low levels, but that are objectionable when present in food.
3. Minor - Those foreign materials that are not hazardous in food, but that are unwanted in food but technically unavoidable and therefore tolerated at very low levels (Usually of natural origin)

Chemical-Physical Analysis

Chemical-Physical Analysis

Property	Target	Min	Max	UoM	Method	Cr	Usage
Dispersibility in Water				Text	UMA-5176		WORLD

Loss on Drying			8	%	ISO-1442	X	WORLD
Density 20 °C	0.6			g/cm³	UMA-2002		WORLD
Vitamin K		2,000		mg/kg	Compendia	X	WORLD

Dispersibility in Water

Dispensability (10% at @25°C): Dispersible in water

Loss on Drying

3g Sample at 105°C for 4 hrs

Density 20 °C

Vitamin K

Vitamin K2 (Menaquinone)

Alternate Method of analysis for Vitamin K2: UMA-2203

Chemical Physical Information

"Additional info for method: Compendia

Notwithstanding anything agreed in any supply agreement (such as UPA) and any thereto related documents for vitamins, minerals and any other substance that is added to foods for achieving a nutritional or physiological effect the supplier guarantees the compliance with the relevant requirements laid down in (1) the Codex Alimentarius Standards (including codes of practice, guidelines and recommendations); (2) the JECFA reports and monographs and (3) any equivalent compendia dealing with the same subject matter in force and/or applicable locally or regionally (such as, but not limited to the United States Pharmacopoeia including National Formulary, the Food Chemicals Codex or the European Pharmacopoeia) e.g. Ph. Eur., USP or FCC."

Additives / Contaminants / Trace comp.

Reference Text

Undesirable Substances

Contaminants/Toxins/Pesticide residues and Other undesirable substances

The Supplier shall source, process and supply the materials in accordance with the Codes of Practices, Guidelines and Standards of the Codex Alimentarius (http://www.codexalimentarius.net/web/index_en.jsp) and the International Standardization Organization (ISO :-<http://www.iso.org/iso/home.html>). The Supplier guarantees the maximum limits set by the Codex Alimentarius for the presence of contaminants, toxins, pesticide residues, residues of veterinary drugs, micro-organisms and other undesirable substances in foods and packaging materials and the maximum limits for additives, processing aids and enzymes will not be exceeded.

Where regional or local legislation is stricter this material must comply with the requirements as laid down in the legislation in force in the country of manufacture and intended receipt for this material.

Consumer Information / Claims

Food Allergen/Food Intolerance

Property	Yes	No	Max Conc.	UoM	Composition	Cross Contamination	Usage
Cereals cont. Gluten and Prod. thereof		X		mg/kg			WORLD
- Wheat		X		mg/kg			WORLD
- Rye		X		mg/kg			WORLD
- Barley		X		mg/kg			WORLD
- Oats		X		mg/kg			WORLD
- Hybridised strains e.g. triticale		X		mg/kg			WORLD
Crustaceans and products thereof		X		mg/kg			WORLD
Gluten		X		mg/kg			WORLD
Molluscs and products thereof		X		mg/kg			WORLD

Egg and products thereof		X		mg/kg			WORLD
Fish and products thereof		X		mg/kg			WORLD
Peanuts and products thereof		X		mg/kg			WORLD
Soybeans and products thereof		X		mg/kg			WORLD
Milk and thereof (including lactose)		X		mg/kg			WORLD
Nuts and products thereof		X		mg/kg			WORLD
- Almond (Amygdalus communis L.)		X		mg/kg			WORLD
- Hazelnut (Corylus Avellana)		X		mg/kg			WORLD
- Walnut (Juglans Regia)		X		mg/kg			WORLD
- Cashew Nuts (Anacardium Occidentale)		X		mg/kg			WORLD
- Pecan nut (Carya illinoensis)		X		mg/kg			WORLD
- Brazil nut (Bertholletia excelsa)		X		mg/kg			WORLD
- Pistachio nut (Pistacia vera)		X		mg/kg			WORLD
- Queensland nut or Macadamia sp.		X		mg/kg			WORLD
- Pine nut (Pinus spp)		X		mg/kg			WORLD
- Beech nut (Fagus spp)		X		mg/kg			WORLD
- Chestnut (Castanea spp)		X		mg/kg			WORLD
- Chinquapin (castanea pumila)		X		mg/kg			WORLD
- Coconut (Cocos nicifera)		X		mg/kg			WORLD
- Ginkgo nut (Ginkgo biloba L.)		X		mg/kg			WORLD
- Hickory nut (Caya spp.)		X		mg/kg			WORLD
- Lichee nut (Litchi chinensis)		X		mg/kg			WORLD
- Pili nut (Canarium ovatum)		X		mg/kg			WORLD
- Sheanut (Viburnum paradoxa)		X		mg/kg			WORLD
- Heartnut (Juglans ailantifolia)		X		mg/kg			WORLD
- Butternut (Juglans cinerea)		X		mg/kg			WORLD
Sesame Seeds and products thereof		X		mg/kg			WORLD
Sulphite		X		mg/kg			WORLD
Celery and products thereof		X		mg/kg			WORLD
Mustard and products thereof		X		mg/kg			WORLD
Lupin and products thereof		X		mg/kg			WORLD
Buckwheat and products thereof		X		mg/kg			WORLD
Mammals and products thereof		X		mg/kg			WORLD
Poultry and products thereof		X		mg/kg			WORLD

Matsutake (Mushroom) and thereof		X		mg/kg			WORLD
Apples and products thereof		X		mg/kg			WORLD
Banana and product thereof		X		mg/kg			WORLD
Kiwi fruit and products thereof		X		mg/kg			WORLD
Oranges and products thereof		X		mg/kg			WORLD
Peaches and products thereof		X		mg/kg			WORLD
Tomato and products thereof		X		mg/kg			WORLD
Yams and products thereof		X		mg/kg			WORLD
Mango and products thereof		X		mg/kg			WORLD
Corn (Maize)	X			mg/kg	X		WORLD
Yeast		X		mg/kg			WORLD
Glutamate		X		mg/kg			WORLD
AZO Colours		X		mg/kg			WORLD
Artificial Colours (other)		X		mg/kg			WORLD
Alcohol		X		mg/kg			WORLD
Allium		X		mg/kg			WORLD
Antioxidants		X		mg/kg			WORLD
Artificial Sweeteners		X		mg/kg			WORLD
Preservatives		X		mg/kg			WORLD

Dietary - Guaranteed

Property	Yes	No	Comment	Usage
Halal Certified	X			WORLD
Kosher	X			WORLD
Vegan	X			WORLD
Ovo Lacto Vegetarian	X			WORLD
Lacto Vegetarian	X			WORLD
Ovo Vegetarian	X			WORLD
Organic		X		WORLD

Hal-al Certified

The supplier must hold a certification that is in accordance with the legislation in the country to which the material is manufactured and delivered.

Kosher

The supplier must hold a certification that is in accordance with the legislation in the country to which the material is manufactured and delivered.

Ready to Eat/Drink (RTE/RTD)

Property	Yes	No	Usage
RTE/RTD	X		WORLD

Foods Free from

Property	Yes	No	Comment	Usage
Irradiation	X			WORLD
Alcohol	X			WORLD
Meat	X			WORLD

Genetic Modification

Property	Yes	Max Conc.	Usage
Non GM by Origin	X		WORLD
GM free processing	X		WORLD
GMO Percentage		0	WORLD

Reference Text

RTE/RTD - Negligible pathogen risk

RTE/RTD Yes means the raw material is heavily processed or from chemical or alcoholic origin and therefore the risk for micro biological pathogens is negligible and deemed suitable as RTE/RTD.

Microbiological Analysis

Infectious and Toxigenic Pathogens

Property	n	c	m	M	UoM	Method	Cr	Usage
Bacillus cereus				0	cfu/g	ISO-7932		WORLD
Bacillus cereus					cfu/g	FDA BAM		WORLD
Salmonella cfu/25g				0	cfu/25g	ISO-6579-1	X	WORLD
Salmonella cfu/25g					cfu/25g	FDA BAM		WORLD
Coagul. pos. Staphylococci				0	cfu/g	ISO-6888-1		WORLD
Coagul. pos. Staphylococci Coagul. pos. Staphylococci					cfu/g	FDA BAM		WORLD

Staphylococcus Aureus: Absent/0.1 g [India Specific Requirement).

Bacillus cereus

Method	Condition Set
ISO-7932	Limit of Detection is 100 cfu/g
FDA BAM	Chapter 14 Limit of detection 100 cfu/g

Salmonella cfu/25g

Method	Condition Set
ISO-6579-1	Limit of detection is 0 cfu/ 25 g
FDA BAM	Chapter 5 Limit of detection is 0 cfu/ 25 g

Coagul. pos. Staphylococci

Method	Condition Set
ISO-6888-1	Limit of Detection is 100 cfu/g
FDA BAM	Chapter 12 Limit of detection 100 cfu/g

Indicator/Utility Microorganisms

Property	n	c	m	M	UoM	Method	Cr	Usage
Aerobic Plate Count				10,000	cfu/g	ISO 4833-1	X	WORLD
Aerobic Plate Count					cfu/g	FDA BAM		WORLD
Enterobacteriaceae				100	cfu/g	ISO-21528-2		WORLD
Coliforms cfu/g				10	cfu/g	ISO-4832	X	WORLD
Coliforms cfu/g					cfu/g	FDA BAM		WORLD
Yeasts				100	cfu/g	ISO-21527	X	WORLD
Yeasts					cfu/g	FDA BAM		WORLD
Moulds				100	cfu/g	ISO-21527	X	WORLD
Moulds					cfu/g	FDA BAM		WORLD
Escherichia coli				0	cfu/g	ISO-16649-1		WORLD
Escherichia coli					cfu/g	FDA BAM		WORLD

Enterobacteriaceae

Enterobacteriaceae are required for Europe, Indonesia and Brazil. Coliform for other regions.

Aerobic Plate Count

Method	Condition Set
ISO 4833-1	Limit of Detection is 10 cfu/g
FDA BAM	Chapter 3 Limit of detection 10 cfu/g

Enterobacteriaceae

Method	Condition Set
ISO-21528-2	Limit of Detection is 10 cfu/g

Coliforms cfu/g

Method	Condition Set
ISO-4832	Limit of Detection is 10 cfu/g
FDA BAM	Chapter 4 Limit of detection is < 3 MPN/g

Yeasts

Method	Condition Set
ISO-21527	Limit of Detection is 10 cfu/g
FDA BAM	Chapter 18 Limit of detection 10 cfu/g

Moulds

Method	Condition Set
ISO-21527	Limit of Detection is 10 cfu/g
FDA BAM	Chapter 18 Limit of detection 10 cfu/g

Escherichia coli

Method	Condition Set
ISO-16649-1	Limit of Detection is 10 cfu/g
FDA BAM	Chapter 4 Limit of detection is < 3 MPN/g

Reference Text

Food Microbiological definition

M is defined as the maximum acceptable value of a test organism. The value 0 cfu/g should be interpreted as a value less than the limit of detection of the test method used

Alternative methods are allowed if they are validated against the reference methods (ISO, UMA, AOAC or BAM).

Coliforms are a subgroup of Enterobacteriaceae. Enterobacteriaceae are required for Europe, Indonesia and Brazil, Coliforms are required for other regions.

If regional or local legislation requires raw materials to be analyzed according to a sampling plan, it is the responsibility of the supplier to meet these requirements.

If regional or local legislation is stricter, this material must comply with the requirements as laid down in the legislation in force in the country of manufacture and in the country of intended receipt for this material.

Microbiological Information

Reference: MCS V21 (Malt Based Food Category)

Ingredient Group: Starches (maize, potato, tapioca, wheat, waxy maize) & Hydrolysed potato products (dextrins & MD up to DE 5/100g& Thickeners (Gums: seeds, seaweeds, microbials; Seaweed) & Fibers (natural and synthetic, cellulose)

Nutrition

Base Data

Property	g	ml	Conv. factor	Usage
Base Data	100			WORLD

Nutritional Data

Property	Typical	UoM	Data Source	Binding Coeff C0	Binding Coeff C1	Sweetness vs Sucrose	Usage
Energy kJ	1,376.569038	kJ	Calculation				WORLD
Energy kcal	329	kcal	Supplier				WORLD
Protein	0	g	Supplier				WORLD
Carbohydrate	64	g	Supplier				WORLD
Carbohydrate including fibre	92	g	Supplier				WORLD
Carbohydrate of which Sugars	44	g	Supplier				WORLD
Fat	1.8	g	Supplier				WORLD
Fat of which SAFA	1.8	g	Supplier				WORLD
Unsaturated Fat	0.000000	Gram	Calculation				WORLD
Fat of which MUFA	0	g	Supplier				WORLD
Fat of which PUFA	0	g	Supplier				WORLD
Fat of which Trans	0	g	Supplier				WORLD
Fat of which Dairy	0	g	Other				WORLD
iTFA(g)	0.000000	g	Calculation				WORLD
%iTFA in Total Fat	0.000000	%	Calculation				WORLD
Fat of which SAFA + Trans	1.800000	g	Calculation				WORLD
Cholesterol	0	mg	Supplier				WORLD
Fibre Dietary	28	g	Supplier				WORLD
Calcium	549	mg	Supplier				WORLD
Iodine	0	µg	Other				WORLD

Iron	0	mg	Supplier				WORLD
Magnesium	0	mg	Other				WORLD
Phosphorus	199	mg	Supplier				WORLD
Potassium	150	mg	Supplier				WORLD
Sodium	0.000000	g	Calculation				WORLD
Sodium mg	0	mg	Supplier				WORLD
Zinc	0	mg	Other				WORLD
Vitamin A	0	µg	Calculation				WORLD
Vitamin A IU	0.000	IU	Calculation				WORLD
Vitamin A RE	0.000	RE	Calculation				WORLD
Vitamin C	0	mg	Supplier				WORLD
Vitamin D	0.00	µg	Calculation				WORLD
Vitamin D IU	0.000	IU	Calculation				WORLD
Vitamin E	0	mg	Calculation				WORLD
Vitamin E IU	0	IU	Calculation				WORLD
Vitamin B1	0	mg	Other				WORLD
Vitamin B2	0	mg	Other				WORLD
Vitamin B6	0	mg	Other				WORLD
Vitamin B12	0	µg	Other				WORLD
Niacin	0	mg	Other				WORLD
Vitamin K	200,000	µg	Supplier				WORLD
Alcohol	0	g	Supplier	0.000000	0.000000	0.000000	WORLD
Organic Acid(s)	0	g	Supplier				WORLD
Water	5	g	Supplier	0.000000	0.000000	0.000000	WORLD
Ash	12	g	Other	0.002640	-28.315200	0.000000	WORLD
Salt as NaCl	0.000000	g	Calculation				WORLD
Sucrose	40	Gram	Supplier	7.756000	-226.384000	0.400000	WORLD

Vitamin K

Vitamin K2

Vitality Passport Input

Property	Typical/100g	UoM	Data Source	Usage
Added Sugars	40	g	Supplier	WORLD

Added Sugars

Sucrose/Sugar: 30-50 % as Carrier