

EVTeneSol™ 1% (T) - Cold Water Dispersible Natural Mixed-Carotene 1% Powder is a spray-dried water dispersible form of natural mixed-carotene (**EVTene™**), extracted and purified from virgin crude palm oil / palm fruits (*Elaeis guineensis*).

EVTeneSol™ 1% (T) contains natural **alpha-carotene, beta-carotene, gamma-carotene, lycopene** and other carotenes, a unique mixture in natural proportion as found in carrots. It gives a yellow to orange shade (depending on dosage) when used as natural colorant in food and drinks. The product also contains modified starch and antioxidants (tocopherol and ascorbic acid).

Palm mixed-carotene complex is the only true mixed-carotene complex with the highest ratio of **alpha-carotene**. The unique combination of carotenes in natural proportion and their synergistic effects may ultimately confer the many beneficial health effects associated with carotenes.

Specification

TOTAL MIXED-CAROTENE COMPLEX	10 mg/g (1%) Minimum
Isomers	Typical Value *
Alpha-Carotene	3.3 mg/g
Beta-Carotene	6.7 mg/g
Gamma-Carotene	35 mcg/g
Lycopene	10 mcg/g
TOTAL MIXED-CAROTENE COMPLEX	10.04 mg/g
VITAMIN A ACTIVITY	Each gram of this product contains not less than 11,667 IU Vitamin A Activity ^[1] OR 3,350 µg Retinol Activity Equivalents (RAE) ^[2] .
(1) Biological Activity 1 mg of trans beta-carotene = 1,667 IU of Vitamin A Activity. [Martindale The Extra Pharmacopoeia, 30 th ed., page 1051].	
(2) 1 µg RAE = 2 µg supplemental beta-carotene. [21CFR101.9, FDA]	
E 1% 1cm (peak max @ approx 447nm)	25 Minimum
Remarks : E1% 1cm is percentage extinction coefficient. It is the absorbance at 447nm with a 1% solution measured in a 1cm cuvette.	
PARTICLE SIZE	Minimum 95% less than 600 µm
MOISTURE	Maximum 5.0 %
MICROBIOLOGY	
- Total Aerobic Microbial Count	Max 1000 cfu/g
- Total Combined Yeasts/Moulds Count	Max 100 cfu/g
CAROTENES ISOMERIC RATIO *	Approximately 34% cis-isomer and 66% trans-isomer

*Typical Value refers to the average analytical results accumulated over the past years

SHELF LIFE	18 months	LABELLING	Products formulated using EVTeneSol™ 1% (T) can be labelled as containing natural carotenes
STORAGE	Store in airtight containers, below room temperature	STANDARDS	Palm Mixed-Carotene is in compliance with Commission Regulation (EU) No.231/2012: E160a(ii) – Plant Carotenes. Palm Mixed-Carotene Complex is Self-Affirmed GRAS according to Title 21 Code of Federal Regulation for use in Foods and Drinks.
PACKAGING	1-kg aluminum pouch or 10-kg container		

Application	<ul style="list-style-type: none"> Dietary Supplement Natural Colorant Functional Food & Drinks
Intended Consumer	The product is sold in bulk to manufacturers of supplements, pharmaceutical, food & beverage and / or personal care product industry for further process prior to consumption.

Product Certification		Sustainability	
	Certified in accordance to the current Pharmaceutical Inspection Co-Operation Scheme (PIC/S) GMP– Guide to Good Manufacturing Practice for Medicinal Products		Wildlife-Friendly Palm Products

TECHNICAL SUPPORT

ExcelVite's technical support team is ready to assist you in the use of our range of phytonutrients and other ingredients in your formulations at all stages of your product development. Emphasis is given to supplying the most cost effective and efficient solution to your particular requirement. Contact us for further information.

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