technical

COLUMBUS VEGETABLE OILS
WOMEN OWNED
30 E Oakton St., Des Plaines IL, 60018 USA
(847) 257-8920 FAX (773) 265-6985
http://www.columbusvegoils.com

MCT #585

MEDIUM CHAIN TRIGLYCERIDES

Product Overview:

MCTs (Medium Chain Triglycerides), also known as Caprylic/Capric Triglycerides, Fractionated Coconut Oil, or Fractionated Palm Kernel Oil possesses unusual properties that make it unique among edible fats and oils. Due to the large number of short chain fatty acids (C8 and C10s), this product is liquid at low temperatures. It also has a very bland flavor that makes it an ideal carrier for flavors and fragrances. Additionally, this product digests rapidly and provides a boost of energy, making it attractive for nutritional and performance foods.

Product Specifications: (using AOCS Test Method #)

*tests are conducted at CFC and are on Certificate of Analysis (COA)

Flavor / Odor (sensory)	Bland
Color, Lovibond (Cc13b-45)	1.0R (max)
Free Fatty Acid, % as Oleic (Ca 5a-40)	0.10 (max)
Iodine Value, WIJS (Cd 1-25)	1.0 (max)
Peroxide Value, mEq/kg (Cd 8b-90)	1.0 (max)[1]

Typical Properties: (not reported on COAs)

*Universal test results

SAP Value mg KOH/g (mg NaOH/g)	335 (238)
Physical State	Liquid
Appearance	Light Yellow
OSI @ 110°C (hours)	100.0 (min)
Viscosity @ 40°C	15 cSt
Specific Gravity @ 25°C	0.930 – 0.950
Moisture	<500ppm
Hydroxyl Value (mg KOH/g)	8.0 max

Label Ingredients Statement:

Medium Chain Triglycerides

Applications:

Carrier for flavors and fragrances, performance and nutritional products and beverages, low-temperature food-grade lubricants or release agents and a mineral oil alternative for a variety of applications including release agent and polishing agent.

Claims:

Kosher Pareve (as applicable; symbol will be present on label)
Halal Compliant (not certified)
Sustainable Product available (Product code will end with MB, SG, or IP)
SQF Food Safety and Food Quality (as applicable; symbol may be present on label)
USP/NF Compliant (not certified)

Country of Origin:

This product is imported from Indonesia and Malaysia

Process Flow:

Derived from the distilled fatty acid fractions of Coconut Oil and/or Palm Kernel Oil, and esterified with USP high purity glycerine. Refined, Bleached, and Deodorized.

Status of Ingredient Statement:

MCTs, CFC 585 is considered Vegan, Highly Refined, Natural (ISO 16128), No Animal Testing, Lactose Free, Gluten Free, Glutamate Free, BSE & TSE Free, No Hydrogenated or Partially Hydrogenated Oils, No Preservatives

Packaging & Availability:

Contact sales about packaging options and product availability

Storage & Shelf Life:

Store at 65 - 75°F in a dry and odor-free environment.
Best if used within 24 months from the date of manufacture in unopened containers.

[1]Maximum result at packaging, an oil's peroxide value can increase but this does not imply that the oil is rancid.

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Sewer Sludge and Irradiation:
Columbus Vegetable Oils products are not exposed to, nor cultivated in, sewage sludge during production and subsequent processing. The oil is not exposed to any irradiation.

Food Grade Statement:
CVO hereby certifies that MCTs, CFC 585 is Generally Recognized as Safe (GRAS) as per 21CFR 170.30 (prior to January 1, 1958, it was present naturally in Coconut Oil, Palm Kernel Oil and Human Breast Milk. Purer forms were derived by fractionation of Coconut Oil at different temperatures) and it is manufactured to Good Manufacturing Practices and is safe for its intended use in foods. This product is considered Ready-to-Eat.

Regulatory Information:
MCTs, CFC 585 is Proposition 65 compliant, jointly pre-registered on the European REACH program, understood to be in Compliance with EC 1881/2006, All additives Comply to EC 96/77/EC, meets CONEG requirements, registered and compliant with Public Health & Security.
CAS# 73398-61-5 EC# 277-452-2
INCI Name – Caprylic/Capric Triglyceride
FDA Bioterrorism Preparedness and Response Act of 2002 Registration #: ---------5788, Registration is Current.

Foreign Material Contamination:
Pesticide Residues - Vegetable Oils may be routinely monitored for both Organo Phosphate and Chlorinated pesticide residuals by our suppliers. Detections limits for testing are in the 0.01ppm range. Due to the extensive processing involved, these materials are not expected to remain even if present in the original oilseed. To date, no detectable levels are known to be present in the product.

Heavy Metals - When previously tested, no reportable levels of heavy metals have been found. These include but are not limited to Lead (<0.1 ppm), Cadmium (<0.05ppm), Chromium (<0.05ppm), Mercury (<0.05ppm), and Arsenic (<0.1ppm).

To the best of our knowledge, this product is not at risk of exposure to chemicals or substance on the CMR list. As well as likely meets EU criteria on 3-MCPD and GE content.

Other contaminants – There is no known content or contamination of potentially hazardous components in this vegetable oils and as such there is no risk of contamination. These components include but are not limited to chlorpyrifos, mycotoxins, phthalates, PAH, BPa, Dioxin, melamine, ethylene oxide, zearalenone, and organic solvents.

GMO Statement:
Non GMO
This term shall be used to describe products that contain NO ingredients, additives or processing aides derived from commodities that have commercially grown GMO varieties in the supply chain (i.e. contains no soybean, corn, cotton, canola, squash, papaya, potato or tomato).

MCTs, CFC 585 is packed using clean lines and is free from all extraneous material that might harbor genetically modified organisms (GMOs) or substances derived thereof.

As per the USDA, this product is not considered to be Bioengineered and no additional labeling is necessary.

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Microbiological Statement:

Vegetable Oil products by Columbus Vegetable Oils have low moisture content (less than 0.05% typical), have in general been processed at elevated temperatures, and lack nutrients essential to support growth of most microorganisms. Organisms considered food-borne pathogens or of concern from a quality standpoint are not able to proliferate in oil. Columbus processes and packs oil and shortening in a closed and sealed system offering little opportunity for contamination from extraneous materials that might harbor pathogens, viral particles etc.

The typical limits for microorganisms are outlined below.

Organism	Limits
Total Plate Count	Less than 100 per gram
Coliforms	Less than 10 per gram
E. coli	Less than 10 per gram
Staph. areus	Negative
Salmonella	Negative
Yeast & Molds	Less than 10 per gram

Nutritional Data:

Nutrient	Amount /100g
Total Solids**	100
Moisture***	0.0
Calories*	680
Total Fat (g)***	100
Saturated Fat (g)**	100
Polyunsaturated Fatty Acids (g)**	0
Monounsaturated Fatty Acids (g)**	0
Trans Fatty Acids (g)**	0.5
8:0 Capryllic***	55.0
10:0 Capric***	45.0
18:2 Trans***	0.5
Total Carbohydrate (g)*	0.0
Total Dietary Fiber	0.0
Total Sugars (g)*	0.0
Added Sugars (g)*	0.0
Protein (g)*	0.0
Cholesterol (mg)*	0.0
Ash (g)*	0.0
Iron (mg)*	0.0
Sodium (mg)*	0.0
Potassium (mg)*	0.0
Calcium (mg)*	0.0
Vitamin A (mcg/RAE)*	0.0
Vitamin C (mg)*	0.0
Vitamin D (mcg)*	0.0

*USDA National Nutrient Database for Standards,
**Calculated
***Based on Analytical Results

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Allergens:

MCT's, CFC 585 does not contain any of the nine major allergens, which are soy, eggs, peanut, milk, wheat, tree nuts, fish, sesame and crustacean fish.

The original source may be considered an allergen, although this product is not known to be allergenic. Consult with your doctor because it may be recommended that if a person has a severe allergy; they should avoid using this oil as it can give side effects. Follows Food Allergen Labeling and Consumer Protection Act of 2004 (FALCPA) (Pub. L. 108-282).

Refined, bleached, and deodorized (RBD) oils do not contain any proteinaceous material. The high temperature and filtration used in the RBD process effectively removes any proteins, potentially allergenic material from the oil. Furthermore, refined oils do not require allergen labeling under the Food Allergen Labeling and Consumer Protection Act of 2004 (FALCPA).

RBD oils derived from an allergen source include: Allergen Labeling required for Europe (Directive 2000/13/EC and Directive 2007/68/EC). Please reference your country of destination legislation for any additional allergen labeling.

Allergen	In the Product	On the same line	In the Facility
Soy Lecithin - Soy	no	no	yes
Toasted Sesame Oil - Sesame	no	no	yes
Sensitizing Agents (NOT KNOWN ALLERGENS)			
Artificial Flavors – Butter	no	no	yes
Artificial Preservatives – TBHQ, BHA, BHT	no	no	yes

Stored Products:

Allergens listed below are not found in the oil production facility, and those marked with * may be stored and labeled in the warehouse in finished form. All products come from approved suppliers. Each product is evaluated on the potential cross contamination with other products and allergens in the approved supplier's facility. If there is any risk to that product, then it is stated at the top of this section as "may contain" or "contains". Otherwise if it is not, those Allergens or Sensitizing Agents listed below DO NOT pose any threat to any of CVO's finished products.

***Milk and derivatives, *eggs and derivatives, *fish,** shellfish (including crustaceans, mollusks and their derivatives), ***tree nuts and derivatives**, ***wheat and derivatives**, rice and derivatives, corn and derivatives, gluten sources (other than Wheat: such as oat and its by products, barley, rye, malt, buckwheat, spelt and kamut), yeast and derivatives, Lupin and derivatives, artificial colors, MSG, benzoates, hydrolyzed vegetable proteins, sulfites, artificial sweeteners, ***animal derivatives**, sodium, ***mustard, *celery seeds, *seeds**, aspartame, saccharin, ***cocoa and derivatives**, cinnamon, lactose, casein, rBST bovine growth hormone, and caffeine.

Allergen Cross-Contamination Prevention:

Potential allergenic materials are produced using designated storage and processing, the risk of contamination is extremely low. When flush oils are used these are isolated and used only in products that may contain the same allergens. All containers and storage tanks are labeled accordingly if they may contain allergens. Columbus also has a dressing plant in the same building but in a separate, closed area. The allergens handled there are wheat, soy, milk, eggs, fish and celery. There are procedures in place to minimize any cross contamination and risk.

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