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Clear Canola Liquid Shortening #502

Product Overview:

This product is a blend of refined, bleached and deodorized (RBD) Canola Oil and additives to increase its stability. It is naturally winterized and remains clear under refrigeration. Also, it has the lowest level of saturated fats (~6%) among the commercially available vegetable oils.

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)	1.5R (max)
Free Fatty Acid, % as Oleic (Ca 5a-40)	0.05 (max)
Iodine Value, WIJS (Cd 1-25)	105 – 120
Peroxide Value, mEq/kg (Cd 8b-90)	1.0 (max) ¹
Cold Test @ 32°F	5.5 hours (min)

Typical Properties (not reported on COAs):

*Universal test results

SAP value mg KOH/g (mg NaOH/g)	188 (134)
OSI @ 110°C (hours)	16.0 (min)
Smoke Point	425°F (min)
Flash Point (Closed Cup)	550°F (min)
Viscosity @ 40°C	40 cSt
Specific Gravity @ 25°C	0.920
Moisture	<500ppm

Label Ingredient Statement:

Canola Oil, TBHQ and Citric Acid (added as a antioxidant), and dimethyl polysiloxane (added as an antifoam agent)

Applications:

Used in the Food Industry such as Cooking, Baking, Light Frying, and General Food Processing or Preparation.

Claims:

Kosher Pareve (as applicable; symbol will be present on label)
Halal Compliant (not certified)
USP Compliant (not certified)
SQF Level 3 (as applicable; symbol will be present on label)

Country of Origin:

The Canola Oil and dimethyl polysiloxane are produced in the USA and the Canola Oil is also imported from Canada. TBHQ and Citric Acid are imported from India.

Process Flow:

Canola Oil: Produced from USDA approved low erucic acid oil-bearing seeds of varieties derived from the *Brassica napus* L., *Brassica campestris* L. and *Brassica juncea* L., species. Solvent extracted. Refined, Bleached and Deodorized.
TBHQ: Synthetic from petroleum.
Citric Acid: Derived from enzymatic fermentation of sugars.
Dimethyl Polysiloxane: Synthetic

Status of Ingredient Statement:

Clear Canola Liquid Shortening, CFC 502 is considered Vegan, Lactose Free, Gluten Free, Glutamate Free, BSE Free

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 12 months from the date of manufacture in unopened containers.

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.

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

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Food Grade Statement:

CVO hereby certifies that Clear Canola Liquid Shortening, CFC 502 is Generally Recognized as Safe (GRAS) as per 21CFR 182.1, 21CFR 184.1555, 21CFR 172.185 (TBHQ), 21CFR 184.1033 (citric acid), 21CFR 173.340 (antifoam), and it is manufactured to Good Manufacturing Practices and is safe for its intended use in foods.

Regulatory Information:

Clear Canola Liquid Shortening, CFC 502 is Proposition 65 compliant, pre-registered on the European REACH program, meets CONEG requirements, registered and compliant with Public Health & Security.

CAS# 120962-03-0 EC# 601-748-6

INCI Name – Canola Oil, TBHQ, Citric Acid, Dimethyl Polysiloxane

FDA Bioterrorism Preparedness and Response Act of 2002 Registration #: -----5788

Foreign Material Contamination:

Pesticide Residues - Vegetable Oils are routinely monitored for both Organo Phosphate and Chlorinated pesticide residuals by our suppliers. To date, no detectable levels have been found in this 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).

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

GMO Statement:

GMO Free

This term shall be used to describe products that contain ingredients, additives or processing aids derived from commodities that have commercially grown GMO varieties in the supply chain, BUT residual DNA/protein is likely NOT detectable in the final product.

Clear Canola Liquid Shortening, CFC 502 is refined, bleached, and deodorized (RBD) and does not contain any proteinaceous material. During the RBD process, oil is exposed to high temperatures, vacuum stripping and is filtered through diatomaceous earth; effectively removing all extraneous material that might harbor genetically modified organisms (GMO's) or substances (protein, DNA) derived thereof.

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Microbiological Statement:

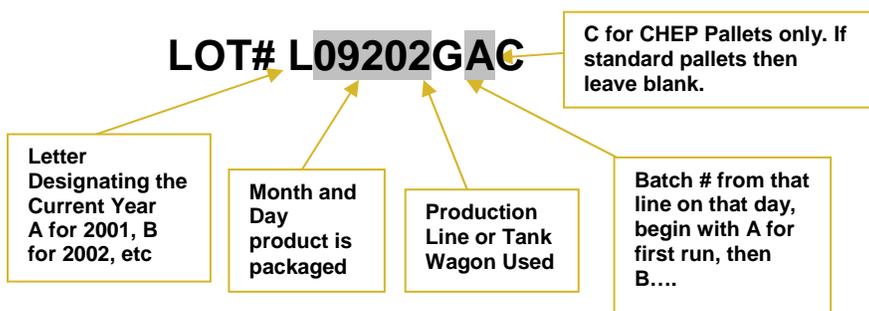
Vegetable Oil products by Columbus Vegetable Oils have low moisture content (less than 0.05% typical), have been processed at elevated temperatures, and lack nutrients essential to support growth of most microorganisms. Organisms considered food-borne pathogens or of concern from a quality standpoint 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.

Columbus periodically sends samples of oil to external laboratories for microbiological testing. These tests detect a presence of few if any microorganisms. The limits for each microorganism tested 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. aureus	Negative
Salmonella	Negative
Yeast & Molds	Less than 10 per gram

*If your organization requires microbials to be tested then each lot of product will need to be sent out and tested, which requires about 2 weeks.

Lot Number Explanation:



Nutritional Data:

Nutrient	Amount /100g
Total Solids**	100
Moisture***	0.0
Calories*	884
Total Fat (g)***	100
Saturated Fat (g)**	6.6
Polyunsaturated Fatty Acids (g)**	29.4
Monounsaturated Fatty Acids (g)**	63.5
Trans Fatty Acids (g)**	0.5
16:0 Palmitic***	4.4
18:0 Stearic***	2.2
18:1 Oleic***	62.8
18:2 Linoleic***	21.9
18:2 Trans***	0.5
18:3 Linolenic***	6.7
22:1 Erucic***	<2.0
Total Carbohydrate (g)*	0.0
Total Dietary Fiber	0.0
Total 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 (IU)*	0.0
Vitamin C (mg)*	0.0

*USDA National Nutrient Database for Standards, Reference 18 (2005)
 **Calculated
 ***Based on Analytical Results

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Allergens:

Clear Canola Liquid Shortening, CFC 502 does not contain any of the eight major allergens, which are soy, eggs, peanut, milk, wheat, tree nuts, fish, and crustacean fish. CVO also considers sesame protein an allergen because it has caused allergic reactions to some individuals and thus is a concern to many food processors.

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

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).

Stored Products:

Allergens listed below are not found in the 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, *peanuts 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, 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.