

VITAMIN E

Product Overview:

TKB's Vitamin E is a clear brownish-red viscous oil containing mixed Tocopherol concentrate. Its taste and odor are bland to mild characteristic. Tocopherols are used to protect food and cosmetic products from oxidation, thus increasing the shelf life of the product it is used in. In food applications, Tocopherols offer the advantage of low volatility, resulting in excellent carry-through characteristics. Products formulated using Tocopherols may be labeled as containing "natural mixed tocopherols" or "natural Vitamin E".

Product Specifications:

Specific Gravity	0.94 – 0.96 g/cm ³
Refractive Index	1.480 – 1.500
Color	Amber
Odor	Herbal

Each gram of TKB Tocopherols contains 500 mg of total tocopherols, including a minimum of 400 mg of non-alpha-tocopherols. Relative amounts of d-alpha, d-beta, d-gamma, and d-delta-tocopherol will vary because of the variability in natural oil source. However, the following values (expressed as a percent of the total tocopherols) are typical: d-alpha 14%, d-beta 1%, d-gamma 62%, d-delta 23%.

Label Ingredients Statement:

Tocopherols or Mixed Tocopherols and Soybean Oil (Carrier for the product)

Applications:

Used in the Food Industry, Cosmetic, and Pharmaceutical.

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:

This product is sourced and manufactured in the USA

Process Flow:

Tocopherols: Plant-Derived antioxidant for preservation of fats and oils
Soybean Oil: Derived from USDA approved soybean varieties. Solvent Extracted. Refined, Bleached, and Deodorized.
Citric Acid may be used as a processing aid and remain at trace levels.

Status of Ingredient Statement:

Vitamin E 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.

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

Product Name and Number: Vitamin E			Document #: 2.3.5.1
Date: 06/09/14	Revision #: 5.2	Revision Reason: Logo, GMO EU, Allergen & Regulatory Info Update	Reviser: Rick Cummisford

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Sewer Sludge and Irradiation:

TKB's Vitamin E is not exposed to, nor cultivated in, sewage sludge during production and subsequent processing. The oil is not exposed to any irradiation.

Food Grade Statement:

TKB hereby certifies that Vitamin E is Generally Recognized as Safe (GRAS) as per 21CFR 182.3890, 21CFR 182.1 and it is manufactured to Good Manufacturing Practices and is safe for its intended use in foods.

Regulatory Information:

Vitamin E is Proposition 65 compliant, meets CONEG requirements, is registered and compliant with Public Health & Security, understood to be in Compliance with EC 1881/2006 and all additives (except TBHQ) comply to EC 96/77/EC. Soybean Oil is exempt from REACH (EC 1907/2006) as per Annex V and Tocopherols are registered on the European REACH program.

CAS# 1406-66-2, 1406-66-2 / 8001-22-7 EC# 215-798-8 / 232-274-4

INCI Name – Tocopherols, Glycine soja (Soybean) Oil

FDA Bioterrorism Preparedness and Response Act of 2002 Registration #: -----5788, re-registered 12-2012

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 aides 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.

Vitamin E 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.

GMO-free products include: GM Labeling required for Europe (EC 1829/2003)

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Microbiological Statement:

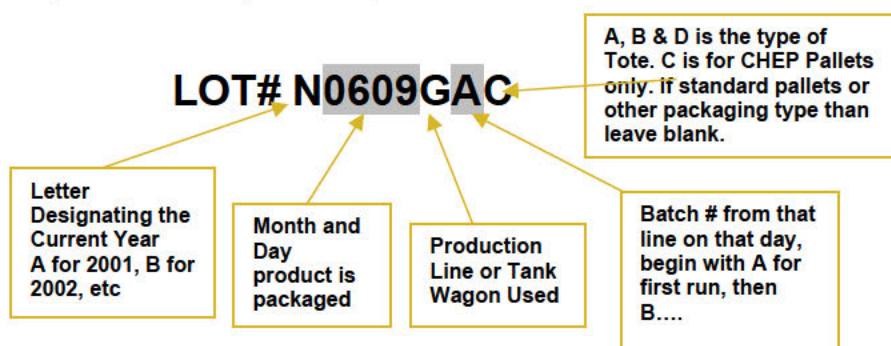
Vitamin E by TKB Trading, LLC have low moisture content (less than 0.05% typical), have been processed at elevated temperatures, and lack nutrients essential to support growth of most microorganisms. Organisms considered food-borne pathogens or of concern from a quality standpoint are not able to proliferate in oil; TKB 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.

TKB 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)**	24.5
Polyunsaturated Fatty Acids (g)**	54.1
Monounsaturated Fatty Acids (g)**	20.9
Trans Fatty Acids (g)**	0.5
16:0 Palmitic***	20.5
18:0 Stearic***	3.0
18:1 Oleic***	20.9
18:2 Linoleic***	52.9
18:2 Trans***	1.7
18:3 Linolenic***	0.0
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

Allergens:

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Vitamin E does not contain any of the eight major allergens, which are soy, eggs, peanut, milk, wheat, tree nuts, fish, and crustacean fish. TKB 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	no	no	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 TKB'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, 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.

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