

Product Technical Dossier

| | |
|------------------|---|
| Product | Vitamin E (DL-Alpha Tocopheryl) Acetate Powder 50% CWS (33.56% active vit E) |
| CCL Product Code | P2218 |

Specification Details

| | |
|-------------------------|---|
| Identification (A B C) | Specification Positive |
| Assay | 50% DL-Alpha Tocopheryl Acetate Powder providing on average 33.56% vitamin E (α-TE) |
| Appearance | Free Flowing Powder |
| Colour | Almost White to White |
| Aroma | Characteristic |
| Flavour | Characteristic |
| Sieve Analysis % passed | 100% pass 20 Mesh Min 95% Pass 40 Mesh Max 25% Pass 120 Mesh |
| Loss on Drying | Max 5% |
| Bulk Density | 0.4~0.5 g/cm ³ |
| Tapped Density | 0.5~0.6 g/cm ³ |

Microbiological Limits

| | |
|-----------------------|----------------|
| Total Viable Count | Max 1,000cfu/g |
| Yeasts & Moulds | Max 100cfu/g |
| Enterobacteria | Max 10 cfu/g |
| E. Coli | Negative/10g |
| Salmonella | Negative/25g |
| Staphylococcus aureus | Negative/10g |

Heavy Metal Limits

| | |
|--------------|------------|
| Lead (Pb) | Max 2ppm |
| Cadmium (Cd) | Max 1ppm |
| Mercury (Hg) | Max 0.1ppm |
| Arsenic (As) | Max 3ppm |

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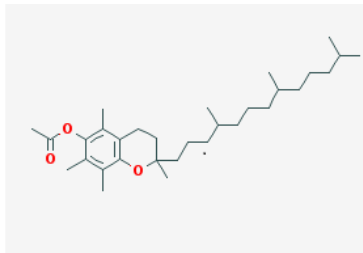
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Additional Technical Information

| | |
|---|--|
| Raw Material Full Botanical / Chemical Name | DL-Alpha-Tocopheryl Acetate Powder 50% CWS |
| The material is Food Grade | Yes |
| Country of Origin | China |
| Country of Manufacture | China |
| Solubility in Alcohol | Not soluble |
| Solubility in Water | Soluble in water (20°C) |
| Average Molecular weight | 472.75 |
| Molecular Formula | C ₃₁ H ₅₂ O ₃ |
| Molecular Structure (image) |  |
| CAS Number | 7695-91-2 |
| EC/EINECS Number | 231-710-0 |
| Shelf Life from Date of Manufacture | Minimum 2 Years |
| Pharmacopeia Standard Used | USP / EP |
| Suitable for Vegetarians? | Yes |
| Suitable for Vegans? | Yes |
| Storage Conditions | Store at room temperature, and protect from light, heat, oxygen, and moisture. |

Composition Origin, Function and Percentages

| Ingredients | Function | % composition | Source |
|-----------------------------|-------------------|---------------|-----------|
| DL-alpha-Tocopheryl Acetate | Antioxidant | 50% | Synthetic |
| Modified Food Starch | Carrier | 30-50% | Corn |
| Maltodextrin | Carrier | 0-20% | Corn |
| Silicon Dioxide | Anti-Caking Agent | 1-3% | Synthetic |

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Nutritional Data

| Test | Value per 100g | Per 1g |
|---|-------------------|-----------|
| Energy kJ / Kcal | 778 KJ / 185 Kcal | 8kJ/2kcal |
| Fat (g) | 0 g | 0.0g |
| Carbohydrate (g) | 45.1 g | 0.5g |
| -of which sugar | 7.7g | 0.08g |
| Fibre (g) | 0 g | 0.0g |
| Protein (g) | 0.6 g | <0.1g |
| Salt (g) | < 0.01g | <0.01g |
| Vitamin E (α-alpha tocopherol equivalents) | 33,560mg | 335.6mg |
| Vitamin E | 50,000 IU | 500 IU |

Vitamin E calculated using the following conversion:

1mg of Vitamin E (d-alpha tocopherol equivalents) = 1.49mg of dl-alpha-tocopherol acetate.

Please note that surveillance testing may mean that not all the parameters stated on this specification are tested for every batch.

The allergen information is supplied by the manufacturer, we have not tested for each individual allergen to ensure they are not present. The information given is based on a documented risk assessment and is accurate to the best of our knowledge. If you intend to make a voluntary "free from" claim on your pack, additional testing may need to be carried out. For technical and labelling guidance, you should always speak to the competent authority for the market or member state in which the final products are placed.

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| Allergens | Product Contains YES/NO | Listed Item on Site at Manufacturer YES/NO | Where applicable, is there risk of cross-contamination? YES/NO or N/A |
|---|-------------------------|--|---|
| Peanuts and Peanut Derivatives (including possible cross contamination) | No | No | N/A |
| Nut and Nut Derivatives <i>Almond (Amygdalus communis L.), Hazelnut (Corylus avellana), Walnut (Juglans regia), Cashew (Anacardium occidentale), Pecan nut (Carya illinoensis (Wangenh.) K. Koch), Brazil nut (Bertholletia excelsa), Pistachio nut (Pistacia vera), Macadamia nut and Queensland nut (Macadamia ternifolia)</i> | No | No | N/A |
| Sesame Seeds and Sesame Seed Derivatives | No | No | N/A |
| Milk and Milk Derivatives (including lactose) | No | No | N/A |
| Egg and Egg Derivatives | No | No | N/A |
| Cereals and Derivatives containing OR POTENTIALLY CONTAMINATED WITH Gluten <i>(wheat, wheatgrass, faro, freekeh, spelt, kamut, rye, oats, barley, barleygrass)</i> | No | No | N/A |
| Soya and Soya Derivatives | No | No | N/A |
| Lupin and Lupin Derivatives | No | No | N/A |
| Mustard and Mustard Derivatives | No | No | N/A |
| Celery or Celery Derivatives (including Celeriac) | No | No | N/A |
| Fish and Fish Derivatives | No | No | N/A |
| Molluscs and their Derivatives | No | No | N/A |
| Crustaceans and their Derivatives | No | No | N/A |
| Sulphur Dioxide and Sulphites (E220, E228) at levels > 10mg/kg or 10mg/litre | No | No | N/A |

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| Additives / Contaminants / Dietary Requirements / Intolerances | Product Contains YES/NO | Listed Item on Site at Manufacturer YES/NO | Where applicable, is there risk of cross-contamination? YES/NO or N/A |
|--|-------------------------|--|---|
| Additives / E Numbers | Yes | Yes | Ingredients |
| Antioxidants | Yes | Yes | Vitamin E |
| Ethylene Oxide | No | No | N/A |
| Gelatine | No | No | N/A |
| Flavourings (Artificial / Nature Identical / Natural / Smoked) | No | No | N/A |
| Maize / Corn and any Derivatives | Yes | Yes | Ingredients |
| Legumes / Pulses | No | No | N/A |
| Rice and Rice Derivatives | No | No | N/A |
| Added Salt | No | No | N/A |
| Added Sugar / artificial or natural sweeteners | No | No | N/A |
| Aspartame | No | No | N/A |
| BHA / BHT (E320 / E321) | No | No | N/A |
| Caffeine | No | No | N/A |
| Colours (Artificial / Nature Identical / Natural / Smoked) | No | No | N/A |
| Dextrose | No | No | N/A |
| other Seeds and Seed Derivatives (Poppy Seeds, Cotton Seeds, Sunflower Seeds) | No | No | N/A |
| Kiwi fruit | No | No | N/A |
| Polyols (sugar alcohols) | No | No | N/A |
| Grapefruit | No | No | N/A |
| Sorbic Acid (E200, E203) | No | No | N/A |
| Any other Preservatives | No | No | N/A |
| Ethanol | No | No | N/A |
| Honey | No | No | N/A |
| Lactose | No | No | N/A |
| Yeast and Yeast Derivatives | No | No | N/A |
| All Animal Products (Beef, Pork, Poultry or other) and Derivatives (which may include growth/yield hormones, antibiotics etc.) | No | No | N/A |
| Bovine Products or Derivatives (which may include growth/yield hormones, antibiotics etc.) | No | No | N/A |



Compliance Statements

| | |
|---|-----|
| <p>Confirmation of BSE / TSE Status This is to certify that this product complies with all relevant current UK and EU Legislative requirements in regard to Transmissible Spongiform Encephalopathies (TSE) and Bovine Spongiform Encephalopathy (BSE) for human food, and so is free of TSE/BSE.</p> | Yes |
| <p>This is also to certify that, during the course of their manufacture, the above-mentioned product did not come into contact with any materials, which could be derived from TSE/BSE risk materials.</p> | Yes |
| <p>Confirmation of GM Status This is to certify that this product is not manufactured from GM raw materials and is therefore not subject to labelling under current regulations.</p> | Yes |
| <p>Confirmation of Non-Irradiation Status This is to certify that this product, whole or in part, has not been subjected to Ionising Radiation as per European Directives.</p> | Yes |
| <p>Confirmation of Nandrolone Status This is to certify that this product, whole or in part, has not come into contact with Nandrolone or any of its precursors in any way.</p> | Yes |
| <p>Confirmation of IOC Product Status This is to certify that this product, whole or in part, has not come into contact with any product/s, which is banned by the IOC (International Olympics Committee) and or WADA.</p> | Yes |
| <p>Confirmation of Animal Testing Status This is to certify that all the products sold by Cambridge Commodities have not been tested on animals in any part of its manufacture in accordance with current regulations.</p> | Yes |
| <p>Confirmation of Pesticides Status This is to certify that the above-mentioned product complies with the EU max residue limits (MRLs) on pesticides.</p> | Yes |
| <p>Confirmation of Nanoparticles Status This is to certify that unless otherwise stated, the above-mentioned product is free of nanoparticles. Commission Recommendation, defines as follows: "Nanomaterial" means a natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for 50 % or more of the particles in the number size distribution, one or more external dimensions is in the size range 1 nm - 100 nm".</p> | Yes |
| <p>Packaging Status We hereby certify that the packaging used in the above-mentioned material conforms to EU regulations and subsequent amendments on food grade packaging</p> | Yes |
| <p>Confirmation of PAH status This is to certify that the above-mentioned product complies with the max PAH limits set by the EU regulations</p> | Yes |

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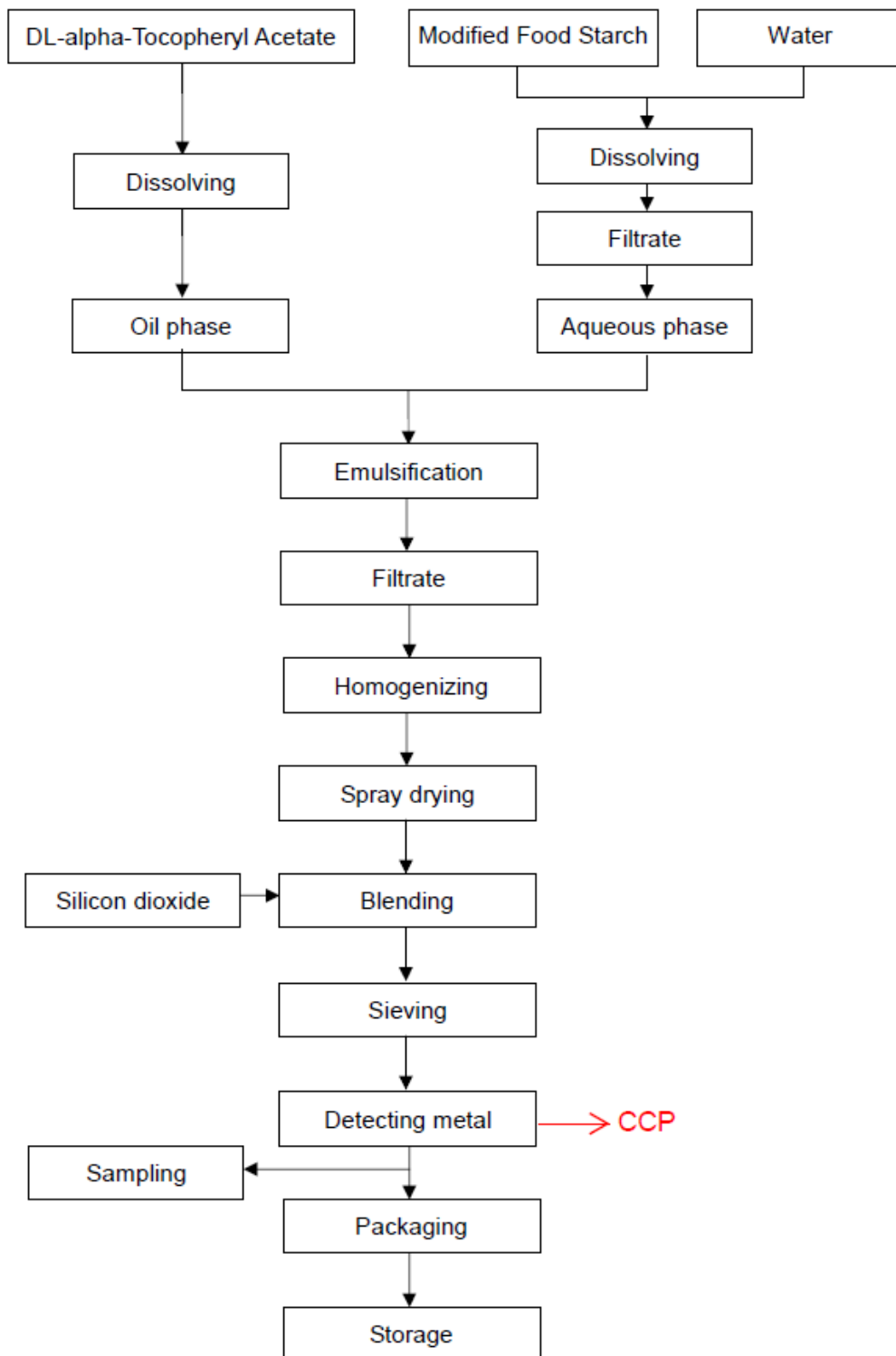
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Product Flow Chart



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Material Safety Data Sheet

To download this product's material safety data sheet, please click [here](#) and search for the Cambridge Commodities product code. If there is no MSDS available, please follow the on-screen instructions to request one.

The Information provided in this document is subject to change and the batch specific certificate of analysis should always be referenced.

To be used as per local legislation.

Change History

| Version | Change | Customer Notification required Yes / No |
|---------|--|---|
| 1 | First Issue | N/A |
| 2 | Updated to new format | No |
| 3 | Added conforms to additives section for EC 231/2012. Updated to new header and added product name to the top of the document. | No |
| 4 | Shelf Life updated to Minimum 2 Years (Batch Specific) from 2 years | No |
| 5 | Added: solubility in water, Bulk and tap density and changed sieve pass through percentages to conform to supplier's specification. Amended source to correct historic clerical error. | Yes |
| 6 | Raw material full name has been changed from "DL-Alpha-Tocopherol Acetate Powder 50% CWS" to "DL-Alpha-Tocopheryl Acetate Powder 50% CWS" to correct historic clerical error. | No |
| 7 | Removed '50%' from product name, changed limit/range/specification from 'NLT 50%' to '50% DL-Alpha Tocopheryl Acetate Powder providing on average 33.56% vitamin E (α-TE)' to provide a better description and added nutritional information. | Yes |
| 8 | Updated colour and odour | No |
| 9 | Changed Flavour/taste from 'characteristic' to 'no taste'. | No |
| 10 | Added compound ingredient functions. | No |
| 11 | Amended the following: Sieve analysis from Max: 40% through 120 Mesh to Max 25% Pass 120 Mesh, Bulk Density from 0.4 g/cm ³ to Bulk Density Approx. 0.4 g/cm ³ , Tapped Density from 0.5 g/cm ³ to Tapped Density Approx. 0.5 g/cm ³ , E. Coli from Negative/25g to E. Coli Negative/10g. Added the following specifications: Sieve Analysis % passed 100% pass 20 Mesh, Staphylococcus aureus Negative/10g, Pseudomonas aeruginosa Negative/10g. Added Molecular Structure (image). General reformat. | Yes |
| 12 | Updated nutritional information. | Yes |
| 13 | Amended nutritional data which was wrong due to clerical error. | Yes |

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| | | |
|----|--|-----|
| 14 | Changes: <ul style="list-style-type: none"> Bulk Density from Approx. 0.4 g/cm³ to 0.4 ~0.5g/cm³ Tapped Density from Approx. 0.5 g/cm³ to 0.5~0.6 g/cm³ | Yes |
| 15 | Updated Identification with (A B C) | Yes |
| 16 | Removed FCC from pharmacopeia used Removed Pseudomonas aeruginosa specification Updated food additive table Updated composition table – modified food starch from 49% to 30-50%, added Maltodextrin 0-20%, Silicon Dioxide from 1% to 1-3% | Yes |

Document Approval

| Originator | | Approver | |
|-----------------------|---|---------------------------|---|
| Anne Stevens | | C White | |
| Quality Administrator |  14/12/2023 14:41 | Senior Quality Specialist |  15/12/2023 09:12 |

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