

TECHNICAL DATA SHEET

D-alpha Tocopheryl Acetate Powder (700 IU)

Natural Source | D-alpha Tocopheryl Acetate ≥ 51.5% (≥ 700 IU/g) | Food Grade

This Technical Data Sheet is issued by KEEP INGREDIENTS CO. LTD for the evaluation of the product described herein. The supplier and the customer undertake to maintain the CONFIDENTIAL information contained or enclosed in this document.

1. PRODUCT DESCRIPTION & INFORMATION

Product Description

D-alpha tocopheryl acetate powder is an almost white, yellowish or light brown free-flowing powder, manufactured with spray drying technology. The individual particles containing d-alpha tocopheryl acetate are well dispersed in carbohydrates. This product is dispersible in cold water. Mainly used for dry mixes, tablets, and as a nutrient in dry foods such as dry milk, solid beverage, and water-based foods.

Product Information

Item	Information
Product name	D-alpha Tocopheryl Acetate Powder 700 IU
Product code	CP700
Product form	Almost white, yellowish or light brown free-flowing powder
Source	Natural (d-alpha tocopheryl acetate)
Empirical formula	C ₃₁ H ₅₂ O ₃
Molecular weight	472.75
CAS No.	58-95-7
Solubility	Dispersible in water; insoluble in vegetable oils, fats and organic solvents
Recommended use	Food additive and antioxidant; dry mixes, tablets, dry foods, water-based foods
Country of origin	China
Supplier	KEEP INGREDIENTS CO. LTD, Xi'an, Shaanxi, China
Shelf life	24 months when properly stored



2. FORMULATION COMPOSITION

Ingredient	Composition
D-alpha tocopheryl acetate	52% - 54%
Starch sodium octenyl succinate	30% - 45%
Silicon dioxide	1% - 3%
Maltodextrin	1% - 10%

Components: D-alpha Tocopheryl Acetate (CAS 58-95-7), Starch sodium octenyl succinate (CAS 66829-29-6), Maltodextrin (CAS 9050-36-6), Silicon dioxide (CAS 7631-86-9).



3. PRODUCT SPECIFICATION

Item	Specification	Test Method
Assay	≥ 51.5%; ≥ 700 IU/g	HPLC
Loss on drying	≤ 5.0%	GB 5009.3
Particle size	All pass through 40 mesh	GB/T 6288
Acidity	≤ 1.0%	Internal
Lead (Pb)	≤ 1 mg/kg	GB 5009.75
Arsenic (As)	≤ 1 mg/kg	GB 5009.76
Cadmium (Cd)	≤ 1 mg/kg	GB 5009.15
Mercury (Hg)	≤ 0.1 mg/kg	GB 5009.17
Aerobic plate count	≤ 1,000 CFU/g	GB 4789.2
Yeast and moulds	≤ 100 CFU/g	GB 4789.15
Coliform	< 0.3 MPN/g	GB 4789.3
Salmonella	Negative / 25 g	GB 4789.4
Shigella	Negative / 25 g	GB 4789.5
Staphylococcus aureus	Negative / 25 g	GB 4789.10

* Heavy metals and microbiology are tested periodically to ensure the requirements are met.



4. CERTIFICATE OF ANALYSIS

Item	Information
Product name	D-alpha-Tocopheryl Acetate Powder
Product code	CP700
Specification	700 IU powder
Batch No.	KYCP7002026061501
Manufacturing date	2026.06.15
Report date	2026.06.22
Expiry date	24 months
Test standard	Internal quality standard



Item	Specification	Result
Appearance	Almost white, yellowish or light brown small particles	Conform
Particle size	All pass through the sieve of 40 mesh	Conform
Assay	≥ 51.5%; ≥ 700 IU/g	52.3%; 711 IU/g
Acidity	≤ 1.0 ml	0.1 ml
Loss on drying	≤ 5.0%	0.8%
Lead (Pb)	≤ 2.0 mg/kg	< 1.0 mg/kg
Arsenic (As)	≤ 2.0 mg/kg	< 1.0 mg/kg
Aerobic plate count	≤ 1,000 CFU/g	< 10 CFU/g
Yeast and moulds	≤ 100 CFU/g	< 10 CFU/g
Coliform	< 0.3 MPN/g	< 0.3 MPN/g
Salmonella	Negative / 25 g	Negative
Shigella	Negative / 25 g	Negative
Staphylococcus aureus	Negative / 25 g	Negative

Conclusion: conform. Remarks: * tested periodically to ensure requirements are met.

5. PRODUCTION PROCESS

The product is manufactured by spray drying. The individual particles containing d-alpha tocopheryl acetate are well dispersed in carbohydrates. The main production steps are as follows:

Step	Process	Control point
1	Emulsify starch sodium octenyl succinate, maltodextrin, d-alpha tocopheryl acetate with pure water	CCP1
2	Filter the homogeneous mixture	—
3	Spray drying	—
4	Mix the dried product with silicon dioxide	—
5	Sifting	—
6	Metal detection	CCP2
7	Weighing and packing	—
8	Warehouse entry inspection	—



6. STABILITY DATA

6.1 Accelerated Stability Study

Accelerated stability test of D-alpha tocopheryl acetate 700 IU powder (T: 40±2°C, RH: 75±5%). Quality standard: white to light yellow free-flowing powder, no foreign matter, no peculiar smell; loss on drying ≤ 5.0%; content ≥ 51.5%.

Time point	Batch No.	Appearance	Loss on drying (%)	Content (%)	Conclusion
0 months	CP20161201(0)	Conforms	1.94	52.22	Conforms
1 month	CP20161201(1)	Conforms	2.24	52.03	Conforms
3 months	CP20161201(3)	Conforms	2.61	51.99	Conforms
6 months	CP20161201(6)	Conforms	2.20	51.90	Conforms
0 months	CP20170501(0)	Conforms	1.40	52.70	Conforms
1 month	CP20170501(1)	Conforms	1.37	52.76	Conforms
3 months	CP20170501(3)	Conforms	1.64	52.97	Conforms
6 months	CP20170501(6)	Conforms	1.85	52.95	Conforms

All accelerated stability samples conformed to the quality standard at 40±2°C / 75±5% RH over six months; the content remained above 51.5%.



6.2 Long Term Stability Study

Long term stability test of D-alpha tocopheryl acetate 700 IU powder (T: 25±2°C, RH: 60±10%).

Time point	Batch No.	Appearance	Loss on drying (%)	Content (%)	Conclusion
0 months	CP20161201(0)	Conforms	1.94	52.22	Conforms
3 months	CP20161201(3)	Conforms	2.52	52.01	Conforms
6 months	CP20161201(6)	Conforms	1.97	52.00	Conforms
9 months	CP20161201(9)	Conforms	1.93	52.50	Conforms
12 months	P20161201(12)	Conforms	2.35	52.20	Conforms
18 months	P20161201(18)	Conforms	2.41	52.40	Conforms
24 months	P20161201(24)	Conforms	2.40	52.70	Conforms
36 months	P20161201(36)	Conforms	2.10	52.70	Conforms
0 months	CP20170501(0)	Conforms	1.40	52.70	Conforms
3 months	CP20170501(3)	Conforms	1.52	52.92	Conforms
6 months	CP20170501(6)	Conforms	1.60	53.00	Conforms
9 months	CP20170501(9)	Conforms	1.66	53.08	Conforms
12 months	P20170501(12)	Conforms	1.73	53.06	Conforms
18 months	P20170501(18)	Conforms	1.82	52.80	Conforms
24 months	P20170501(24)	Conforms	2.00	53.00	Conforms
36 months	P20170501(36)	Conforms	2.00	52.92	Conforms

All long term stability samples conformed to the quality standard at 25±2°C / 60±10% RH for up to 36 months; the content remained above 51.5% throughout the study.



7. NUTRITIONAL INFORMATION

Nutritional Value (per 100 g)

Item	Value
Energy (kJ/100g)	4
Protein (g/100g)	Not detected
Fat (g/100g)	0.127
Carbohydrate (g/100g)	0
Sodium (mg/100g)	Not detected



8. PRODUCT STATEMENTS

8.1 Allergen Statement

ALLERGEN STATEMENT

This product is free from the following allergens and products thereof: wheat, other cereals containing gluten, crustaceans, eggs, fish, peanuts, soybeans, milk (including lactose), nuts, celery, mustard, sesame seeds, sulphur dioxide and sulphites (> 10 ppm), lupin and molluscs. The statement is declared according to (EU) No 1169/2011 and FDA "FALCPA".

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8.2 Plant-Derived & BSE/TSE Statement

BOTANICAL / PLANT-DERIVED & BSE/TSE

This product is a plant-derived material. Its formulation consists of d-alpha tocopheryl acetate and carbohydrate-based carriers (starch sodium octenyl succinate, maltodextrin) and silicon dioxide; it contains no material of animal or ruminant origin and no material derived from, or exposed to, ruminants affected by or under quarantine for transmissible spongiform encephalopathy (TSE) / bovine spongiform encephalopathy (BSE). The product poses no BSE/TSE risk.

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8.3 Country of Origin

COUNTRY OF ORIGIN

The product is produced and packaged in China. Country of origin: China.

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9. HANDLING, STORAGE & TRANSPORT

Item	Information
Packaging	25 kg paper drum.
Storage	Store in tightly closed containers, protected from light. After opening, use up immediately. Store in a dry and ventilated area away from heat sources.
Handling	Apply good manufacturing practice and industrial hygiene practices, ensuring proper ventilation. Observe good personal hygiene; do not eat, drink or smoke whilst handling.
Stability	Stable to acid; unstable to alkali and oxidizing agents. The esterified form of vitamin E is stable to light and oxygen, however, exposure should be limited.
Transport	Not classified as hazardous under transport regulations; not regulated by IMDG.
Shelf life	At least 24 months after date of manufacture in sealed, original containers under normal storage conditions.

Safety notes: This product is a food raw material and not a medicine. Keep out of reach of children.

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Authorized signature & company stamp

This Technical Data Sheet is issued by KEEP INGREDIENTS CO. LTD and is valid together with the supplied Certificate of Analysis. The information given is based on our knowledge of the product at the time of publication and is given in good faith; it does not exempt the user from applying the regulations governing the use, storage and labelling of the product in their own country. A Material Safety Data Sheet (MSDS) is available upon request.

