



## TECHNICAL DATA SHEET

### 1. Product Information

| Item          | Specification                     |
|---------------|-----------------------------------|
| Product Name  | D-alpha Tocopheryl Acid Succinate |
| Product Code  | H1210                             |
| Specification | 1210 IU                           |
| Form          | Granular or Powder                |
| Test Standard | USP-NF 2026                       |
| CAS No.       | 4345-03-3                         |

### 2. Product Description

D-alpha Tocopheryl Acid Succinate is a stable, fat-soluble derivative of natural-source vitamin E. It is the succinate ester form of D-alpha-tocopherol and is widely used as a vitamin E source in dietary supplements, nutraceutical formulations and other nutritional products.

The product is supplied as a white to off-white granular or powder material and is standardized to a vitamin E potency of **1210 IU/g**.

### 3. Technical Specifications

| Test Item                                 | Specification                                                                                              | Test Method  |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------|
| <b>Identification</b>                     |                                                                                                            |              |
| Color Reaction                            | Positive                                                                                                   | USP          |
| Specific Rotation<br>[α] <sub>D25°C</sub> | ≥ +24°                                                                                                     | USP<br><781> |
| Retention Time                            | The retention time of the major peak in the test solution is the same as that of the standard preparation. | USP          |
| <b>Acidity</b>                            | 18.0 ml – 19.3 ml                                                                                          | USP          |
| <b>Assay</b>                              | 96.0% – 102.0%                                                                                             | USP          |
| <b>Vitamin E Potency</b>                  | ≥1162 IU/g                                                                                                 | USP          |
| <b>Appearance</b>                         | White to off-white granular or powder                                                                      | Visual       |
| <b>Particle Size</b>                      | Residue on 20 meshes ≤1%                                                                                   | USP<br><786> |

| Test Item                          | Specification                 | Test Method  |
|------------------------------------|-------------------------------|--------------|
| <b>Bulk Density</b>                | 0.45 – 0.60 g/cm <sup>3</sup> | USP<br><616> |
| <b>Benzo(a)Pyrene</b>              | ≤2 ppb                        | GC-MS        |
| <b>Residual Solvents – Hexane</b>  | ≤290 ppm                      | USP<br><467> |
| <b>Residual Solvents – Ethanol</b> | ≤5000 ppm                     | USP<br><467> |
| <b>Heavy Metals – Lead</b>         | ≤1 mg/kg                      | AAS          |
| <b>Heavy Metals – Arsenic</b>      | ≤1 mg/kg                      | AFS          |
| <b>Heavy Metals – Cadmium</b>      | ≤1 mg/kg                      | AAS          |
| <b>Heavy Metals – Mercury</b>      | ≤0.1 mg/kg                    | AFS          |
| <b>Aerobic Plate Count</b>         | ≤1000 cfu/g                   | USP <61>     |
| <b>Yeast and Molds</b>             | ≤100 cfu/g                    | USP <61>     |
| <b>Escherichia Coli</b>            | Negative/g                    | USP <62>     |
| <b>Salmonella</b>                  | Negative/25g                  | USP <62>     |
| <b>Staphylococcus Aureus</b>       | Negative/25g                  | USP <62>     |

#### 4. Typical Applications

D-alpha Tocopheryl Acid Succinate is commonly used in:

- Dietary supplements
- Vitamin and mineral formulations
- Nutraceutical products
- Softgel and capsule formulations
- Functional food and nutritional products
- Vitamin E fortification
- Health and wellness formulations

#### 5. Storage

Store in a **cool, dry and well-ventilated place**, protected from direct sunlight, heat, moisture and strong sources of oxidation.

Keep the container tightly closed when not in use.

## **6. Packaging**

Available packaging can be provided according to customer requirements.

## **7. Shelf Life**

**24 months** under recommended storage conditions.

## **8. Compliance**

The product is manufactured and tested according to **USP-NF 2026** requirements.

**Conclusion:** Conforms to USP-NF 2026.