

大连汉德姆精细化学品有限公司

## DALIAN HANDOM CHEMICALS CO.,LTD.

## **Certificate of Analysis**

Product Name: D-Alpha Tocopherol 1000IU Batch No.: HDC20221129001 Manufacturing Date: Nov 29<sup>th</sup>, 2022

## **Country of Origin:** China **Quantity:** 820.00kg **Retest Date:** Nov 28<sup>th</sup>, 2024

Test Items		<b>Test Methods</b>	Specifications	Test Results
Physical & O	Chemical Data		1	
Appearance		Visual	Clear oily liquid	Conforms
Color		Visual	Yellow to brownish red	Conforms
Odor		Organoleptic	Nearly odorless	Conforms
Analytical Q	uality			
Identification	Chemical Reaction	Color Reaction	Positive	Conforms
	GC	GC	Corresponds to RS	Conforms
Acidity		Titration	≤1.0ml	0.02ml
Optical Rotation[a]D25		USP<781>	≥+24°	+24.8°
Assay D	O-Alpha Tocopherol	GC	≥67.11% ≥1000 IU/g	67.41% 1004 IU/g
Residue on Ignition		USP<281>	≤0.1%	Conforms
Specific Gravity(25°C)		USP<841>	0.92g/cm <sup>3</sup> ~0.96g/cm <sup>3</sup>	Conforms
Contaminant	ts		1	
Lead(Pb)		GF-AAS	≤1.0ppm	Conforms
Arsenic(As)		HG-AAS	≤1.0ppm	Conforms
Cadmium(Cd)		GF-AAS	≤1.0ppm	Conforms
Mercury(Hg)		HG-AAS	≤0.1ppm	Conforms
B(a)p		HPLC	≤2.0ppb	Conforms
PAH <sub>4</sub>		GC-MS	≤10.0ppb	Conforms
Microbiologi	cal		1	1
Total Aerobic Microbial Count		USP<2021>	≤1000CFU/g	Conforms
Total Yeasts and Molds Count		USP<2021>	≤100CFU/g	Conforms
Escherichia coli		USP<2022>	Negative/10g	Conforms

**Conclusion:** This batch of product is complied with the In-house standard, European regulations and current USP standards.

**Shelf Life:** The product may be stored for 24 months if kept in the unopened original containers at room temperature.

Packaging & Storage: 20kg per steel drum.(Food Grade)

It should be stored in tightly closed containers at room temperature, and protected from heat, light, moisture and oxygen.