



## Certificate of Analysis

Product: Vitamin E Synthetic  
Batch Number: Best 4331403  
Before End: August 2021

Test	Analysis	Specification
Description	Clear colourless slightly green/yellowish oil EP/USP/FCC	Clear colourless slightly green/yellowish oil EP/USP/FCC
Optical Rotation	0	(-0.01 - +0.01 EP)
IR	Conforms	To conform EP/USP/FCC
Colour Reaction	Conforms	To conform USP/FCC
Retention Time, GC	Conforms	To conform USP/FCC
Impurity A	<0.1%	≤ 0.5% EP
Impurity B	0.70%	≤ 1.5% EP
Impurity C	<0.1%	≤ 0.5% EP
Impurity D and E	<0.1%	≤ 1.0% EP
Any Other Impurities	0.1	≤ 0.25% EP
Total Impurities	0.70%	≤ 2.5% EP
Acidity	0.05%	≤ 1.0ml, USP/FCC
Residual Solvents	Conforms	To Conform
Heavy Metals	<0.05mg/kg (BLD)	≤ 2mg/kg, FCC
Arsenic	<1mg/kg	≤ 1mg/kg In-house
Copper	<2mg/kg (BLD)	≤ 25mg/kg In-house
Zinc	<2mg/kg (BLD)	≤ 25mg/kg In-house
Assay	99.20%	96.0% - 102.0% USP/FCC
Total Aerobic Microbial Count	≤ 1000cfu/g EP/USP	<10cfu/g
Total Yeast and Mould Count	≤ 100cfu/g EP/USP	<10cfu/g
Escherichia	n.d./g EP/USP	n.d
Salmonella	n.d./g EP/USP	n.d
Pseudomonas Aeruginosa	n.d./g EP/USP	n.d
Staphylococcus Aureus	n.d./g EP/USP	n.d
Enterobacteriaceae (Ph.Eur/USP)	n.d./g EP/USP	n.d



## Product Information

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### COMPOSITION DECLARATION

**Product Name:**     **Vitamin E Synthetic**

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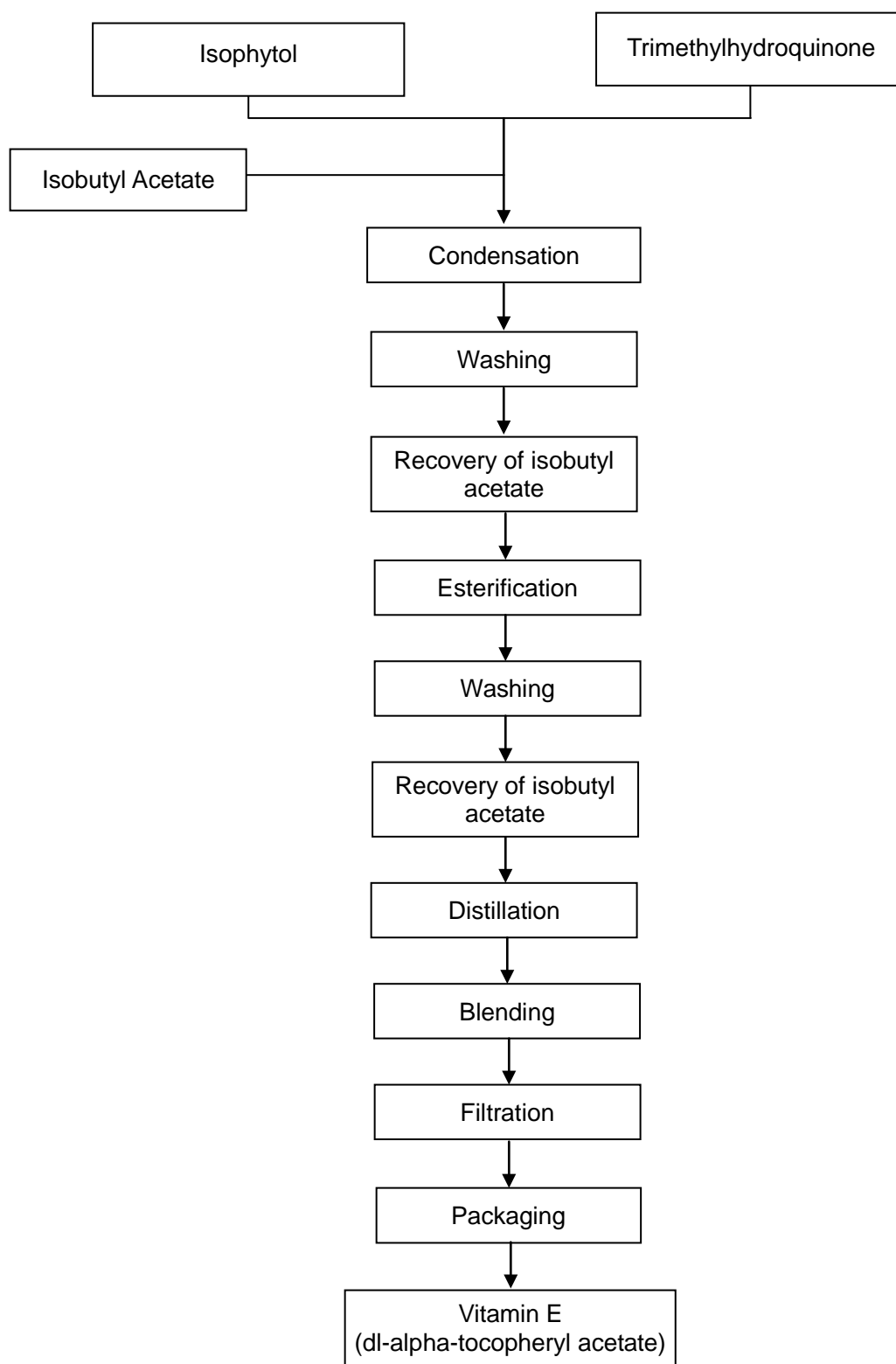
Ingredients	Composition
1 DL-alpha-Tocopheryl Acetate	100.0%**

\*The data is based on average.

\*\* No excipients are added to this product.

## Flow Chart

### VITAMIN E SYNTHETIC





## **CERTIFICATE**

### **Product Information**

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#### **Vitamin E Synthetic/ DL Alpha Tocopherol Acetate**

##### **Statement with respect to GM Ingredients**

We, MADAR Corporation Ltd, hereby declare that the above mentioned material does not contain, to the best of our knowledge at this specified date, any ingredients from GM sources.

**This is an electronically generated document and is valid without a signature**

**26<sup>th</sup> September 2017**



# SAFETY DATA SHEET

Date of Issue: 11/05/2015

Issue: 1

## Vitamin E Synthetic

### Section 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product Identifier

**Product name:** Vitamin E Synthetic  
**CAS number:** 7695-91-2  
**EINECS number:** 231-710-0  
**INCI Name:** DL-alpha-Tocopheryl Acetate

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Use of substance / mixture:** Used as a nutrient/Cosmetics

#### 1.3. Details of the supplier of the safety data sheet

**Supplier Name:** MADAR Corporation Limited  
**Supplier Address:** 19-20 Sandleheath Industrial Estate  
Fordingbridge  
Hampshire  
SP6 1PA  
**Approved Sellers:** Mystic Moments, New Directions, World of Moulds

#### 1.4. Emergency telephone number

**Telephone:** +44 (0)1425 655555 (office hours only)

### Section 2: Hazards Identification

#### 2.1. Classification of the substance or mixture

No particular hazards known

#### 2.2. Label elements

No particular hazards known

#### 2.3. Other hazards

**PBT:** This substance is not identified as a PBT substance

### Section 3: Composition/information on ingredients

#### 3.1. Substances

**Vitamin E Synthetic****Section 4: First aid measures****4.1. Description of first aid measures**

**Skin contact:** Remove all contaminated clothes and footwear immediately. Wash immediately with plenty of soap and water.  
**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.  
**Ingestion:** Rinse mouth and then drink plenty of water  
**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so.

**4.2. Most important symptoms and effects, both acute and delayed**

In some cases of exposure, the following symptoms may be observed:

**Skin contact:** Not applicable  
**Eye contact:** Not applicable  
**Ingestion:** Not applicable  
**Inhalation:** Not applicable

**4.3. Indication of any immediate medical attention and special treatment needed**

**Skin contact:** Not applicable  
**Eye contact:** Not applicable  
**Ingestion:** Not applicable.  
**Inhalation:** Not applicable

**Section 5: Fire-fighting measures****5.1. Extinguishing media**

**Extinguishing media:** Water, Carbon Dioxide, Foam, Dry extinguishing media

**5.2. Special hazards arising from the substance or mixture**

**Exposure hazards:** No particular hazards known

**5.3. Advice for fire-fighters**

**Advice for fire-fighters:** Wear a self-contained breathing apparatus

**Section 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

**Vitamin E Synthetic**

**Personal precautions:** Refer to section 8 of SDS for personal protection details.

**6.2. Environmental precautions**

**Environmental precautions:** Do not discharge into drains or rivers.

**6.3. Methods and material for containment and cleaning up**

**Clean-up procedures:** Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

**6.4. Reference to other sections**

Not applicable

**Section 7: Handling and storage****7.1. Precautions for safe handling**

**Handling requirements:** Apply good manufacturing practice & industrial hygiene practices, ensuring proper ventilation. Observe good personal hygiene, and do not eat, drink or smoke whilst handling

**7.2. Conditions for safe storage, including any incompatibilities**

**Storage conditions:** Store in cool, well ventilated area. Keep container tightly closed.  
**Suitable packaging:** Must only be kept in original packaging.

**7.3. Specific end use(s)**

Not applicable

**Section 8: Exposure controls/personal protection****8.1. Control parameters**

**Workplace exposure limits:** Not applicable.

**8.2. Exposure controls**

**Engineering measures:** Ensure there is sufficient ventilation of the area.  
**Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency.  
**Hand protection:** Protective gloves.

## Vitamin E Synthetic

**Eye protection:** Safety goggles.  
**Skin protection:** Protective clothing with elasticated cuffs and closed neck.

### Section 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

**State:** Liquid  
**Colour:** Pale yellow /greenish oily liquid  
**Odour:** Odourless  
**Solubility in water:** insoluble  
**Soluble in:** freely soluble in acetone, in anhydrous ethanol and in fatty oils  
**Relative Density:** 0.95~0.96 g/cm<sup>3</sup> (approx.20°C)  
**Flash point:** 210 °C ~243 °C  
**Initial Boiling Point:** >300°C  
**Vapor pressure** Approx.1.4 mbar (approx.240°C)  
 Approx.4.0 mbar (approx.270°C)  
**Partition coefficient:** Log Pow 12.26 (n-octanol/water) (calculate at 25 °C)  
**Viscosity:** 6.31-6.59 Pa·s (20 °C)

#### 9.2. Other information

Not applicable

### Section 10: Stability and reactivity

#### 10.1. Reactivity

Not applicable

#### 10.2. Chemical stability

**Chemical stability:** Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Not applicable

#### 10.4. Conditions to avoid

**Conditions to avoid:** Heat and Light

#### 10.5. Incompatible materials

**Incompatible materials:** Alkali, Strong acids, metal salts, oxidising agents.

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### 10.6. Hazardous decomposition products

**Haz. decomp. products:** No hazardous decomposition products if handled and stored as indicated.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

#### Toxicity values:

Route	Species	Test	Value	Units
ORL	MOUSE	LD50	> 10,000	mg/kg

### Symptoms / routes of exposure

Not applicable

## Section 12: Ecological information

### 12.1. Toxicity

Quantitative data on the ecologic effect of this product are not available.

### 12.2. Persistence and degradability

**Persistence and degradability:** Inherently biodegradable

### 12.3. Bioaccumulative potential

Not data available

### 12.4. Mobility in soil

**Mobility:** Dispersible in water.

### 12.5. Results of PBT and vPvB assessment

**PBT identification:** This substance is not identified as a PBT substance.

### 12.6. Other adverse effects

Not applicable

## Section 13: Disposal considerations

**Vitamin E Synthetic****13.1. Waste treatment methods**

**Disposal operations:** Must be disposed of in accordance with local and national regulations.  
**Disposal of packaging:** Dispose of as normal industrial waste.  
**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

**Section 14: Transport information****14.1. UN number**

**UN number:** Not classified for transport

**14.2. UN proper shipping name**

**UN proper shipping name:** Not applicable.

**14.3. Transport hazard class(es)**

**Transport hazard class:** Not applicable.

**14.4. Packing group**

**Packing group:** Not applicable.

**14.5. Environmental hazards**

**Environmental hazards:** Not classified as environmentally hazardous according to UN Model Regulations (IMDG, ADR, RID and ADN)

**14.6. Special precautions for user**

**Disposal operations:** Must be disposed of in accordance with local and national regulations.

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC code**

**Transport in bulk:** Product will not be transported in bulk

**Section 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Not applicable

**15.2. Chemical Safety Assessment**

## Vitamin E Synthetic

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

### Section 16: Other information

#### Other information

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

## Vitamin E Synthetic

**INCI Name:** DL-alpha Tocopheryl Acetate  
**Cas No:** 7695-91-2 / 231-710-0

Tocopheryl Acetate is a viscous liquid, but still fairly easy to handle at room temperature. It is readily soluble in all kind of cosmetic oils. Tocopheryl Acetate is relatively stable to air and heat.

## Specification

Test Parameter	Typical Value
Chemical formula	$C_{31}H_{52}O_3$
Molecular weight	472,7
Characters	clear, colorless to greenish-yellow, viscous oily liquid
Identification	A: specific optical rotation (-0,01° to +0,01°) B: IR absorption spectrophotometry C: TLC test
Acidity	≤2.0 mg KOH/g
Free tocopherol	≤1.0%
Sulphated ashes	≤0.10%
Heavy metal	≤10 mg/kg
Lead	≤2 mg/kg
Arsenic	≤1 mg/kg
Refractive(20°C)	1.494~1.498
Absorbance	42.0~45.0max. at about 284nm 7.5~9.0min. at about 254nm
Density(20°C)	0.952~0.966 g/ml
<b>Assay</b> (Ph. Eur.: 96,5% to 102,0%)	98,0% to 102,0%

## Further Information

## Related substances

impurity A* <sup>1</sup>	not more than 0,5%
impurity B* <sup>2</sup>	not more than 1,5%
impurity C* <sup>3</sup>	not more than 0,5%
impurity D* <sup>4</sup> and E* <sup>5</sup>	not more than 1,0%
any other impurity	not more than 0,25%
total impurities	not more than 2,5%

\*1 all-rac-trans-2,3,4,6,7-pentamethyl-2-(4,8,12-trimethyltridecyl)-2,3-dihydrobenzofuran-5-yl acetate

\*2 all-rac-cis-2,3,4,6,7-pentamethyl-2-(4,8,12-trimethyltridecyl)-2,3-dihydrobenzofuran-5-yl acetate

\*3 all rac-alpha-tocopherol  
\*4 4-methoxy-2,3,6-trimethyl-5-[(all-RS,E)-3,7,11,15-tetramethylhexadec-2-enyl]phenyl acetate

\*5(all-RS,all-E)-2,6,10,14,19,23,27,31-octamethyldotriaconta-12,14,18-triene

## Microbiological data

- Total aerobic microbial count: max. 1000cfu/g
- Total yeast and moulds count: max. 100cfu/g

## Storage and packaging

- Expiry date: In unopened original packaging and under adequate storage conditions minimum 3 years after production date
- Storage condition: Store in tight container at 1°C to 30°C

## REACH

- DL-alpha Tocopheryl Acetate has been registered (reg no: 01-2119457641-38-0002). The final REACH registration considers the uses recommended by COLIPA