



## CERTIFICATE OF ANALYSIS

Name : Vitamin A Acetate Powder  
Batch No. : 4356516  
Best Before End : April 2022

ITEM	SPECIFICATION	RESULT
1. Appearance	Pale yellow to yellow flowing powder	Complies
2. Loss on drying	<5.0%	4.07%
3. Vitamin A Acetate Content	>325,000IU/g	344,200IU/g
4. Solubility	Easily dispersed in cold water 15°C to form a homoqeneous and stable emulsion	Complies
5. Granularity: go through the sieve of 60 mesh	>90.0%	97.8%
6. Heavy Metal	< 10ppm	Complies
7. Lead	<2ppm	<1ppm
8. Arsenic	<1ppm	<1ppm
9. Mercury	<0.1ppm	<0.1 ppm
10. Cadmium	<1ppm	<1ppm
11. Microbial Limit Test		
(1) Total Plate Count	< 1000cfu/g	90 cfu/g
(2) Yeast & Mold	<100cfu/g	<10cfu/g
(3) Coliforms	<0.3MPN/g	<0.3MPN/g
(4) E Coli	Negative/10g	Negative
(5) Salmonella	Negative/25g	Negative
(6) S. Aureus	Negative/25g	Negative

**Conclusion:** Conform to USP40.

**Storage:** Store in the original container, protected from light, in a dry, cool (8-15°C) place.

## Safety Data Sheet – Vitamin A Acetate

Issue Date: 04.09.17

Vitamin A Acetate Powder 325,000IU/g

### Section 1. Identification of the substance/mixture and of the company

#### 1.1. Product identifier.

**Product Name:** Vitamin A Acetate Powder 325,000IU/g Retinol Acetate

**Description:**

#### 1.2. Data of the supplier of the safety data sheet.

**Supplier:** MADAR Corporation Ltd.

**Address:** 19-20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA

**Phone:** 01425 655555

**Approved Sellers:** Cosmetic Butters, Mystic Moments, New Directions, World of Moulds

### Section 2. Composition / Information on Ingredients

#### 2.1. Key information

**Chemical Formula:** C<sub>22</sub>H<sub>32</sub>O<sub>2</sub>

**CAS No.:** 127-47-9

**EINECS No.:** 204-844-2

**Quantity:** 10 – <30%

### Section 3. Hazards Identification

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

Classification according to Directive 2006/121/EC or 1999/45/EC:

**Indications of Danger:** T – Toxic, Xi – Irritant

**R Phrase:** May cause harm to the unborn child. Irritating to skin

Classification according to Regulation (EC) No. 1272/2008 [CLP] Hazard categories:

**Skin corrosion/irritation:** Skin Irrit. 2

**Reproductive toxicity:** Repr. 1B

**Hazardous to the aquatic environment:**

Aquatic Chronic 4 Hazard Statements:

Causes skin irritation.

May damage the unborn child.

May cause long lasting harmful effects to aquatic life.

#### 3.2. Label Elements.

Hazardous components which must be listed on the label for “Vitamin A Acetate”

**Signal Word:** Danger

**Pictograms:** GHS07 – GHS08

Hazard Statements according to Regulation (EU) No. 453/2010

H315 - Causes skin irritation; H360D - May damage the unborn child; H413 - May cause long lasting harmful effects to aquatic life.

Precautionary Statements

P201 - Obtain special instructions before use; P280 - Wear suitable gloves and eye/face protection; P302+P352 - IF ON SKIN: Wash with plenty of water. P308+P313 - IF exposed or concerned: Get medical advice/attention; P501 - Dispose of this material and its container to hazardous or special waste collection point.

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## Section 4. First Aid Measures

### 4.1. Description of First Aid Measures.

General Advice: Immediately remove contaminated clothing. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). First aid personnel should pay attention to their own safety.

Inhalation: Keep patient calm, remove to fresh air, get medical attention.

Ingestion: Rinse mouth immediately and then drink plenty of water, induce vomiting, seek medical attention.

Skin Contact: Immediately wash thoroughly with soap and water.

Eye contact: Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

## Section 5. Fire-Fighting Measures

### 5.1. Key Information.

Suitable Extinguishing Media: Water spray, Foam, Extinguishing powder, Carbon dioxide (CO<sub>2</sub>), Sand

### 5.2. Special Exposure Hazards.

Dust explosive. In case of fire and/or explosion do not breathe fumes. Slightly flammable to flammable in presence of open flames and sparks, of heat. Non-flammable in presence of shocks.

Risks of explosion of the product in presence of mechanical impact: Not available

Risks of explosion of the product in presence of static discharge: Not available

### 5.3. Advice for firefighters.

In case of fire: Wear self-contained breathing apparatus.

Flammability of the product: Non-flammable, but may be combustible at high temperature.

Auto-ignition temperature: Not Available

## Section 6. Procedure in the case of unintended release to the environment

### 6.1. Accidental Release Measures.

Ensure adequate ventilation. Avoid dust formation. Use personal protective equipment.

### 6.2. Environmental precautions according to Regulation (EU) No 453/2010.

Do not discharge into the drains or bodies of water. Do not discharge into surface waters/groundwater. Do not discharge into the subsoil/soil.

### 6.3. Methods for Cleaning or Taking up.

Avoid raising dust.

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill: Use a shovel to put the material into a convenient waste disposal container.

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## Section 7. Handling of substances and mixtures and storage

### 7.1. Precautions for safe handling.

Avoid dust formation. Ensure thorough ventilation of stores and work areas.

Protection against fire and explosion: Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

### 7.2. Conditions of safe storage, together with the information related to any mutual inconsistencies.

Store in light-resistant containers. Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 39°C. Preferably store between 8 to 15 °C

#### Temperature tolerance

Protect from temperatures above: 60 °C

Damage by exceeding the maximum temperature is not reversible.

## Section 8. Exposure control/personal protection equipment

### 8.1. Control Parameters.

Not Applicable

### 8.2. Exposure Controls.

Eye Protection: Safety glasses with side-shields (frame goggles) (EN 166)  
Skin Protection: Protective clothing  
Hand Protection: Suitable chemical resistant safety gloves (EN 374)  
Respiratory Protection: Breathing protection if breathable aerosols/dust are formed. Particle filter Type P2 or FFP2 (medium efficiency for solid and liquid particles e.g. EN143, 149)  
General Safety/Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice. Remove soiled or soaked clothing immediately. Keep divorced from food and feed. Wash hands and skin before breaks and after work.  
Exposure Limits: Not available.

## Section 9. Physical and Chemical Properties

### 9.1. Typical Physical Properties

Appearance: Fine Powder  
Colour: Pale yellow to brown  
Odour: Mild, Pleasant  
Molecular Weight: 328.49g/mole  
Melting Point: 63°C (145.4°F)  
Bulk Density: approx. 0.6 g/ml  
Solubility in Water: Easily dispersed in cold water 15°C to form a homogeneous and stable emulsion.

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Vitamin A Acetate Powder 325,000IU/g

## **Section 10. Stability and Reactivity**

### **10.1. Key Information**

<u>Stability:</u>	The product is stable. When exposed to light and heat, potency will deteriorate.
<u>Conditions to avoid:</u>	Moisture, direct sunlight, heat, conditions that might generate heat.
<u>Possibility of Hazardous Reactions:</u>	Dust Explosion Hazard.
<u>Incompatible Materials:</u>	Strong oxidising Agents, Acid (concentrated), Alkalis (concentrated)
<u>Hazardous Decomposition Products:</u>	No hazardous decomposition products if stored and handled as prescribed/indicated.

## **Section 11. Toxicological Information**

### **11.1. Key Information.**

<u>Routes of Entry:</u>	Inhalation, Ingestion
<u>Toxicity to Animals (LD<sub>50</sub>):</u>	> 5000 mg/kg (Mouse)
<u>Chronic Effects on Humans:</u>	N/A
<u>Teratogenic Effects:</u>	Possible risk of harm to the unborn child

### **11.2. Special Remarks on other Toxic Effects on Humans (Acute).**

<u>Skin:</u>	May cause skin irritation.
<u>Eyes:</u>	May cause eye irritation.
<u>Ingestion:</u>	May be harmful if swallowed in large amounts. May cause irritation of the digestive tract. May affect the liver, blood behaviour, respiration, sense organs, metabolism, urinary system.
<u>Inhalation:</u>	May cause respiratory tract irritation.
<u>Mutagenic Effects:</u>	Not mutagenic.

## **Section 12. Ecological Information**

### **12.1 Toxicity.**

Not Available

### **12.2 Persistence and degradability.**

Possibly hazardous short-term degradation products are not likely. However, long term degradation products may arise. The product itself and its products of degradation are not toxic.

### **12.3 Bio accumulative Potential.**

No data available

### **12.4 Mobility in soil.**

No data available

### **12.5 Other adverse effects.**

Product may not be released into water without pre-treatment.

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## **Section 13. Manner of waste disposal**

### **13.1. Substance and Container Treatment Methods.**

Waste must be disposed of in accordance with national and local environmental control regulations. Packaging that cannot be cleaned should be disposed of like the product.

## **Section 14: Transport Information**

### **14.1. General.**

Not regarded as a hazardous material

### **14.2. DOT Classification**

Not a DOT controlled material (United States)

### **14.3. IATA Classification.**

They are considered to be non-dangerous by the 58th IATA Dangerous Goods Regulations and it is not restricted as per SPECIAL PROVISION A3

### **14.4. Identification.**

Not applicable.

### **14.5. Special provisions for Transport.**

Not Applicable

## **Section 15: Regulatory Information**

### **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.**

#### EINECS:

This product is on the European Inventory of Existing Commercial Chemical Substances. The product meets the requirements of Regulation EC 1831/2003 for feed additives and premixes.

#### Water contaminating class (D):

2 - water contaminating

## **Section 16: Other Information**

### **16.1. References according to Regulation (EU) No 453/2010.**

Not available

### **16.2. Other special considerations.**

Not available

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.*

## Product Spec – Vitamin A Acetate

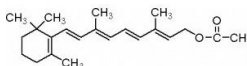
Vitamin A Acetate Powder  
325,000IU/g

Molecular Weight: 328.54 g/mol

CAS Number: 127-47-9

EINECS Number: 204-844-2

Formula:  $C_{22}H_{32}O_2$



### Specification Information

<b>Appearance:</b>	Pale Yellow to Yellow, Free Flowing Powder
<b>Particle Size:</b>	100% Pass-Through Sieve No. 20 Min. 90% Pass-Through Sieve No. 40 Max. 15% Pass-Through Sieve No. 100
<b>Solubility in Water:</b>	Easily dispersed in cold water to 15°C to form a homogenous and stable emulsion.
<b>Assay:</b>	Min. 325,000IU/g of vitamin A (HPLC-method)
<b>Loss on Drying:</b>	Max. 5.0%
<b>Heavy Metal:</b>	Max. 10 ppm
<b>Lead:</b>	Max. 2 ppm
<b>Arsenic:</b>	Max. 1 ppm
<b>Mercury:</b>	Max. 0.1 ppm
<b>Cadmium:</b>	Max. 1 ppm
<b>Total Plate Count:</b>	Max. 1000 cfu/g
<b>Yeast &amp; Mould:</b>	Max 100 cfu/g
<b>Coliforms:</b>	Max. 0.3 mpn/g
<b>E. Coli:</b>	Absent / 10g
<b>Salmonella:</b>	Absent / 25g
<b>Saureus:</b>	Absent / 25g
<b>Salmonella:</b>	Absent / 25g

### Additional Chemical and Physical Information

<b>Description:</b>	The product contains vitamin A acetate, which existing uniformly in a starch-coated matrix consisting of maltodextrin and arabic gum with dL-alpha-tocopherol added as an antioxidant.
<b>Storage:</b>	Once opened, please use it up in a short time. The shelf life is 24 months for the unopened product stored in recommended condition.