



## **Biotin 2%**

Issued March 23, 2009

### **1. Composition/Ingredient Description**

<b>Chemical</b>	<b>CAS #</b>	<b>OSHA</b>	<b>Concentration %</b>
Biotin	58-85-5	N	2

Distributed By: Pestell Minerals & Ingredients, New Hamburg Ontario, Canada  
Canutec: 24 hour Call 613-996-6666

### **2. Hazards Identification**

**Emergency Overview:** This product is a feed additive and diet supplement. **Overdosage can cause serious health effects. Dusts may form explosive mixtures in air.**

**Physical Appearance and Odour:** Beige fine powder solid, odourless

#### **Potential Health Effects**

**Accute Eye: Irritant.** Can cause irritation and redness upon prolonged contact.

**Acute Skin:** Skin absorption not likely. May cause dryness and irritation upon prolonged contact.

**Acute Inhalation:** Dusts may cause respiratory tract irritation.

**Acute Ingestion:** Low acute oral toxicity.

**Chronic Effects:** None known

### **3. First Aid Measures**

**Eye Contact:** Rinse particulate matter from eye. Seek medical attention if irritation develops or persists or if visual changes occur.

**Skin Exposure:** Wash with plenty of soap and water. Seek medical attention if irritation develops or persists. Remove contaminated clothing and shoes and clean before re-use.

**Inhalation:** If respiratory irritation or distress occurs, remove victim to fresh air. Seek medical attention if respiratory irritation or distress continues.

**Ingestion:** If victim is conscious and alert, give 1-2 glasses of water to drink. Do not give anything by mouth to an unconscious person. Seek medical attention. Do not leave victim unattended.

**Medical Conditions Possibly Aggravated by Exposure:** Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis.

**Notes to Physician:** All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Treat symptomatically. No specific antidote available.

#### **4. Fire Fighting Measures**

**Flash Point:** >93C (200F)

**Flammability Limits (vol/vol%):** Lower: No data Upper: No data

**Extinguishing Media:** Dry chemical, foam, water, CO<sub>2</sub>

**Special Fire Fighting Procedures:** Firefighters should wear NIOSH/MSHA approved self contained breathing apparatus and full protective clothing. Cool containers exposed to fire with water.

**Unusual Fire and Explosion Hazards:** Product will burn under fire conditions. Like all organic and most dry chemicals, as powder or dust, this product (when mixed with air in critical proportions and in the presence of an ignition source) may present an explosion hazard.

**Hazardous Decomposition Materials Under Fire Conditions:** Oxides of carbon, oxides of nitrogen, ammonia, oxides of sulfur, hydrogen sulfide.

#### **5. Accidental Release Measures**

**Evacuation Procedures and Safety:** Wear appropriate protective gear for the situation. (See Personal Protection Information in Section 7).

**Cleanup and Disposal of Spill:** Sweep up and place in an appropriate closed container. Clean up residual material by washing area with water. Collect washings for disposal. Consult state and local regulations regarding the proper disposal of this material.

**Environmental and Regulatory Reporting:** Do not flush to drain. Consult state and local regulations regarding the proper disposal of this material.

## 6. Handling and Storage

**Handling:** Avoid skin and eye contact. Minimize dust generation. Wear protective goggles and in cases of insufficient ventilation, use anti dust mask. An eyewash station should be readily available where this is used.

**Storage:** Store in tightly closed, original container. Store in an area that is cool, dry, dark and well ventilated and away from acids.

## 7. Exposure Controls/Personal Protection

**Introductory Remarks:** These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application.

**Exposure Guidelines:** The following limits apply to components of this material.

Particulates, not otherwise classified, inhalable particulate: 10 mg/M3 - ACGIH TWA

Particulates, not otherwise regulated, total dust: 15mg/M3 - OSHA PEL

Particulates, not otherwise regulated, respirable fraction: 5 mg/M3 - ACGIH TWA, 15 mg/M3 - OSHA Engineering Controls: General area dilution/exhaust ventilation

**Respiratory Protection:** When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with regulatory standards and/or industrial recommendations. Dust/mist filtering respirator is recommended.

**Eye/Face Protection:** A minimum of safety glasses with side shields is recommended.

**Skin Protection:** Skin contact should be minimized through the use of gloves and suitable long sleeved clothing.

**Work Practice Controls:** The following general measures should be taken when working or handling this material: **1)** Do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. **2)** Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet. **3)** Wash exposed skin promptly to remove accidental splashes of contact with this material.

## 8. Physical and Chemical Properties

**Physical Appearance:** Beige fine powder solid

**Odour:** Odourless

**pH:** Not available

**Specific Gravity:** Not available

**Water Solubility:** Insoluble

**Melting Point Range:** >229C (444F)

**Boiling Point Range:** Not available

**Freezing Point Range:** Not available

**Vapour Pressure:** Not available

**Vapour Density:** Not available

## 9. Stability and Reactivity

**Chemical Stability:** This material is stable under normal handling and storage conditions described in Section 6.

**Conditions to be Avoided:** Extreme heat, open flame, dusting conditions

**Materials/Chemicals to be Avoided:** Strong bases, strong acids, strong oxidizing agents

**Hazardous Decomposition Products:** Oxides of carbon, oxides of nitrogen, ammonia, oxides of sulfur, hydrogen sulfide.

**Decomposition Temperature Range:** >825C (1517F)

**Hazardous Polymerization:** Not applicable

## 10. Toxicological Information

**Acute Eye Irritation:** No data available

**Acute Skin Irritation:** No data available

**Acute Dermal Toxicity:** No data available

**Acute Respiratory Irritation:** No data available

**Acute Inhalation Toxicity:** No data available

**Acute Oral Toxicity:** LD50>16,000 mg/kg, mouse

**Chronic Toxicity:** This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be "probable" or "suspected" human carcinogens. No additional test data found for product.

## 11. Ecological Information

**Ecotoxicological Information:** No data available

**Chemical Fate Information:** No data available

## 12. Disposal Considerations

**Waste Disposal Method:** Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised the state and local requirements for waste disposal may be more restrictive or otherwise different from Federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

**Container Handling and Disposal:** Rinse containers before disposal. **EPA Hazardous Waste: NO**

## 13. Transportation Information

**Note:** The listed transportation classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

US Department of Transportation:

Shipping Name: Not regulated

Hazard Class: Not regulated

ID#: Not regulated

Packing Group: Not regulated

## 14. Regulatory Information

**Inventory Status**

US (TSCA): Exempt

Canada (DSL): Yes

Europe (EINECS/ELINCS): Yes

Australia (AICS): No

Japan (MITI): Yes

Korea (KECL): Yes

US Inventory Issues: This product is exempt from TSCA because it is solely for FDA regulated use.

Fire Hazard: No

Reactive Hazard: No

Release of Pressure: No

Acute Health Hazard: No

Chronic Health Hazard: No

SARA Extremely Hazardous Substances/CERCLA Hazardous Substances: None

California Proposition 65: This product does not contain components that are regulated under Propositions 65

## **15. Other Information**

### **National Fire Protection Association (NFPA) Hazard Ratings:**

Health: 0

Flammability: 0

Instability: 0

### **National Paint and Coating Hazardous Materials Identification System (HMIS) Hazard Ratings**

Health: 0

Flammability: 0

Reactivity: 0

### **Disclaimer**

This information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. Pestell Minerals & Ingredients makes no warranty of any kind, expressed or implied, concerning the safe use of this material in your process or combination with any other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. This material may be released from gas, liquid or solid materials made directly or indirectly from it. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards.