

Safety Data Sheet

(Biotin)

DATE PREPARED: 5/20/2016

## Section 1. Product and Company Identification

Product Name Biotin
CAS Number 58-85-5

Parchem - fine & specialty chemicals EMERGENCY RESPONSE NUMBER

415 Huguenot Street CHEMTEL

New Rochelle, NY 10801

New Rochelle, NY 10801

Toll Free US & Canada: 1 (800) 255-3924

All other Origins: 1 (813) 248-0585

parchem.com info@parchem.com Collect Calls Accepted

Section 2. Hazards Identification

#### Classification of the substance or mixture

Not classified as a hazardous substance or mixture.

GHS Classification: Based on available data, the classification criteria are not met.

GHS Label Elements
Pictograms: N/A
Signal word: N/A

# Hazard and precautionary statements

**Hazard Statements** 

Not applicable

Precautionary Statements
Prevention: Not applicable
Response: Not applicable
Storage: Not applicable
Disposal: Not applicable

HMIS Rating Health: 0

Flammability: 0
Reactivity: 0

**Personal Protection:** B





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## Section 3. Composition / Information on Ingredients

**Common Name** Biotin

**Synonym(s)** Coenzyme R; D-Biotin; Vitamin B7; 1H-Thieno [3,4-d]imidazole-4-pentanoic

acid, hexahydro-2-oxo, 3aS-(3aa,4β,6aa)-

 $\begin{array}{ccc} \textbf{Formula} & & C_{10}H_{16}N_2O_3S \end{array}$ 

**CAS Number** 58-85-5

COMPONENT	CAS NUMBER	CONCENTRATION
Biotin	58-85-5	100% wt.

#### Section 4. First Aid Measures

**Eye Contact:** Flush with copious amounts of water for 15 minutes, separating eyelids with fingers. If irritation persists seek medical aid.

**Skin Contact:** Wash with soap & water for 15 minutes. If irritation persists seek medical aid. **Ingestion:** Call a physician. Wash out mouth with water. Do not induce vomiting without medical advice.

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician

**Symptoms and Effects:** Not expected to present a significant hazard under anticipated conditions of normal use.

## Section 5. Firefighting Measures

**Specific Hazards Arising from the Chemical:** Not applicable **Flammable Properties:** May be combustible at high temperature

Hazardous Combustion Products: Under fire conditions, hazardous fumes will be present.

#### **Extinguishing Media**

**Small Fire:** Dry chemical, CO<sub>2</sub>, or water spray.

Large Fire: Dry chemical, CO<sub>2</sub>, alcohol resistant foam, or water spray. Do not get water inside

containers.

**Protective Equipment and Precautions for Firefighters:** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

# Section 6. Accidental Release Measures

**Personal Precautions:** Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**Methods & Material For Containment:** On land, sweep or shovel into suitable containers. Minimize generation of dust.



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**Clean-up Procedure:** Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Shut off all sources of ignition. Evacuate the area. If necessary, employ water fog to disperse the vapors. Absorb the matter with compatible vermiculite or other absorbing material. Place in a suitable container and retain for disposal. Ventilate and clean the affected area. Do not flush into sewerage system or to drains.

#### Section 7. Handling and Storage

**Precautions for Safe Handling:** Do not inhale. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling.

**Storage Conditions:** Store in original container, tightly sealed container, protected from direct sunlight, in a dry, cool and well-ventilated area, away from incompatible materials. Store in accordance with local regulations. Eliminate all ignition sources. Separate from oxidizing materials. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in tight containers.

#### Section 8. Exposure Controls / Personal Protection

**Chemical Name:** Biotin

	TWA	Ceiling	STEL	REL	IDLH	Remarks
ACGIH TLV	N/L	N/L	N/L	-	-	-
AIHA WEEL	N/L	N/L	N/L	-	-	-
HSE	N/L	N/L	N/L	-	-	-
NIOSH	N/L	N/L	N/L	N/L	N/L	-
OSHA PEL	N/L	N/L		-	-	-
Safe Work	N/L	N/L	N/L		-	- 12
Australia HSIS						

**Exposure Guidelines:** Consult local authorities for provincial or state exposure limits. Particulates not otherwise regulated, respirable fraction:  $5 \text{ mg/m}^3$ .

#### **Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by WHMIS or OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to minimize contact with skin.

**Respirators:** Follow WHMIS or OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.





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**Specific Engineering Controls:** Adequate mechanical ventilation. Fume hood, eye wash station, and safety shower.

Section 9. Physical and Chemical Properties

Physical State: Solid

**Description:** Practically white, crystalline powder.

**Solubility:** Very slightly soluble in water and in alcohol; insoluble in other common organic

solvents.

**Odor:** Odorless

Flammability: May be combustible at high temperature

Odor Threshold: Not available

**pH:** 4.5 (0.01%)

**Melting Point:** 229 - 233°C (444.2 - 451.4°F) - Decomposes

Boiling Point: Not available
Freezing Point: Not available
Flash Point: Not available
Specific Gravity: Not available
Evaporation Rate: Not available
Explosive Limit: Not available

**Upper Flammable/Explosive Limit(s):** Not available **Lower Flammable/Explosive Limit(s):** Not available

Vapor Pressure: Not available

Vapor Density (Air = 1): Not available
Relative Density (Water = 1): Not available

Log P (Octanol-Water): 0.390

Auto-ignition Temperature: Not available

Decomposition Temperature: Not available

Viscosity: Not available

Section 10. Stability and Reactivity

Reactivity: Not established

**Stability:** Stable under recommended storage conditions

Materials To Avoid: Strong oxidants

Hazardous Decomposition Products: Toxic fumes of carbon monoxide, carbon dioxide,

nitrogen oxides and other gases may occur **Hazardous Polymerization:** Will not occur

Possibility of Hazardous Reaction: Not established

**Conditions To Avoid:** Moisture, sunlight and extreme temperatures





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# Section 11. Toxicological Information

**Acute Toxicity** 

**LD50 Oral - Rat:** > 354 mg/kg

LD50 Dermal - Rabbit: Not available LD50 Inhalation - Rat: Not available

Skin Corrosion/Irritation: Intradermal injection, Species: Guinea pig, Result: Negative

Based on available data, the classification criteria are not met.

Serious Eye Damage/Eye Irritation: 0.1 % Irritancy test, Species: Rabbit, Result: Negative,

Severity: Slight; transient

Based on available data, the classification criteria are not met.

**Respiratory or Skin Sensitization:** Due to lack of data the classification is not possible.

Germ Cell Mutagenicity: Due to lack of data the classification is not possible.

## **Carcinogenicity**

**OSHA:** Biotin (Vitamin H) is not listed. **NTP:** Biotin (Vitamin H) is not listed. **IARC:** Biotin (Vitamin H) is not evaluated.

California Proposition 65: This product does not contain any chemicals known to the State of

California to cause cancer, birth defects, or any other reproductive harm.

## Additional Carcinogenicity Information: Not available

Reproductive Toxicity: Suspected of damaging the unborn child. Suspected of damaging fertility. Maternal effects (uterus, cervix, vagina, other effects on female). Effects on fertility (post-implantation mortality, litter size). Effects on embryo or fetus (fetotoxicity, extra embryonic structures). 1000 mg/kg Reproductive and developmental toxicity assay.

Result: No adverse reproductive or developmental effects

Species: Mouse

Based on available data, the classification criteria are not met.

**Specific Target Organ Toxicity - Single Exposure:** Due to lack of data the classification is not possible.

**Specific Target Organ Toxicity - Repeated Exposure:** Due to lack of data the classification is not possible.

**Aspiration Hazards:** Due to lack of data the classification is not possible.

**Signs and symptoms of exposure:** Not expected to present a significant hazard under anticipated conditions of normal use.

#### **Potential Health Effects**

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion:** May be harmful if swallowed.

**Skin:** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes:** May cause eye irritation.





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## Section 12. Ecological Information

**Toxicity** 

EC50: 48 Hr: Daphnia magna: (mg/L): Not available

LC50: 96 Hr: Fish: (mg/L): Not available IC50: 72 Hr: Algae: (mg/L): Not available

Persistence and Degradability: Biodegradation: 38%

**Bioaccumulative Potential:** LogPow: 0.390 **Mobility in Soil:** Water solubility: 220 mg/L (25°C)

Other Adverse Effects: Not available

This product is not intended to be released into the environment

Section 13. Disposal Considerations

**Waste Treatment Methods:** Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

**United States & Canada** 

**UN Proper Shipping Name:** Not dangerous good

**UN Number:** Not applicable

Class: Not applicable

Packing Group: Not applicable

Australia

**UN Proper Shipping Name:** Not dangerous good

**UN Number:** Not applicable

Class: Not applicable

**Packing Group:** Not applicable **Hazchem:** Not applicable

Environmental Hazards: Not available

**Special Shipping Information:** Not applicable

Section 15. Regulatory Information

Chemical: Biotin (Vitamin H)
CAS Number: 58-85-5

CERCLA 40 CFR Part 302.4: Not Listed

SARA (Title III) 40 CFR Part 372.65: Not Listed EPA 40 CFR Part 355 - Appendix A: Not Listed EPA 40 CFR Part 355 - Appendix B: Not Listed





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Right-to-Know - Pennsylvania: Not Listed Right-to-Know - New Jersey: Not Listed Right-to-Know - Massachusetts: Not Listed

California Prop 65: Not Listed

Australian Regulations CAS Number: 58-85-5

CERCLA 40 CFR Part 302.4: Not Listed

Poisons and Therapeutic Goods Regulation: Not Listed

Therapeutic Goods Act: Not Listed

Code of Practices - Illicit Drug Precursors: Not Listed

Section 16. Other Information

**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. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

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