



# American International Chemical, Inc.

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## MATERIAL SAFETY DATA SHEET

### CYANOCOBALAMIN (VITAMIN B12)

#### SECTION 1 - CHEMICAL PRODUCT AND COMPANY INFORMATION

American International Chemical, Inc. 135 Newbury Street Framingham, MA 01701	Emergency Number: Chemtrec Information Number:	800-424-9300 703-527-3887 800-238-0001
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Date: August 2007

Synonyms: Vitamin B12; 5,6-dimethylbenzimidazolyl cyanocobamide

CAS #: 68-19-9

DOT Hazard Class: Not Regulated

#### SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

100% Cyanocobalamin      Molecular formula:  $C_{63}H_{88}CoN_{14}O_{14}P$

#### SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: A dark red powder that presents little or no health hazard and no unusual hazard if involved in a fire.

POTENTIAL HEALTH EFFECTS:

**Skin:** May cause skin irritation.

**Eyes:** May cause irritation or burning.

**Inhalation:** May cause irritation to the respiratory tract.

**Ingestion:** Not a hazard with normal nutritional usage.

CARCINOGENICITY: Not Identifiable.

#### SECTION 4 - FIRST AID MEASURES

**Skin:** Immediately wash skin with soap and water for at least 15 minutes.

**Eyes:** Immediately flush with plenty of water for at least 15 minutes, holding eye lids apart.

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

**Ingestion:** Wash out mouth with water.

**On All Of The Above:** Consult a physician if symptoms persist.

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## **SECTION 5 - FIRE FIGHTING MEASURES**

Flash Point: Non Combustible

Flammable Limits: Non Combustible

Extinguishing Media: Use media that is appropriate to treat surrounding fire.

Special Fire Fighting Procedures:

Use fire fighting procedure that is appropriate to treat surrounding fire. All firefighters should use self-contained breathing apparatus and full fire-fighting turn-out gear.

Unusual Fire Explosion Hazard: During a fire, irritating and highly toxic gasses may be generated by thermal decomposition or combustion.

Auto Ignition Temperature: Not Applicable

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## **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Isolate hazard area and deny entry to unnecessary or unprotected personnel.

Contain spill, sweep up, collect and place in a disposal container. Avoid runoff into storm sewers and ditches which lead to waterways.

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## **SECTION 7 - HANDLING AND STORAGE**

Avoid contact with skin, eyes and clothing. Use with adequate ventilation. Avoid breathing dust. Use normal personal hygiene and housekeeping. Store in cool dry area away from other incompatible materials. Product is slightly hygroscopic and should be stored in a dry area to prevent moisture pick up and caking.

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## **SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirators.

VENTILATION REQUIREMENTS: Ventilate as necessary to eliminate dust from the work area and maintain concentrations below the limit.

SKIN AND EYE PROTECTION: Use rubber or neoprene gloves, chemical goggles and clothing sufficient to protect skin and eyes from dust.

WORK, HYGIENIC PRACTICES:

As required to protect skin and eyes from dust, safety showers and/or eye wash should be available. Do not leave food or smoke in work area. Wash thoroughly and remove or clean any contaminated clothing.

EXPOSURE LIMITS: None Established

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## **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Boiling Point: Not Applicable

Vapor Pressure (MM Hg): Not Applicable

Vapor Density (AIR=1): Not Applicable

Specific Gravity (H<sub>2</sub>O=1): Not Available

Percent Volatile by Volume (%): Not Applicable

Melting Point: >300° C

Evaporation Rate (Butyl Acetate=1): Not Applicable

Solubility in Water: 1 gm per 80 mls

pH: Not Available

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#### **SECTION 10 - STABILITY AND REACTIVITY**

CHEMICAL STABILITY: Stable under normal temperatures and pressures with proper storage conditions. Light sensitive. Store in tight, light resistant containers at controlled room temperature.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Unknown.

KEEP AWAY FROM: Direct light and heat.

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#### **SECTION 11 - TOXICOLOGICAL INFORMATION**

Not Available

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#### **SECTION 12 - ECOLOGICAL INFORMATION**

Not Available

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#### **SECTION 13 - DISPOSAL CONSIDERATIONS**

Dispose of in accordance with all federal, state and local regulations.

RCRA WASTE #: Not Listed

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#### **SECTION 14 - TRANSPORTATION INFORMATION**

D.O.T. SHIPPING NAME: Vitamin B12

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**SECTION 15 - REGULATORY INFORMATION**

OSHA STATUS: Not listed

TSCA STATUS: Listed

CERCLA REPORTABLE REQUIREMENTS: (RQ) None

SARA TITLE III INFORMATION:

Section 302 Extremely Hazardous Substance Not listed

Section 313 Toxic Chemicals: Not listed

Section 311/312 Hazard Category: Not considered a hazard.

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**SECTION 16 - OTHER INFORMATION**

Reason for Issue: Changed Date

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