

## SAFETY DATA SHEET

Creation Date 27-Sep-2018

Revision Date 27-Sep-2018

Revision Number 1

### 1. Identification

**Product Name** Coenzyme B12

**Cat No. :** AC464360000; AC464360010; AC464362500

**CAS-No** 13870-90-1

**Synonyms** 5'-Deoxyadenosylcobalamine; Adenosyl cobalamine; Cobamamide; DMBC coenzyme

**Recommended Use** Laboratory chemicals.

**Uses advised against** Food, drug, pesticide or biocidal product use

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

##### Company

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

##### **Emergency Telephone Number**

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11

Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99

**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) identification

#### Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the  
Globally Harmonized System (GHS)

#### Label Elements

##### **Hazard Statements**

##### **Precautionary Statements**

###### **Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

###### **Response**

IF exposed or concerned: Get medical attention/advice

###### **Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

None identified

**3. Composition/Information on Ingredients**

Component	CAS-No	Weight %
Cobamamide	13870-90-1	> 95

**4. First-aid measures**

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
<b>Inhalation</b>	Move to fresh air. Get medical attention immediately if symptoms occur.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.
<b>Most important symptoms and effects</b>	None reasonably foreseeable.
<b>Notes to Physician</b>	Treat symptomatically

**5. Fire-fighting measures**

<b>Unsuitable Extinguishing Media</b>	No information available
<b>Flash Point</b>	No information available
<b>Method -</b>	No information available
<b>Autoignition Temperature</b>	No information available
<b>Explosion Limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available

**Specific Hazards Arising from the Chemical**

Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**Carbon monoxide (CO) Carbon dioxide (CO<sub>2</sub>) Nitrogen oxides (NO<sub>x</sub>) oxides of phosphorus**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**Health  
0Flammability  
1Instability  
0Physical hazards  
N/A**6. Accidental release measures**

<b>Personal Precautions</b>	Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.
<b>Environmental Precautions</b>	Should not be released into the environment.

**Methods for Containment and Clean** Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust

Up formation.

## 7. Handling and storage

Handling	Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid dust formation.
Storage	Keep container tightly closed in a dry and well-ventilated place. To maintain product quality: Store in freezer.

## 8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures None under normal use conditions.

### Personal Protective Equipment

Eye/face Protection	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection	No protective equipment is needed under normal use conditions.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

Physical State	Solid
Appearance	Red brown
Odor	No information available
Odor Threshold	No information available
pH	No information available
Melting Point/Range	No data available
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	Not applicable
Specific Gravity	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	Not applicable
Molecular Formula	C72 H100 Co N18 O17 P
Molecular Weight	1579.58

## 10. Stability and reactivity

Reactive Hazard None known, based on information available

<b>Stability</b>	No information available.
<b>Conditions to Avoid</b>	Incompatible products.
<b>Incompatible Materials</b>	Strong oxidizing agents
<b>Hazardous Decomposition Products</b>	Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Nitrogen oxides (NO <sub>x</sub> ), oxides of phosphorus
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions</b>	No information available.

## 11. Toxicological information

### Acute Toxicity

#### Product Information

#### Component Information

**Toxicologically Synergistic Products** No information available

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Irritation</b>	No information available
<b>Sensitization</b>	No information available
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Cobamamide	13870-90-1	Not listed	Contains Cobalt below the classification level	Not listed	Not listed	Not listed

<b>Mutagenic Effects</b>	No information available
<b>Reproductive Effects</b>	No information available.
<b>Developmental Effects</b>	No information available.
<b>Teratogenicity</b>	No information available.
<b>STOT - single exposure</b>	None known
<b>STOT - repeated exposure</b>	None known
<b>Aspiration hazard</b>	No information available
<b>Symptoms / effects, both acute and delayed</b>	No information available
<b>Endocrine Disruptor Information</b>	No information available
<b>Other Adverse Effects</b>	The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

Do not empty into drains.

<b>Persistence and Degradability</b>	No information available
<b>Bioaccumulation/ Accumulation</b>	No information available.

**Mobility** No information available.

### 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### 14. Transport information

DOT Not regulated  
TDG Not regulated  
IATA Not regulated  
IMDG/IMO Not regulated

### 15. Regulatory information

All of the components in the product are on the following Inventory lists: X = listed

#### International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Cobamamide	-	-	-	237-627-6	-		-	X	X	-	-

#### Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

#### U.S. Federal Regulations

**TSCA 12(b)** Not applicable

#### SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Cobamamide	13870-90-1	> 95	1.0

**SARA 311/312 Hazard Categories** See section 2 for more information

**CWA (Clean Water Act)** Not applicable

#### Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Cobamamide	X		-

**OSHA Occupational Safety and Health Administration**  
 Not applicable

**CERCLA** Not applicable

**California Proposition 65** This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Cobamamide	-	X	X	X	-

**U.S. Department of Transportation**

Reportable Quantity (RQ): N  
DOT Marine Pollutant N  
DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations**

Mexico - Grade No information available

**16. Other information**

Prepared By Regulatory Affairs  
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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**