

## SAFETY DATA SHEET

Section 1: Identification		
<b>Section 1, Identification</b>		
<b>Product Name</b>	Cyanocobalamin Injection 1000mcg/mL	
<b>Cat No:</b>	AC405920000; AC405920010; AC405920050; AC405920250; AC405925000	
<b>CAS No.</b>	68-19-9	
<b>Synonyms</b>	Vitamin B12	
<b>Recommended Use</b>	Laboratory chemicals	
<b>Uses Advised Against</b>	Food, drug, pesticide or biocidal product use	
<b>Distributor</b>	SOLA Pharmaceuticals 655 Highlandia Drive, Ste B Baton Rouge, LA. 70810 Tel: 866.747.7365 Fax: 800.754.9550 <a href="http://www.solameds.us">www.solameds.us</a> info@solameds.us	
<b>NDC Number</b>	70512-840-01 (1mL) 70512-840-25 (25's 1mL)	
Section 2: Hazard(s) Identification		
<b>Section 2, Hazard(s) Identification</b>		
<b>Classification</b> Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).  This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).		
<b>Label Elements</b> None required.		
<b>Hazards Not Otherwise Classified (HNOC)</b> None identified		
Section 3: Composition/Information on Ingredients		
<b>Section 3, Composition/Information on Ingredients</b>		
<b>Component</b>	<b>CAS No.</b>	<b>Weight %</b>
Vitamin B12	68-19-9	96

Section 4: First-Aid Measures				
<b>Section 4, First-Aid Measures</b>				
<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>	Remove to fresh air. Get medical attention immediately if symptoms occur. If not breathing, give artificial respiration.			
<b>Ingestion</b>	Do NOT induce vomiting. Get medical attention.			
<b>Most important symptoms and Effects</b>	No information available			
<b>Notes to Physician</b>	Treat symptomatically			
Section 5: Fire-Fighting Measures				
<b>Section 5, Fire-Fighting Measures</b>				
<b>Suitable Extinguishing Media</b>	Water spray. Carbon dioxide (CO <sub>2</sub> ). Dry chemical. Chemical foam.			
<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.			
<b>Specific Hazards Arising From The Chemical</b>				
Thermal decomposition can lead to release of irritating gases and vapors.				
<b>Hazardous Combustion Products</b>				
Nitrogen oxides (NO <sub>x</sub> ). Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ). Oxides of phosphorus.				
<b>Protective Equipment and Precautions for Firefighters</b>				
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.				
<b>NFPA</b>				
	<b>Health</b>	<b>Flammability</b>	<b>Instability</b>	<b>Physical Hazards</b>
	1	1	1	N/A
Section 6: Accidental Release Measures				

<b>Section 6, Accidental Release Measures</b>											
<b>Personal Precautions</b>	Ensure adequate ventilation. Use personal protective equipment as required.										
<b>Environmental Precautions</b>	Should not be released into the environment.										
<b>Methods for Containment And Clean Up</b>	Sweep up and shovel into suitable containers for disposal.										
<b>Section 7: Handling and Storage</b>											
<b>Section 7, Handling and Storage</b>											
<b>Handling</b>	Avoid contact with skin and eyes. Do not breathe dust.										
<b>Storage</b>	Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Protect from light. Protect from moisture. Incompatible materials. Acids. Strong acids.										
<b>Section 8: Exposure Controls / Personal Protection</b>											
<b>Section 8, Exposure Controls / Personal Protection</b>											
<u>Exposure Guidelines</u>											
	<table border="1"> <thead> <tr> <th>Component</th> <th>ACGIH TLV</th> <th>OSHA PEL</th> <th>NIOSH IDLH</th> <th>Mexico OEL (TWA)</th> </tr> </thead> <tbody> <tr> <td>Vitamin B12</td> <td></td> <td>(vacated (TWO: 5mg/m<sup>3</sup></td> <td>IDLH: 25mg/m<sup>3</sup></td> <td></td> </tr> </tbody> </table>	Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)	Vitamin B12		(vacated (TWO: 5mg/m <sup>3</sup>	IDLH: 25mg/m <sup>3</sup>	
Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)							
Vitamin B12		(vacated (TWO: 5mg/m <sup>3</sup>	IDLH: 25mg/m <sup>3</sup>								
<i>Legend</i>											
OSHA	Occupational Safety and Health Administration										
NIOSH IDLH	NIOSH – National Institute for Occupational Safety and Health										
<b>Engineering Measures</b>	None under normal use conditions.										
<u>Personal Protective Equipment</u>											
<b>Eye/Face Protection</b>	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 EN 166.										
<b>Skin and Body Protection</b>	Wear appropriate protective gloves and clothing to prevent skin exposure.										
<b>Respiratory Protection</b>	No protective equipment is needed under normal use conditions.										
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practices.										
<b>Section 9: Physical and Chemical Properties</b>											
<b>Section 9, Physical and Chemical Properties</b>											
<b>Physical State</b>	Solid										
<b>Appearance</b>	Dark Red										
<b>Odor</b>	No information available										
<b>Odor Threshold</b>	No information available										
<b>pH</b>	No information available										
<b>Melting Point/Range</b>	No data available										
<b>Boiling Point/Range</b>	No information available										
<b>Flash Point</b>	No information available										

<b>Evaporation Rate</b>	Not applicable
<b>Flammability (solid, gas)</b>	No information available
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Vapor Pressure</b>	No information available
<b>Vapor Density</b>	Not applicable
<b>Specific Gravity</b>	No information available
<b>Solubility</b>	No information available
<b>Partition coefficient; n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	No information available
<b>Decomposition Temperature</b>	No information available
<b>Viscosity</b>	Not applicable
<b>Molecular Formula</b>	C63 H88 Co N14 O14 P
<b>Molecular Weight</b>	1355.38
<b>Section 10: Stability and Reactivity</b>	
<b>Section 10, Stability and Reactivity</b>	
<b>Reactive Hazard</b>	None known, based on information available.
<b>Stability</b>	Stable under normal conditions. Hygroscopic. Light sensitive.
<b>Conditions to Avoid</b>	Exposure to light. Incompatible products. Exposure to moist air or water.
<b>Incompatible Materials</b>	Acids, Strong Acids
<b>Hazardous Decomposition Products</b>	Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2), Oxides of phosphorus.
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions</b>	None under normal processing.
<b>Section 11: Toxicological Information</b>	
<b>Section 11, Toxicological Information</b>	
<b><u>Acute Toxicity</u></b>	
<b>Product Information</b>	No acute toxicity information is available for this product.
<b>Component Information</b>	
<b>Toxicologically Synergistic Products</b>	No information available
<b><u>Delayed and Immediate Effects As Well As Chronic Effects from Short and Long-Term Exposure</u></b>	
<b>Irritation</b>	May cause skin, eye, and respiratory tract irritation.
<b>Sensitization</b>	No information available
<b>Carcinogenicity</b>	The table below indicates whether each Agency has listed any ingredients as a carcinogen.

Component	CAS No.	IARC	NTP	ACGIH	OSHA	Mexico
Vitamin B12	68-19-9	Not listed	Reasonably Anticipated	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.				
<b>Section 12: Ecological Information</b>						
<b>Section 12, Ecological Information</b>						
<u>Ecotoxicity</u>						
<b>Persistence and Degradability</b>		Soluble in water. Persistence is unlikely based on information available.				
<b>Bioaccumulation/Accumulation</b>		No information available				
<b>Mobility</b>		Will likely be mobile in the environment due to its water solubility.				
<b>Section 13: Disposal Considerations</b>						
<b>Section 13, Disposal Considerations</b>						
<b>Waste Disposal Methods</b>		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.				
<b>Section 14: Transport Information</b>						
<b>Section 14, Transport Information</b>						
<b>DOT</b>		Not regulated				
<b>TDG</b>		Not regulated				
<b>IATA</b>		Not regulated				
<b>IMDG/IMO</b>		Not regulated				

**Section 15: Regulatory Information**

**Section 15, Regulatory Information**

**United States of America Inventory**

Component	CAS No.	TSCA	TSCA Inventory Notification – Active/Inactive	TSCA – EPA Regulatory Flags
Vitamin B12	68-19-9	X	ACTIVE	---

Legend:

TSCA US EPA (TSCA) – Toxic Substances Control Act; 40 CFR Part 710

X Listed

“-“ Not listed

**TSCA 12(b) – Notices of Export** Not applicable

**International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL)

Component	CAS No.	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Vitamin B12	68-19-9	X	-	200-680-0	X	---	X	X	X	KE-11218

KECL – NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

**U.S. Federal Regulations**

**SARA 313**

Component	CAS No.	Weight %	SARA 313 – Threshold Values %
Vitamin B12	68-19-9	96	1.0 0.1

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

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

Component	CWA – Hazardous Substances	CWA – Reportable Quantities	CWA – Toxic Pollutants	CWA – Priority Pollutants
Vitamin B12	-	-	X	X

**Clean Air Act** Not applicable

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Vitamin B12	X		-

**OSHA – Occupational Safety And Health Administration** Not applicable

<b>CERCLA</b>	Not applicable				
<b>California Proposition 65</b>	This product does not contain any Proposition 65 chemicals.				
<b>U.S. State Right-To-Know Regulations</b>					
<b>Component</b>	<b>Massachusetts</b>	<b>New Jersey</b>	<b>Pennsylvania</b>	<b>Illinois</b>	<b>Rhode Island</b>
Vitamin B12	-	X	X	X	X
<b>U. S. Department of Transportation</b>					
Reportable Quantity (RQ)	N				
DOT Marine Pollutant	Y				
DOT Severe Marine Pollutant	N				
<b>U.S. Department of Homeland Security</b>	This product does not contain any DSH chemicals.				
<b><u>Other International Regulations</u></b>					
<b>Mexico – Grade</b>	No information available				
<b>Authorization/Restriction According to EU REACH</b>					
<b>Safety, health, and environmental regulations/legislation specific for the substance or mixture</b>					
<b>Component</b>	<b>CAS No.</b>	<b>OECD HPV</b>	<b>Persistent Organic Pollutant</b>	<b>Ozone Depletion Potential</b>	<b>Restriction of Hazardous Substances (RoHS)</b>
Vitamin B12	68-19-9	Not applicable	Not applicable	Not applicable	Not applicable
<b>Component</b>	<b>CAS No.</b>	<b>Seveso III Directive (2012/18/EC) – Qualifying Quantities for Major Accident Notification</b>	<b>Seveso III Directive (2012/18/EC) – Qualifying Quantities for Safety Report Requirements</b>	<b>Rotterdam Convention (PIC)</b>	<b>Basel Convention (Hazardous Waste)</b>
Vitamin B12	68-19-9	Not Applicable	Not applicable	Not applicable	Not applicable
<b>Section 16: Other Information</b>					
<b>Section 16, Other Information</b>					
The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Nothing herein shall be deemed to create any warranty, express or implied. It is the responsibility of the user to determine the applicability of this information and the suitability of the material or product for any particular purpose.					
SOLA shall not be held liable for any damage resulting from handling or from contact with the above product. SOLA reserves the right to revise this Safety Data Sheet.					