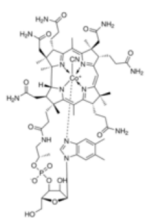


MATERIAL SAFETY DATA SHEET
VITAMIN B12 (CYANOCOBALAMIN)

1 PRODUCT & COMPANY IDENTIFICATION

Product Name: Vitamin B12 (Cyanocobalamin)
Synonyms: Cobalamin, Cyanocobalamin
CAS Number: 68-19-9
Formula: C₆₃H₈₈CoN₁₄O₁₄P
Product Form: Solid.
Product Use: Industrial
For professional use only.



Chemical Structure

Supplier: ASES CHEMICAL WORKS.
Address: Brahm Bagh, Jalori Gate
Jodhpur - 342001 Rajasthan-India
Phone: +91-9636889954
Web: www.ases.in
Email: ecom@ases.in

2 HAZARDS IDENTIFICATION

Classification according to Regulation (EC) No. 1272/2008 [CLP]: Not classified
Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]: Not classified
Labelling according to Regulation (EC) No. 1272/2008 [CLP]: No labelling applicable
Other hazards: No data available

3 COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	EC-No.	Formula	Mol. Weight.
Vitamin B12 (Cyanocobalamin)	68-19-9	200-680-0	C ₆₃ H ₈₈ CoN ₁₄ O ₁₄ P	1355.37 g/mol

4 FIRST AID MEASURES

Eye: Rinse immediately with plenty of water.
Skin: Wash with plenty of water.
Inhalation: Assure fresh air breathing. Allow the victim to rest.
Instigation: Rinse mouth.

5 FIRE-FIGHTING MEASURES

Extinguishing media: Water Foam, Carbon dioxide (CO₂), Dry powder. Avoid water jet.
Fire hazard: No additional information available.
Advice for firefighters: Do not enter fire area without proper protective equipment, including respiratory protection.
Further information: No data available

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Evacuate unnecessary personnel. Use personal protective equipment as required.
Environmental precautions: Avoid release to the environment.
Methods and materials for containment and cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers.

7 HANDLING & STORAGE

Handling: Avoid contact with skin and eyes. Avoid dust formation. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
Storage: Store in a well-ventilated place. Keep container tightly closed.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls: No additional information available.
Eye protection: Chemical goggles or safety glasses
Personal protection: Protective gloves. Wear suitable protective clothing.
Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment

MATERIAL SAFETY DATA SHEET
VITAMIN B12 (CYANOCOBALAMIN)

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance :	Solid.	Freezing point :	No data available
Colour:	Dark red	Boiling point :	No data available
Odour :	No data available	Flash point :	No data available
Odour threshold :	No data available	Flash point :	No data available
pH :	No data available	Relative density :	No data available
Melting point :	300 °C	Solubility (ies) :	Moderately soluble in water.

10 STABILITY AND REACTIVITY

Reactivity:	No additional information available.
Chemical Stability:	Stable under recommended storage conditions.
Hazardous Polymerization:	No additional information available.
Conditions to Avoid:	Direct sunlight. Moisture.
Incompatible Materials:	No additional information available.
Hazardous Decomposition Products:	No additional information available.

11 TOXICOLOGICAL INFORMATION

Acute toxicity:	Not classified.	Carcinogenicity :	Not classified
Skin corrosion/irritation :	Not classified	Reproductive toxicity :	Not classified
Serious eye damage/irritation :	Not classified	STOT-single exposure :	Not classified
Respiratory or skin sensitisation :	Not classified	STOT-repeated exposure :	Not classified
Germ cell mutagenicity :	Not classified	Aspiration hazard :	Not classified

12 ECOLOGICAL INFORMATION

Etoxicity:	No additional information available.
Persistence and degradability:	No additional information available.
Bioaccumulative potential:	No additional information available.
Mobility in soil:	No additional information available.
Results of PBT & vPvB assessment :	No additional information available.
Other adverse effects:	No additional information available.

13 DISPOSAL CONSIDERATIONS

Disposal Product –	Dispose of product in accordance with local, state or provincial and federal regulations.
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14 TRANSPORT INFORMATION

IATA / IMO-IMDG / RID/ADR:	Not applicable.
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15 REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture :-

EU-Regulations :-	No REACH Annex XVII restrictions
Chemical Safety Assessment :-	No additional information available

16 OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and ASES CHEMICAL WORKS assume no liability resulting from its use.