Safety data sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name: VB12 (Cyanocobalamin) ELISA Kit

Catalog Number: E-FS-M002

1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

Application of the substance / the preparation

In vitro diagnostic kit.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Elabscience Biotechnology Co., Ltd

Building B18, Biomedical Park, #858 Gaoxin Road, Donghu Hi-Tech Development Area, Wuhan, Hubei,

China.

Fax: 86-27-87645690

E-mail: techsupport@elabscience.com Web: www.elabscience.com

1.4 Emergency telephone: 86-27-87385095

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The product is not classified according to the CLP regulation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.

Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of the "General

Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

2.2 Label elements Void.

2.3 Supplemental Hazard Void.

SECTION 3: Composition/information on ingredients

Description: Mixture of substances with nonhazardous additions.

| Component | Hazardous substance | % (wt/wt) | Component classification | CAS No. | EC No. |
|---------------------------|---------------------|-----------|--------------------------|---------|--------|
| ELISA Microtiter plate | - | - | non-hazardous | - | - |
| VB12 Standard (solid) | Vitamin B12 | 5% | non-hazardous | 68-19-9 | |
| VB12 Assay Medium (solid) | - | - | non-hazardous | - | - |
| Sterile Water | - | - | non-hazardous | | |
| VB12 Strain | - | - | non-hazardous | - | - |
| Empty plate frame | - | - | non-hazardous | - | - |

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: No special measures required.

After inhalation: due the small volumes involved, there is a minimal risk of inhalation. In case there appear to be symptoms of exposure, supply fresh air. Monitor respiration. If breathing becomes difficult, consult a doctor and give oxygen. Get medical aid.

After skin contact: immediately flush with large amounts of water and soap. Remove all contaminated clothing and wash them before reusing. In presence of irritation, get medical aid.

After eye contact flush eyes with large amounts of water for at least 15 minutes. Insure adequate washing by keeping eyelids open with fingers. Get medical aid.

After swallowing: Ingestion may cause nausea and vomiting. Do not administer anything if victim is unconscious. Rinse mouth with water. Get medical aid.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the mixture:

No further relevant information available.

5.3 Advice for firefighters:

In case of fire, if necessary, wear approved self-contained breathing apparatus and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Wear protective clothing.

6.2 Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and materials for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

No special measures required

7.2 Conditions for safe storage, including any incompatibilities

Keep products tightly sealed in their original containers. Store bottles between $+2 \,\mathrm{C}$ and $+8 \,\mathrm{C}$. Avoid physical damage to containers. Do not expose to heat or direct light. The packaging guarantees the component isolation from incompatible material.

7.3 Specific end uses

No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters.

Exposure workplace limit values for sulfuric acid (data refer to pure substance): 0.05 mg/m³ (TWA).

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: Not required.

Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the permanent contact gloves made of the following materials are suitable:

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

As protection from splashes gloves made of the following materials are suitable:

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Goggles recommended during refillinge.

SECTION 9: Physical and chemical properties

ELISA Microtiter plate polystyrene plastic material, 96-wells breakable

microtiter plate (12 strips each of 8 wells)

VB9 Standard (solid) solid, colourless, odourless
VB9 Assay Medium (solid) Solid, colour, odourless
Sterile Water liquid, colourless, odourless

VB9 Strain liquid, colourless, odourless

polystyrene plastic material, 96-wells breakable

Empty plate frame microtiter plate (12 strips each of 8 wells)

SECTION 10: Stability and reactivity

10.1 Reactivity: No further relevant information available.

10.2 Chemical stability

Stable under the conditions for storage and handling described in the instructions.

- 10.3 Possibility of hazardous reactions: No further relevant information available.
- **10.4 Conditions to avoid:** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

Primary irritant effect:

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

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

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

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

STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure Based on available data, the classification criteria are not met.

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

SECTION 12: Ecological information

The components are furnished in volumes that do not represent hazard for the environment if used and disposed of correctly.

This product contains no components considered to be either persistent, bioaccumulative or toxic (PBT) or very persistent and very bioaccumulative (vPvB).

SECTION 13: Disposal considerations

Recommendation: Disposal must be made according to official regulations. **Recommendation:** Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

14.1 Environmental hazards

Marine pollutant: No

14.2 Special precautions for user: Not applicable.

14.3 Transport in bulk according to Annex II of Marpol and the IBC Code: Not applicable.

SECTION 15: Regulatory information

This safety data sheet is in accordance with Regulation (EC) No. 1907/2006 and Regulation No. 453/2010.

SECTION 16: Other information

16.1 Hazard statements and precautionary statements full text

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic **vPvB:** very Persistent and very Bioaccumulative

IMPORTANT! Read the safety data sheets before the use and disposal of this product. Insure that this information is understood by the operators exposed to this product. Use this product for the intended purpose as indicated in the instruction manual.

The above information is believed to be accurate and up to date. It is, however, liable to change due to the continuous modification of legislation and of standards and security data. Since the correct or incorrect use of this product is beyond our jurisdiction, this information cannot be expressed or implied to be comprehensive. Elabscience cannot be held responsible for any improper use of the product, including those uses that could violate current patents or other copyrights. Only the user is responsible for the evaluation of this product's conformity and of the risks involved before use, and must adopt appropriate precautions towards self and other persons involved.