

Material Safety Data Sheet

VITAMIN B12 ELISA

1. IDENTIFICATION OF THE PREPARATION AND COMPANY NAME.

Product Name: VITAMIN B12 ELISA
Catalog No: 1739-8
Synonyms: N/A
Intended Use: Laboratory Use

2. Wash Buffer

The Wash Buffer contains no toxic or otherwise hazardous components.

3. Conjugate / Standards / Sample Diluent

3.1. Chemical Characterization / Information on Ingredients

Character	Aqueous, protein-containing mixture preserved with 0.01 % potassium tetraiodomercurate (K_2HgI_4 , resulting complex of KI and HgI_2).
CAS-No. (HgI_2)	7774-29-0
EINECS-No. (HgI_2)	231-873-8
Classification	<i>Very toxic, irritant.</i>

3.2. Hazards Identification

Warnings	Toxic if swallowed. Irritates eyes, respiratory tract and skin. In case of breathing in or skin contact, a sensitisation may be possible. Because of a possible mutagenic effect, an irreversible defect is possible (affected organs are kidneys and CNS). In case of contact with acids, the development of toxic gases is possible.
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3.3. First Aid Measures

Eye Contact	Promptly wash eyes with water for at least 15 minutes. Seek medical advice.
Skin Contact	Flush skin with copious amounts of water and soap.
Ingestion	Wash out mouth with water provided person is conscious. Seek medical advice.
Inhalation	Remove to fresh air. If breathing becomes difficult, seek medical advice.
Changing Clothes	In case of sever contamination.

3.4. Fire-Fighting Measures

Extinguishing Media	Water spray. Use carbon dioxide, dry chemical powder or appropriate foam.
Special Fire Fighting Procedure	Wear self-containing breathing apparatus and special protective clothes.
Unusual Fire Fighting Procedure	N/A.
Thermal decomposition	Emits toxic fumes under fire conditions.

3.5. Accidental Release Measures

Personal Protection	Protective glasses, rubber gloves and protective clothing.
Steps after Spillage	Remove spilled fluid onto an inert material. Ventilate area. Wash area with soap solution. Collect contaminated fluid and material in a special closable container.
Absorbent material	No restriction.
Waste Disposal Method	Consult a specialist for disposal or the spilled substance.

3.6. Handling and Storage

Handling	Wear protective clothing. Avoid contact with eyes, skin and clothes. Open and handle container carefully. Thoroughly washing after use is recommended.
Storage	Store between +2°C and +8°C.

3.7. Exposure Controls / Personal Protection

TLV	No.
Personal Protection	Protective glasses, rubber gloves and clothing. Thoroughly washing after use is recommended.

3.8. Physical and Chemical Properties

Physical State	<i>Liquid</i>	Flash Point	<i>N/A</i>
Color	<i>Red</i>	Ignition Temperature	<i>N/A</i>
Odor	<i>N/A</i>	Explosion Limits	<i>N/A</i>
pH-Value	<i>6.2 – 6.7</i>	Vapor Pressure	<i>N/A</i>
Boiling Point	<i>100°C</i>	Solubility in Water	<i>complete</i>
Melting Point	<i>N/A</i>	Viscosity	<i>N/A</i>

3.9. Stability and Reactivity

Hazardous Decomposition Products	<i>Mercury.</i>
Hazardous Polymerisation	<i>Will not occur</i>

3.10. Toxicological Information

LD₅₀ Oral (rat)	<i>18 mg/kg</i>	LD₅₀ Skin (rat)	<i>75 mg/kg</i>
LD₅₀ Oral (man)	<i>357 mg/kg</i>	LD₅₀ Inhalation	<i>Not known</i>

3.11. Ecological Information

Water Hazard Class 1 (own specification)

4. TMB (Substrate for HRP Conjugate)

4.1. Chemical Characterization / Information on Ingredients

Character *Product contains 0.05 % Tetramethyl Benzdine (TMB)*
CAS-No *54827-17-7*
Classification *Hazardous. Irritant*

4.2. Hazards Identification

Warnings *Toxic if swallowed. Irritant, handle with care.*

4.3. First Aid Measures

Eye Contact *Promptly wash eyes with water for at least 15 minutes. Seek medical advice.*
Skin Contact *Flush skin with copious amounts of water.*
Ingestion *Wash out mouth with water provided person is conscious. Seek medical advice.*
Inhalation *N/A*
Changing Clothes *In case of severe contamination.*

4.4. Fire-Fighting Measures

Extinguishing Media *Water spray, carbon dioxide, dry chemical powder or appropriate foam.*
Special Fire Fighting Procedure *N/A*
Unusual Fire Fighting Procedure *Emits toxic fumes under fire conditions.*
Thermal Decomposition *Dangerous decomposition is not anticipated.*

4.5. Accidental Release Measures

Personal Protection *Protective glasses, gloves and clothing*
Steps after Spillage *Remove spilled fluid onto an inert material. Wash area with soap solution.*
Absorbent Material *No restriction*
Waste Disposal Method *Consult a specialist for disposal of the spilled substance.*

4.6. Handling and Storage

Handling *Wear protective clothing. Open and handle container carefully.*
Storage *Store between +2°C and +8°C.*
Other Precautions *N/A*

4.7. Exposure Controls / Personal Protection

TLV	No
Personal Protection	Protective glasses, gloves and clothing.

4.8. Physical and Chemical Properties

Physical State	Liquid	Ignition Temperature	N/A
Color	Yellow	Explosion Limits	N/A
Odor, pH-Value	N/A	Vapor Pressure	N/A
Solubility in Water	Soluble	Boiling Point	> 100°C
Flash Point	N/A	Viscosity	N/A

4.9. Stability and Reactivity

Hazardous Reactions	N/A
Hazardous Decomposition Products	Toxic fumes of carbon monoxide, carbon dioxide and nitrogen oxides.

4.10. Toxicological Information

LD₅₀ Oral	Not known	LD₅₀ Skin	Not known
LD₅₀	Not known	LD₅₀ Inhalation	Not known

4.11. Ecological Information

Water Hazard Class	1 (own specification)
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5. Stop-Solution (0.5 M Sulfuric Acid)

5.1. Chemical Characterization / Information on Ingredients

Character	Product contains 0.5 M Sulfuric Acid (H ₂ SO ₄)
CAS-No of H₂SO₄	7664-93-9
EINECS-No.	213-639-5
Classification	Very caustic, toxic, possible carcinogen

5.2. Hazards Identification

Warnings	Very caustic, toxic, possible carcinogen after inhalation, irritant, handle with care.
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5.3. First Aid Measures

Eye Contact	Promptly wash eyes with water for at least 15 minutes. Seek medical advice.
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Skin Contact	Flush skin with copious amounts of water and soap.
Ingestion	Wash out mouth with water provided person is conscious. Seek medical advice.
Inhalation	Remove to fresh air. If breathing becomes difficult, seek medical advice.
Changing Clothes	In case of severe contamination.

5.4. Fire-Fighting Measures

Extinguishing Media	Do not use water. Use carbon dioxide, dry chemical powder or appropriate foam.
Special Fire Fighting Procedure	Wear self-containing breathing apparatus and special protective clothes.
Unusual Fire Fighting Procedure	Emits toxic fumes under fire conditions.
Thermal Decomposition	N/A

5.5. Accidental Release Measures

Personal Protection	Protective glasses, gloves and clothing.
Steps after Spillage	Remove spilled fluid onto an inert material. Ventilate area. Wash area with soap solution. Collect contaminated fluid and material in a special closable container.
Absorbent Material	No restriction
Waste Disposal Method	Consult a specialist for disposal of the spilled substance.

5.6. Handling and Storage

Handling	<i>Wear protective clothing. Open and handle container carefully.</i>
Storage	<i>Store between +2°C and +8°C.</i>
Other Precautions	N/A

5.7. Exposure Controls / Personal Protection

TLV	No
Personal Protection	<i>Protective glasses, rubber gloves and acid-resistant clothing; breathing apparatus in severe cases: thoroughly washing after use is recommended.</i>

5.8. Physical and Chemical Properties

Physical State	<i>Liquid</i>	Vapor Pressure	N/A
Color	<i>Colourless</i>	Boiling Point	<i>> 100°C</i>
Odor	<i>N/A</i>	Flash Point	N/A
pH-Value	<i>1.0 - 3.0</i>	Solubility in Water	<i>Soluble</i>

5.9. Stability and Reactivity

Hazardous Reactions	Incompatibility with bases, halogenides and metals.
Hazardous Decomposition Products	Sulfur oxides.

5.10. Toxicological Information

LD ₅₀ Oral	2140 mg/kg	LD ₅₀ Skin	<i>Not known</i>
LDL0	135 mg/kg	LD ₅₀ Inhalation (rat)	510 mg/m ³ (2h)

5.11. Ecological Information

Water Hazard Class 1 (own specification), neutralization

6. Disposal Considerations

Observe all Federal, State and Local laws concerning Health and Pollution.

7. Transport Information


N/A

8. Regulatory Information

N/A

9. Other Information

The information herein is believed to be correct as of the given data but is provided without warranty of any kind. The recipient of our products is responsible for observing any laws and guidelines applicable.

<p>ISO 13485 ISO 9001</p> 	
Date Adopted	2016-05-13
REF 1739-8	AccuDiag™ Vitamin B12 ELISA
EC REP	CEpartner4U, Esdoornlaan 13, 3951DB Maarn. The Netherlands. www.cepartner4u.eu
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