InBiOS

MATERIAL SAFETY DATA SHEET

MSDS No. 4019

Effective Date: 6/16/2010

1. Product & Company Information

Manufacturer InBios International, Inc.
562 First Ave. South, Ste. 600
Seattle, WA 98104 USA

Information Phone Number: 206-344-5821
Hours: Mon. to Fri. 8:30-5
Emergency Number: 206-344-5821

Catalog Number(s)	STMS-1
Product Name	Scrub Typhus Detect IgM ELISA System
Synonyms	N/A
Formula	N/A
Molecular Weight	N/A

2. Composition / Information on Ingredients

Component	CAS #	SARA
1. **Scrub Typhus ELISA Plate, Strippable, 96 wells**		
2. **Sample Dilution Buffer for Scrub Typhus,** pH 7.2-7.6		
Tris-HCl Buffered Solution		
Proclin (0.05%)		
Tween 20 (≤0.05%)	9005-64-5	No
3. **Scrub Typhus IgM Negative Control**		
Heat–inactivated negative serum		
4. **Scrub Typhus IgM Positive Control**		
Heat–inactivated positive serum		
Thimerosal (0.01%)	54-64-8	Yes
5. **Ready to Use Enzyme Conjugate-HRP for Scrub Typhus IgM,** pH 7.2-7.6		
Tris-HCl Buffered Solution		
Anti-human IgM mAb with horseradish peroxidase		
Proclin (0.05%)		
Tween 20 (≤0.05%)	9005-64-5	No
6. **10X Wash Buffer,** pH 6.7-7.1		
Phosphate buffered saline (10X)		
Tween 20 (1.0%)	9005-64-5	No
7. **EnWash,** pH 7.2-7.6		
Phosphate buffered saline		

Tween 20 (≤0.05%)	9005-64-5	No

8. Liquid TMB Substrate, pH 3.3-3.8

3,3',5,5'-Tetramethylbenzidine (≤0.05%)	54827-17-7	No
Hydrogen peroxide (≤0.05%)	7722-84-1	No
Citric-acid citrate buffer		

9. Stop Solution

Sulfuric Acid, aqueous (1N)	7664-93-9	No
Corrosive		

3. Hazard Identification

Emergency Overview

Additional Toxicity information is Section 11.

Potential Health Effects (Acute and Chronic)

Inhalation: May be irritating to mucous membranes and respiratory tract. May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

Skin Contact: May be irritating to skin. Sulfuric acid causes severe burns.

Eye Contact: May be irritating to eyes. Sulfuric acid causes sever burns.

Aggravated Medical Conditions by Exposure: No information found.

Carcinogenicity: High levels of exposure to sulfuric acid mists and mercury compounds have shown carcinogenic effects.

Sensitization: No information found.

4. First Aid Measures

Emergency First Aid

GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE.

Inhalation	Remove to fresh air; give artificial respiration if breathing has stopped.
Ingestion	Wash out mouth with water provided person is conscious; get immediate medical attention.
Skin	Immediately flush thoroughly with large amounts of water. Remove contaminated clothing and wash before reuse. Seek medical attention.
Eyes	Immediately flush thoroughly with water for at least 15 minutes. Seek medical attention.

5. Fire Fighting Measures

Extinguishing Media Use dry chemical powder.

Fire Fighting Procedures	Wear self-contained breathing apparatus and protective clothing.
Fire & Explosion Hazards	Emits toxic fumes under fire conditions.

6. Accidental Release Measures

Spill Response

Evacuate the area of all unnecessary personnel. Wear suitable protective equipment listed under Exposure / Personal Protection. Contain the release and eliminate its source, if this can be done without risk. Spill material should be disposed of accordingly (see Section 12). Comply with all Federal, State, and local regulations on reporting releases. Refer to Regulatory Information for reportable quantity and other regulatory data.

7. Handling and Storage

Handling

Avoid inhalation and contact with skin, eyes, and clothing. Avoid prolonged and repeated exposure. Components containing human serum must be treated as biohazardous and handled following Universal Precautions.

Storage

Keep container tightly closed and protected against physical damage. Store under appropriate conditions away from incompatible chemicals.

8. Exposure Controls and Personal Protection

Safety Equipment

Safety showers and eye wash station.

Personal Protective Equipment

Engineering and/or administrative controls should be implemented to reduce exposure. Protective gloves must be worn to prevent skin contact. Safety glasses with side shields must be worn at all times. Impervious protective clothing should be worn to prevent skin contact.

Work and Hygiene Practices

Wash thoroughly after handling. Wash contaminated clothing before reuse.

Exposure Guidelines

OSHA - PEL:

	TWA		STEL		CL		
Component	PPM	MG/M3	PPM	MG/M3	PPM	MG/M3	Skin

Hydrogen Peroxide	1
Mercury	0.01
Sulfuric Acid	1

ACGIH - TLV:

Component	TWA PPM	TWA MG/M3	STEL PPM	STEL MG/M3	CL PPM	CL MG/M3	Skin
Mercury		0.1					X

If there are no exposure limit numbers listed in the Exposure Guidelines chart, this indicates that no OSHA or ACGIH exposure limits have been established.

9. Physical and Chemical Properties

Boiling Point (C 760 mmHg)	N/A
Melting Point (C)	N/A
Specific Gravity (H_20 = 1)	N/A
pH	See Section 2.
Flash Point (F)	N/A
Flammable Limits LEL (%)	N/A
Flammable Limits UEL (%)	N/A
Vapor Pressure (mm Hg)	N/A
Percent Volatile by vol (%)	N/A
Vapor Density (Air = 1)	N/A
Evaporation Rate (BuAc = 1)	N/A
Solubility in Water	N/A
Appearance	N/A

N/A = Not Available

10. Stability and Reactivity

Stability

Stable:	Stable
Incompatibles:	Strong oxidizing agents, bases, brass, iron, finely powdered metals
Conditions to Avoid:	Incompatibles

Hazardous Polymerization

Hazardous polymerization will not occur.

Hazardous Decomposition

Carbon dioxide, Carbon monoxide, Sulfur oxide, Hydrogen sulfide, Mercury, Mercury oxides, Nitrogen oxides

11. Toxicological Information

Oral Rat LD50	N/A
Inhalation Rat LD50	N/A
Skin Rabbit LD50	N/A

12. Ecological Considerations

No data available.

13. Disposal Considerations

Contact a licensed professional waste disposal company for disposal of this material. Precious metals should be recovered. Observe all federal, state, and local environmental regulations.

14. Transportation Information

DOT

Proper Shipping Name: None
This substance is considered non-hazardous for transport.

IATA

Proper Shipping Name: None
This substance is considered non-hazardous for transport.

15. Regulatory Information

Component	SARA TPQ (lbs)	SARA DeMininis (%)	CERCLA RQ (lbs)
Mercury compound	10	No Exemption	1
Sulfuric Acid			1000

If there is no information listed on the regulatory information chart, this indicates that the chemical is not covered by the specific regulation listed.

16. Other Information

Comments

None

NFPA Hazard Ratings

Health	N/A
Flammability	N/A
Reactivity	N/A
Special Hazards	N/A

N/A = Not Available
N/E = None Established

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