

1. Product Identifier

Product Name: Mouse IgG ELISA kit

Product Use: Research Laboratory Use

Manufacturer/Supplier: CytoDiagnostics Inc.

919 Fraser Drive, Unit 11, Burlington, Ontario, Canada, L7L 4X8

Phone: (866) 344-3954

 Web: <http://www.cytodiagnostics.com>

 Information and Support: customer_service@cytodiagnosics.com

Components: 1X Assay Diluent (contains TWEEN™ 20)
 10X Wash Buffer (contains TWEEN™ 20)
 TMB Substrate (contains Hydrogen peroxide and TMB)
 Stop Solution (contains Sulfuric Acid)

Chemical Name	EC-No	CAS-No	Weight %	Classification (Reg. 1272/2008)
TWEEN™ 20	500-018-3	9005-64-5	0.0125	Not classified
TMB	-	54827-17-7	<0.1	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)
Hydrogen peroxide	231-765-0	7722-84-1	0.1-1	STOT SE 3 (H335) Skin Corr. 1A (H314) Acute Tox. 4 (H302) Acute Tox. 4 (H332) Aquatic Chronic 3 (H412) Ox. Liq. 1 (H271)
Sulphuric acid	231-639-5	7664-93-9	2	Skin Corr. 1A (H314)

2. GHS / CLP - GHS - Classification

3. Signal Word

 Warning
 DANGER

4. DSD / DPD - Classification according to EU Directives 67/548/EEC or 1999/45/EC*Classification*

C - Corrosive

R-phrase(s)

R35 - Causes severe burns

S-phrase(s)

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection

4. Other information

A safety data sheet follows for all potentially hazardous components—all other components are non-hazardous.

5. Transport Information

DOT Not dangerous goods

IATA Not dangerous goods

ADR Not dangerous goods

See additional safety data sheets.

1. Chemical and Company Identification

Product Name: TMB Substrate

Product Use: Research Laboratory Use

Manufacturer/Supplier: CytoDiagnostics Inc.

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Phone: (866) 344-3954

Web: <http://www.cytodiagnosics.com>

Information and Support: customer_service@cytodiagnosics.com

2. Hazards Identification

GHS - Classification

Class 1A Causes severe skin burns and eye damage (H314)

Class 1 Causes serious eye damage (H318)

Class 4 Harmful if swallowed (H302)

Class 4 Harmful if inhaled (H332)

GHS Label elements, including precautionary statements



Signal Word

Warning

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear protective gloves/ protective clothing

Other information

No information available

3. Composition/ Information on Ingredients

Substances

Not applicable

Components

TMB; CAS# 54827-17-7

Hydrogen peroxide; CAS# 7722-84-1

For the full text of the H-Statements mentioned in this Section, see Section 16



4. First Aid Measures

In case of skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

In case of ingestion: Clean mouth with water. Drink plenty of water.

In case of eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.

If case of inhalation: Move to fresh air

Notes to physician: Treat symptomatically

5. Fire Fighting Measures

Flammable properties

Not flammable

Flash point

Not determined

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Explosion Data

Sensitivity to Mechanical Impact: None

Sensitivity to Static Discharge: None

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6. Accidental Release Measures

Personal precautions

Ensure adequate ventilation.

Environmental precautions

Try to prevent the material from entering drains or water courses.

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Pick up and transfer to properly labeled containers.

7. Handling and Storage

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice.

Technical measures/Storage conditions

Keep containers tightly closed in a dry, cool, and well-ventilated place.

8. Exposure Controls/Personal Protection

EXPOSURE GUIDELINES

This product does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrogen peroxide 7722-84-1	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m ³ (vacated) TWA: 1 ppm (vacated) TWA: 1.4 mg/m ³	IDLH: 75 ppm TWA: 1 ppm TWA: 1.4 mg/m ³

Engineering measures

Showers
Eyewash stations
Ventilation systems

PERSONAL PROTECTIVE EQUIPMENT

Eye/face protection

Tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Long sleeved clothing. Protective gloves.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Appearance:	no data available	Physical State at 20°C:	Liquid
Odor:	no data available	Vapor pressure:	no data available
Odor threshold:	no data available	Vapor density:	no data available
pH:	3.3 – 3.8	Relative density:	no data available
Melting Point/Freezing point:	no data available	Solubility:	no data available
Boiling point/boiling range:	no data available	Specific Gravity:	no data available
Flash points:	no data available	Auto-ignition temperature:	no data available
Evaporation rates:	no data available	Decomposition temperature:	no data available
Flammability (solid; gas):	no data available	VOC Content (%):	not applicable

10. Stability and Reactivity

Stability: Stable under recommended storage conditions

Incompatible products: None known based on information supplied

Hazardous decomposition products: None known based on information supplied

Hazardous polymerization: Hazardous polymerization does not occur

Conditions to avoid: None known based on information supplied

11. Toxicological Information

Acute Toxicity

Product does not present an acute toxicity hazard based on known or supplied information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrogen peroxide	801 mg/kg (Rat)	4060 mg/kg (Rat) 2000 mg/kg (Rabbit)	2 mg/L (Rat) 4 h

Chronic Toxicity

Chemical Name	ACGIH	IARC	NTP	OSHA
Hydrogen peroxide	A3	Group 3	-	-

Chronic Toxicity

Target Organ Effects: None known.

12. Ecological Information

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Hydrogen peroxide	2.5: 72 h <i>Chlorella vulgaris</i> mg/L EC50	16.4: 96 h <i>Pimephales promelas</i> mg/L LC50 18-56: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 10.0-32.0: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static	7.7: 24 h <i>Daphnia magna</i> mg/L EC50 18 - 32: 48 h <i>Daphnia magna</i> mg/L EC50 Static

13. Disposal Considerations

Waste disposal methods

Dispose of in accordance with federal, state, and local regulations

Contaminated packaging

Do not re-use empty containers

Chemical Name	California Hazardous Waste Status
Hydrogen peroxide	Toxic Corrosive Ignitable Reactive

14. Transport Information

DOT	Not dangerous goods
IATA	Not dangerous goods
ADR	Not dangerous goods

15. Regulatory Information

WHMIS Note

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

16. Other Information

Full text of H-Statements referred to under sections 2 and 3

H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation
H314 - Causes severe skin burns and eye damage H302 + H332 - Harmful if swallowed or if inhaled H412
- Harmful to aquatic life with long lasting effects H271 - May cause fire or explosion; strong oxidizer

This product is for laboratory research purposes, not for diagnostic or therapeutic use in humans or animals.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Users should make independent decisions regarding completeness of the information based on all sources available. Cytodiagnostics Inc. shall not be held liable for any damage resulting from handling or contact with the above product.

End of MSDS

1. Chemical and Company Identification

Product Name: Stop solution

Product Use: Research Laboratory Use

Manufacturer/Supplier: CytoDiagnostics Inc.

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Phone: (866) 344-3954

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Information and Support: customer_service@cytodiagnosics.com

2. Hazards Identification

GHS - Classification

Class 1A Causes severe skin burns and eye damage (H314)

Class 1 Causes serious eye damage (H318)

Class 1 Corrosive to metals (H290)

GHS Label elements, including precautionary statements



Signal Word

Warning

Corrosive

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear protective gloves/ protective clothing

Other information

No information available

3. Composition/ Information on Ingredients

Substances

Not applicable

Components

Sulphuric acid; CAS# 7664-93-9

For the full text of the H-Statements mentioned in this Section, see Section 16

4. First Aid Measures

In case of skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

In case of ingestion: Clean mouth with water. Drink plenty of water.

In case of eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.

If case of inhalation: Move to fresh air

Notes to physician: Treat symptomatically

5. Fire Fighting Measures

Flammable properties

Not flammable

Flash point

Not determined

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Explosion Data

Sensitivity to Mechanical Impact: None

Sensitivity to Static Discharge: None

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6. Accidental Release Measures

Personal precautions

Ensure adequate ventilation.

Environmental precautions

Try to prevent the material from entering drains or water courses.

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Pick up and transfer to properly labeled containers.

7. Handling and Storage

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice.

Technical measures/Storage conditions

Keep containers tightly closed in a dry, cool, and well-ventilated place.

8. Exposure Controls/Personal Protection
EXPOSURE GUIDELINES

This product does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sulphuric acid 7664-93-9	TWA: 0.2 mg/m ³ thoracic fraction	TWA: 1 mg/m ³ (vacated) TWA: 1 mg/m ³	IDLH: 15 mg/m ³ TWA: 1 mg/m ³

NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d962 (11th Cir., 1992).

Engineering measures

Showers
 Eyewash stations
 Ventilation systems

PERSONAL PROTECTIVE EQUIPMENT
Eye/face protection

Tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Long sleeved clothing. Protective gloves.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Appearance:	Colorless	Physical State at 20°C:	Liquid
Odor:	no data available	Vapor pressure:	no data available
Odor threshold:	no data available	Vapor density:	no data available
pH:	1.2 at 5 g/L	Relative density:	no data available

Melting Point/Freezing point:	no data available	Solubility:	no data available
Boiling point/boiling range:	no data available	Specific Gravity:	no data available
Flash points:	no data available	Auto-ignition temperature:	no data available
Evaporation rates:	no data available	Decomposition temperature:	no data available
Flammability (solid; gas):	no data available	VOC Content (%):	not applicable

10. Stability and Reactivity

Stability: Stable under recommended storage conditions

Incompatible products: None known based on information supplied

Hazardous decomposition products: None known based on information supplied

Hazardous polymerization: Hazardous polymerization does not occur

Conditions to avoid: None known based on information supplied

11. Toxicological Information

Acute Toxicity

Product does not present an acute toxicity hazard based on known or supplied information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sulphuric acid	2140 mg/kg (Rat)	-	510 mg/m ³ (Rat) 2 h 347 ppm (Rat) 1 h

Chronic Toxicity

Chemical Name	ACGIH	IARC	NTP	OSHA
Sulphuric acid	A2	Group 1	Known	X

ACGIH: (American Conference of Governmental Industrial Hygienists): A2 - Suspected Human Carcinogen

IARC: (International Agency for Research on Cancer): Group 1 - Carcinogenic to Humans

NTP: (National Toxicity Program): Known - Known Carcinogen

OSHA: (Occupational Safety & Health Administration): X - Present

Chronic Toxicity

Target Organ Effects: Eyes, Respiratory system, Skin, Teeth

12. Ecological Information

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to fish	Toxicity to daphnia and other aquatic

invertebrates

Sulphuric acid	500: 96 h <i>Brachydanio rerio</i> mg/L LC50 static	29: 24 h <i>Daphnia magna</i> mg/L EC50
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13. Disposal Considerations***Waste disposal methods***

This material, as supplied, is not a hazardous waste according to Federal regulations (40CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging

Do not re-use empty containers

Chemical Name	California Hazardous Waste Status
Sulphuric acid	Toxic Corrosive

14. Transport Information

DOT	Not dangerous goods
IATA	Not dangerous goods
ADR	Not dangerous goods

15. Regulatory Information***WHMIS Note***

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

16. Other Information***Full text of H-Statements referred to under sections 2 and 3***

H314 - Causes severe skin burns and eye damage

This product is for laboratory research purposes, not for diagnostic or therapeutic use in humans or animals.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Users should make independent decisions regarding completeness of the information based on all sources available. Cytodiagnostics Inc. shall not be held liable for any damage resulting from handling or contact with the above product.

End of MSDS