

Safety Data Sheet (SDS)

Version 2

Reviewed on 1.1.2024

1. Product Identifier

Product Name: Human VEGF ELISA kit

Product Use: Research Laboratory Use

Manufacturer/Supplier: CytoDiagnostics Inc.

5867 South Garnett Road, Tulsa, Oklahoma 74146 USA

Phone: (866) 344-3954

Web: <http://www.cytodiagnostics-us.com>Information and Support: customer_service-us@cytodiagnosics.com

Components: Human VEGF Microplate

HRP Conjugate (contains Glycerol)

Assay Diluent A (contains Sodium Azide)

Assay Diluent B (contains Proclin 300 Mixture)

Sample Diluent (contains Proclin 300 Mixture)

Detection Diluent (contains Proclin 300 Mixture)

Wash Buffer Concentrate (contains Proclin 300 Mixture)

TMB Diluent (contains Hydrogen peroxide)

TMB Reagent (contains DMSO and TMB)

Stop Solution (contains Sulfuric Acid)

Chemical Name	EC-No	CAS-No	Weight %	Classification (Reg. 1272/2008)
Sodium Azide	247-852-1	26628-22-8	0.010	Acute Tox. 2 (H300) Acute Tox. 1 (H310) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) (EUH032)
Glycerol	200-289-5	56-81-5	40	-
Proclin™ 300 (Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H-isothiazol-3-One)	911-418-6	55965-84-9	< 0.1	Aquatic Chronic 4 (H413) Acute Tox. 3 (H301) Acute Tox. 2 (H330) (H310) Skin Corr. 1C (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
TMB	-	54827-17-7	<0.1	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)

Safety Data Sheet (SDS)

Version 2

Reviewed on 1.1.2024

Chemical Name	EC-No	CAS-No	Weight %	Classification (Reg. 1272/2008)
Dimethyl sulfoxide (DMSO)	-	67-68-5	50-99	-
Hydrogen peroxide	-	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

Not dangerous

3. Other information

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

4. Transport Information

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

See additional safety data sheets.

Safety Data Sheet (SDS)

Version 2

Reviewed on 1.1.2024

1. Chemical and Company Identification

Product Name: Assay Diluent A

Product Use: Research Laboratory Use

Manufacturer/Supplier: CytoDiagnostics Inc.

5867 South Garnett Road, Tulsa, Oklahoma 74146 USA

Phone: (866) 344-3954

Web: <http://www.cytodiagnostics-us.com>Information and Support: customer_service-us@cytodiagnosics.com**2. Hazards Identification*****GHS - Classification***

Ozone - Not applicable

GHS Label elements, including precautionary statements

Not dangerous

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

Sodium Azide; CAS# 26628-22-8

*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

Safety Data Sheet (SDS)

Version 2

Reviewed on 1.1.2024

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.

Safety Data Sheet (SDS)
Version 2

Reviewed on 1.1.2024

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
Sodium Azide 26628-22-8	Ceiling: 0.29 mg/m ³ NaN ₃ Ceiling: 0.11 ppm Hydrazoic acid vapor	(vacated) Ceiling: 0.1 ppm HN ₃ (vacated) Ceiling: 0.3 mg/m ³ NaN ₃	Ceiling: 0.1 ppm HN ₃ Ceiling: 0.3 mg/m ³ NaN 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.

Safety Data Sheet (SDS)

Version 2

Reviewed on 1.1.2024

9. Physical and Chemical Properties

Appearance:	no data available	Physical State at 20°C:	no data available
Odor:	no data available	Vapor pressure:	no data available
Odor threshold:	no data available	Vapor density:	no data available
pH:	no data available	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
Sodium Azide	27 mg/kg (Rat)	50 mg/kg (Rat) 20 mg/kg (Rabbit)	0.054-0.52 mg/L (dust)

Chronic Toxicity

Target Organ Effects: None known

Safety Data Sheet (SDS)
Version 2

Reviewed on 1.1.2024

12. Ecological Information***Ecotoxicity***

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

Chemical Name	Toxicity to fish
Sodium Azide	0.8: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 0.7: 96 h <i>Lepomis macrochirus</i> mg/L LC50 5.46: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through

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

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***

H300 - Fatal if swallowed H310 - Fatal in contact with skin H400 - Very toxic to aquatic life H410 - Very toxic to aquatic life with long lasting effects

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.

Safety Data Sheet (SDS)
Version 2

Reviewed on 1.1.2024

1. Chemical and Company Identification

Product Name: Assay Diluent B

Product Use: Research Laboratory Use

Manufacturer/Supplier: CytoDiagnostics Inc.

5867 South Garnett Road, Tulsa, Oklahoma 74146 USA

Phone: (866) 344-3954

Web: <http://www.cytodiagnostics-us.com>Information and Support: customer_service-us@cytodiagnostics.com**2. Hazards Identification****Classification of the substance or mixture**

GHS / CLP - REGULATION (EC) No 1272/2008

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Ozone	Not applicable

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

For the full text of the R-phrases mentioned in this Section, see Section 16

Symbol(s) Xi – Irritant

R-code(s) Xi;R36/38 – R43

Label elements

Signal Word

DANGER

Hazard statements

H314 - Causes severe skin burns and eye damage H317 - May cause an allergic skin reaction H319 -

Causes serious eye irritation

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

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P310 - Immediately call a POISON CENTER or doctor/ physician

P280 - Wear eye protection/ face protection

Other information

No information available

Safety Data Sheet (SDS)

Version 2

Reviewed on 1.1.2024

3. Composition/ Information on Ingredients**Substances**

Not applicable

Components

Proclin™ 300 (Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H-isothiazol-3-One);
CAS# 55965-84-9

For the full text of the R-phrases mentioned in this Section, see Section 16

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 plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Remove and wash contaminated clothing before re-use. Wash off immediately with plenty of water. Wash off immediately with soap and plenty of water

In case of ingestion: Do NOT induce vomiting. Drink plenty of water. Immediate medical attention is not required. Rinse mouth.

In case of eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

If case of inhalation: Move to fresh air. If symptoms persist, call a physician.

Protection of first aiders: Use personal protective equipment.

Notes to physician: May cause sensitization of susceptible persons.

5. Fire Fighting Measures***Suitable extinguishing media***

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

Extinguishing media which shall not be used for safety reasons

No information available

Special hazard

None in particular

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus and full protective gear

Safety Data Sheet (SDS)
Version 2

Reviewed on 1.1.2024

6. Accidental Release Measures***Personal precautions***

Use personal protective equipment. Avoid contact with the skin and the eyes.
See Section 12 for additional information

Environmental precautions

Prevent entry into waterways, sewers, basements, or confined areas. Do not flush into surface water or sanitary sewer system

Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g., sand, silica gel, acid binder, universal binder, sawdust)

7. Handling and Storage***Precautions for safe handling***

Ensure adequate ventilation. Wear personal protective equipment.

Conditions for safe storage, including any incompatibilities

Keep out of the reach of children. Keep container tightly closed. Keep containers tightly closed in a cool, well-ventilated place.

Specific end uses

Specific use(s): No information available
Exposure scenario: No information available

8. Exposure Controls/Personal Protection***Control parameters***

Exposure limits: This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.
Derived No Effect Level (DNEL): No information available
Predicted No Effect Concentration (PNEC): No information available

Exposure controls

Engineering measures: Ensure adequate ventilation, especially in confined areas

Personal protective equipment

Eye protection: Tightly fitting safety goggles
Hand protection: Protective gloves
Skin and body protection: Long sleeved clothing.
Respiratory protection: No special protective equipment required
Thermal hazards: No information available
Hygiene measures: When using, do not eat, drink, or smoke. Remove and wash contaminated clothing before re-use.
Environmental exposure controls: Do not allow material to contaminate ground water system.

Safety Data Sheet (SDS)
 Version 2

Reviewed on 1.1.2024

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:	no data available	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 (%):	no data available

10. Stability and Reactivity

Reactivity: No information available

Chemical stability: Stable under normal conditions

Possibility of hazardous reactions: None under normal processing

Conditions to avoid: Heat, flames, and sparks

Incompatible materials: None in particular

Hazardous decomposition products: None under normal use

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
Proclin 300	53 mg/kg (Rat)	-	-

Chronic Toxicity

Carcinogenicity: This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B)

Target Organ Effects: Eyes. Respiratory system. Skin.

12. Ecological Information

Ecotoxicity: Contains no substances known to be hazardous to the environment or that are not degradable in wastewater treatment plants

Persistence and degradability: No information available

Bioaccumulative potential: No information available

Mobility in soil: No information available

Results of PBT and vPvB assessment: No information available

Other adverse effect: No information available

13. Disposal Considerations**Waste from residues / unused products**

Dispose of in accordance with local regulations

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or Disposal

Other information

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

14. Transport Information

IMDG/IMO	Not dangerous goods
IATA	Not dangerous goods
ADR	Not dangerous goods
RID	Not dangerous goods
ICAO	Not dangerous goods

15. Regulatory Information**Safety, health and environmental regulations/legislation specific for the substance or mixture**

No information available

Chemical Safety Assessment

No information available

Safety Data Sheet (SDS)

Version 2

Reviewed on 1.1.2024

16. Other information***Risk Combination Phrases***

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed

R36/38 - Irritating to eyes and skin

Hazard statements

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

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.

Safety Data Sheet (SDS)

Version 2

Reviewed on 1.1.2024

1. Chemical and Company Identification

Product Name: 40X HRP-Streptavidin Concentrate

Product Use: Research Laboratory Use

Manufacturer/Supplier: CytoDiagnostics Inc.

5867 South Garnett Road, Tulsa, Oklahoma 74146 USA

Phone: (866) 344-3954

Web: <http://www.cytodiagnostics-us.com>Information and Support: customer_service-us@cytodiagnostics.com**2. Hazards Identification*****GHS - Classification***

Ozone - Not applicable

GHS Label elements, including precautionary statements

Not dangerous

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

Glycerol; CAS# 56-81-5

*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

Safety Data Sheet (SDS)

Version 2

Reviewed on 1.1.2024

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.

Safety Data Sheet (SDS)

Version 2

Reviewed on 1.1.2024

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
Glycerol 56-81-5	TWA: 10 mg/m ³ mist	TWA: 15 mg/m ³ mist, total particulate TWA: 5 mg/m ³ mist, respirable fraction (vacated) TWA: 10 mg/m ³ mist, total particulate (vacated) TWA: 5 mg/m ³ mist, respirable fraction	-

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.

Safety Data Sheet (SDS)

Version 2

Reviewed on 1.1.2024

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:	no data available	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 (%):	50

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
Glycerol	Rat - 12,600 mg/kg	Rabbit - >10,000 mg/kg	-

Chronic Toxicity

Target Organ Effects: Eyes, Kidney, Respiratory system, Skin.

Safety Data Sheet (SDS)

Version 2

Reviewed on 1.1.2024

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
Glycerol	51 - 57: 96 h <i>Oncorhynchus mykiss</i> mL/L LC50 static	500: 24 h <i>Daphnia magna</i> mg/L EC50

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

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

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.

Safety Data Sheet (SDS)

Version 2

Reviewed on 1.1.2024

1. Chemical and Company Identification

Product Name: TMB Reagent

Product Use: Research Laboratory Use

Manufacturer/Supplier: CytoDiagnostics Inc.

5867 South Garnett Road, Tulsa, Oklahoma 74146 USA

Phone: (866) 344-3954

Web: <http://www.cytodiagnostics-us.com>Information and Support: customer_service-us@cytodiagnostics.com**2. Hazards Identification****GHS - Classification**

Ozone - Not applicable

GHS Label elements, including precautionary statements

Not dangerous

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

P280 - Wear protective gloves/ protective clothing

Other information

No information available

3. Composition/ Information on Ingredients**Components**

TMB; CAS# 54827-17-7

DMSO; CAS# 67-68-5

*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.

Safety Data Sheet (SDS)
 Version 2

Reviewed on 1.1.2024

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

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:	no data available	Physical State at 20°C:	no data available
Odor:	no data available	Vapor pressure:	no data available
Odor threshold:	no data available	Vapor density:	no data available
pH:	no data available	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

Safety Data Sheet (SDS)

Version 2

Reviewed on 1.1.2024

10. Stability and Reactivity**Stability:** Stable under recommended storage conditions**Incompatible products:** None known based on information supplied**Hazardous decomposition products:**

TMB: None known based on information supplied

DMSO: Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrogen oxides (NO_x). Sulfur oxides.

Hydrogen chloride.

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
DMSO	14500 mg/kg (Rat)	40 g/kg (Rat)	-

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
DMSO	12350 - 25500: 96 h <i>Skeletonema costatum</i> mg/L EC50	34: 96 h <i>Pimephales promelas</i> mg/L LC50 33-37: 96 h <i>Oncorhynchus mykiss</i> g/L LC50 static 40: 96 h <i>Lepomis</i> <i>macrochirus</i> g/L LC50 static 41.7: 96 h <i>Cyprinus carpio</i> g/L LC50	7000: 24 h <i>Daphnia species</i> mg/L EC50
Chemical Name			log Pow
DMSO			-2.03

Safety Data Sheet (SDS)
Version 2

Reviewed on 1.1.2024

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

14. Transport Information

<i>DOT</i>	Not dangerous goods
<i>IATA</i>	Not dangerous goods
<i>ADR</i>	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

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.

Safety Data Sheet (SDS)
Version 2

Reviewed on 1.1.2024

1. Chemical and Company Identification

Product Name: TMB Diluent

Product Use: Research Laboratory Use

Manufacturer/Supplier: CytoDiagnostics Inc.

5867 South Garnett Road, Tulsa, Oklahoma 74146 USA

Phone: (866) 344-3954

Web: <http://www.cytodiagnostics-us.com>Information and Support: customer_service-us@cytodiagnostics.com**2. Hazards Identification*****GHS - Classification***

Ozone - Not applicable

GHS Label elements, including precautionary statements

Not dangerous

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

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.

Safety Data Sheet (SDS)

Version 2

Reviewed on 1.1.2024

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

Safety Data Sheet (SDS)

Version 2

Reviewed on 1.1.2024

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.

Safety Data Sheet (SDS)

Version 2

Reviewed on 1.1.2024

1. Chemical and Company Identification

Product Name: Stop solution

Product Use: Research Laboratory Use

Manufacturer/Supplier: CytoDiagnostics Inc.

5867 South Garnett Road, Tulsa, Oklahoma 74146 USA

Phone: (866) 344-3954

Web: <http://www.cytodiagnostics-us.com>Information and Support: customer_service-us@cytodiagnostics.com**2. Hazards Identification*****GHS - Classification***

Ozone - Not applicable

GHS Label elements, including precautionary statements

Not dangerous

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.

Safety Data Sheet (SDS)
 Version 2

Reviewed on 1.1.2024

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:	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:	0.5	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

Safety Data Sheet (SDS)
 Version 2

Reviewed on 1.1.2024

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

Safety Data Sheet (SDS)
Version 2

Reviewed on 1.1.2024

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.