

Safety Data Sheet (SDS)

Version 1

Reviewed on 1.1.2025

1. Chemical and Company Identification

Product Name: CytoBlue TMB Substrate

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***

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

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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.

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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.

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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.

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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

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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