acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: November 28, 2018 Revision: November 26, 2018

1 Identification

Product identifier

· Trade name: Methylene Blue Indicator, 1% w/v

· Product code: FEDMB5200-A

· Recommended use and restriction on use

· Recommended use: Laboratory chemicals

· Restrictions on use: No relevant information available.

Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

AquaPhoenix Scientific, Inc.

860 Gitts Run Road

Hanover, PA 17331

Phone: (717)632-1291

Toll-Free: (866)632-1291

info@aquaphoenixsci.com

Distributor:

Fisher Science Education

6771 Silver Crest Road

Nazareth, PA 18064

(800) 955-1177

· Emergency telephone number:

ChemTel Inc.

(800)255-3924 (North America)

+1 (813)248-0585 (International)

2 Hazard(s) identification

· Classification of the substance or mixture

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

· Label elements

The product is not classified as hazardous according to OSHA GHS regulations within the United States.

- GHS label elements None.
- · Hazard pictograms: None.
- · Signal word: None
- · Hazard statements: None.
- · Precautionary statements: None.
- Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Components:			
773	32-18-5	Water	99%
722		Methylene blue trihydrate	1%
		① Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	

Additional information:

(Cont'd. on page 2)

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: November 28, 2018 Revision: November 26, 2018

Trade name: Methylene Blue Indicator, 1% w/v

(Cont'd. of page 1)

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

- Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Rinse with warm water.

If skin irritation is experienced, consult a doctor.

· After eye contact:

Protect unharmed eye.

Remove contact lenses if worn.

Seek medical treatment in case of complaints.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

· Most important symptoms and effects, both acute and delayed:

May cause gastro-intestinal irritation if ingested.

- · Danger: No relevant information available.
- · Indication of any immediate medical attention and special treatment needed:

No relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · For safety reasons unsuitable extinguishing agents: No relevant information available.
- · Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- · Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

· Environmental precautions

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of the collected material according to regulations.

Reference to other sections

(Cont'd. on page 3)

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: November 28, 2018 Revision: November 26, 2018

Trade name: Methylene Blue Indicator, 1% w/v

(Cont'd. of page 2)

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling
- · Precautions for safe handling: No special measures required.
- Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Requirements to be met by storerooms and receptacles:

Due to photo-sensitivity, store product in brown-glass or stainless steel receptacles.

Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidizing agents.

- · Further information about storage conditions: Keep containers tightly sealed.
- · Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

- Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Exposure controls
- General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

- Engineering controls: Provide adequate ventilation.
- · Breathing equipment: Not required under normal conditions of use.
- · Protection of hands:



Protective gloves

Material of gloves

Neoprene gloves Nitrile rubber, NBR Butvl rubber. BR

Fluorocarbon rubber (Viton)

Sensibilization by the components in the glove materials is possible.

· Eye protection:



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

(Cont'd. on page 4)

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: November 28, 2018 Revision: November 26, 2018

Trade name: Methylene Blue Indicator, 1% w/v

(Cont'd. of page 3)

· Body protection: Not required under normal conditions of use.

Information on basic physical and chemical properties

- · Limitation and supervision of exposure into the environment No special requirements.
- · Risk management measures No special requirements.

9 Physical and chemical properties

· Appearance:

Form: Color: Odor: Odor threshold:	Liquid Dark blue Odorless Not determined.
· pH-value: · Melting point/Melting range: · Boiling point/Boiling range:	Not determined. Not determined. 0 °C (32 °F) 100 °C (212 °F)
· Flash point:	The product is not flammable.
· Flammability (solid, gaseous):	Not applicable.
· Auto-ignition temperature:	Not determined.
· Decomposition temperature:	Not determined.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits Lower: Upper: · Oxidizing properties:	Not determined. Not determined. Not determined.
· Vapor pressure at 20 ℃ (68 °F):	23 hPa (17.3 mm Hg)
· Density: Relative density: Vapor density:	Not determined. Not determined.

Not determined.

· Solubility in / Miscibility with

Evaporation rate:

Water: Fully miscible.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity

Dynamic: Not determined. **Kinematic:** Not determined.

• Other information No relevant information available.

10 Stability and reactivity

· Reactivity: No relevant information available.

(Cont'd. on page 5)

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: November 28, 2018 Revision: November 26, 2018

Trade name: Methylene Blue Indicator, 1% w/v

(Cont'd. of page 4)

- · Chemical stability: Stable under normal temperatures and pressures.
- Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· Possibility of hazardous reactions

Reacts with strong acids and oxidizing agents.

Toxic fumes may be released if heated above the decomposition point.

Conditions to avoid

Keep away from heat and direct sunlight.

Light, excess heat, dust generation, incompatible materials.

- · Incompatible materials Strong oxidizing agents, bases, amines and aldehydes.
- Hazardous decomposition products

Under fire conditions only:

Possible in traces.

11 Toxicological information

- Information on toxicological effects
- · Acute toxicity: Based on available data, the classification criteria are not met.
- · LD/LC50 values that are relevant for classification: None.
- · Primary irritant effect:
- · On the skin: Based on available data, the classification criteria are not met.
- · On the eye: Based on available data, the classification criteria are not met.
- · Sensitization: Based on available data, the classification criteria are not met.
- · IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable route(s) of exposure:

Ingestion.

Inhalation.

Eye contact.

Skin contact.

- · Acute effects (acute toxicity, irritation and corrosivity): No relevant information available.
- · Repeated dose toxicity: No relevant information available.
- · Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- · Carcinogenicity: Based on available data, the classification criteria are not met.
- · Reproductive toxicity: Based on available data, the classification criteria are not met.
- · STOT-single exposure: Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- · Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

· Toxicity

(Cont'd. on page 6)

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: November 28, 2018 Revision: November 26, 2018

Trade name: Methylene Blue Indicator, 1% w/v

(Cont'd. of page 5)

- · Aquatic toxicity No relevant information available.
- · Persistence and degradability No relevant information available.
- · Bioaccumulative potential: No relevant information available.
- · Mobility in soil: No relevant information available.
- · Additional ecological information
- · General notes: Generally not hazardous for water.
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.
- · Other adverse effects No relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- Uncleaned packagings
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information			
· UN-Number · DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.		
· UN proper shipping name· DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.		
· Transport hazard class(es)			
· DOT, ADR/RID/ADN, IMDG, IATA · Class	Not regulated.		
· Packing group · DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.		
· Environmental hazards	Not applicable.		
· Special precautions for user	Not applicable.		
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.		

15 Regulatory information

(Cont'd. on page 7)

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: November 28, 2018 Revision: November 26, 2018

Trade name: Methylene Blue Indicator, 1% w/v

(Cont'd. of page 6)

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- · Section 302 (extremely hazardous substances):

None of the ingredients are listed.

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act)

All ingredients are listed.

- · Proposition 65 (California)
- · Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· EPA (Environmental Protection Agency):

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer):

7220-79-3 Methylene blue trihydrate

3

· Canadian Domestic Substances List (DSL) (Substances not listed.):

All ingredients listed on DSL or NDSL.

16 Other information

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.

Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistant, Bio-accumulable, Toxic

vPvB: very Persistent and very Bioaccumulative

OSHA: Occupational Safety & Health Administration

Acute Tox. 4: Acute toxicity - Category 4

Skin Irrit. 2: Skin corrosion/irritation - Category 2

Page: 8/8

Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: November 28, 2018 Revision: November 26, 2018

Trade name: Methylene Blue Indicator, 1% w/v

(Cont'd. of page 7)

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

· Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

SDS Prepared by:

ChemTel Inc.

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: www.chemtelinc.com