



SAFETY DATA SHEET

Revision 4
Revision Date 01/04/2023
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name Methylene Blue Solution
Product Number MB0001
Brand Vantanex Corp

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Laboratory use, Synthesis of substances, safe dye

1.3 Details of the supplier of the safety data sheet

Company Vantanex Corp
4024 Tatlow Road
Kelowna, BC
V1E 4W1 Canada
Contact Phone +1 587 887 6167
Email sales@vantanex.com

1.4 Emergency telephone

Emergency Phone # Chemtrec:
1-800-424-9300
1-703-527-3887
24 Hours/day; 7 Days/week

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

none

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Component	GHS US Classification	Concentration
Methylene blue (main constituent)		
CAS-No.	61-73-4	Acute Tox. 4; H302
		100 %

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

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Non-combustible

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Dust cloud protection. For personal protection see section 8.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed in a dry and well-ventilated place.

Storage class

Storage class (TRGS 510): 12: Non Combustible Liquids

7.3 Specific end use(s)

no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

Safety glasses, Dust Protection: dust mask

Skin protection

Gloves

Body Protection

Protective clothing

Respiratory protection

Dust production. Dust mask.

Control of environmental exposure

No special environmental precautions required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	Form: solid (methylene blue)	Form: liquid solution
b) Odor	Odourless	Odourless
c) Odor Threshold	No data available	No data available
d) pH	4 (1%)	4
e) Melting Point	190 °C	No data available
f) Initial boiling point	No data available	100 °C
g) Flash point	No data available	No data available
h) Evaporation rate	No data available	No data available
i) Flammability (solid/gas)	No data available	No data available
j) Upper/lower explosive limits	No data available	No data available
k) Vapor pressure	< 0.1 hPa (20 °C)	No data available
l) Molecular Mas	319.88 g/mol	No data available
m) Water Solubility	2.5 g/100mL	2.5 g/100mL
n) Log Pow	5.85 (Estimated value)	No data available
p) Autoignition temperature	No data available	No data available
q) Decomposition temperature	190 °C	No data available
r) Viscosity	No data available	No data available
s) Explosive properties	No data available	No data available
t) Oxidizing properties	No data available	No data available

9.2 Other safety information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture

Acute toxicity

Acute toxicity estimate Oral - > 5,000 mg/kg

(Calculation method)

LD50 Oral - Rat - 1,180 mg/kg (Methylene blue)

Inhalation:

No data available

Inhalation:

No data available

Dermal:

No data available

Skin corrosion/irritation:

Non corrosive

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Histidine reversion (Ames) (Methylene blue) Test Type: Mammal
(Methylene blue)

Test system: lymphocyte

- IARC: No ingredient of this product is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No ingredient of this product is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No ingredient of this product is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product is on OSHA's list of regulated carcinogens.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Additional Information

Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. (Methylene blue)

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence
(Methylene blue)

Components :

Methylene blue

Acute toxicity

LD50 Oral - Rat - 1,180 mg/kg

Inhalation: No data available

SECTION 12: Ecological information

12.1 Toxicity

Mixture

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

None known.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information**DOT (US)**

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

Further information

Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

water

methylene blue

CAS-No.

61-73-4

New Jersey Right To Know Components

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

SECTION 16: Other information**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Vantanex Corp and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

Revision 4

Revision Date: 01/04/2022