SDS Safety Data Sheet – H2 Sciences Inc.

1 PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifiers

Product Form	Mixture (liquid)
Product Brand Name	H2Blue
Product Nomenclature	Test Reagent (eco formula)
Manufacturer	H2 Sciences Inc.
Synonyms	Reagent

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Identified Uses	Laboratory Test Reagent

No specific uses advised against are identified.

1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer	H2 Sciences Inc. 2505 Anthem Village Dr Ste E385 Henderson, NV 89052
Phone	(719) 499-2973
Email	support@h2sciencesinc.com
Website	www.h2sciencesinc.com

1.4 Emergency Telephone Number

Emergency phone #	(719) 499-2973; Poison Control Center (800) 222-1222.

2 HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

GHS-US

Not classified: This mixture is not considered a hazard when used in a manner which is consistent with manufacturer's directions.

2.2 GHS Label Statements, Including Precautionary Statements

GHS Label:

Signal Word: Warning

HMIS Rating: Health: 1 Flammability: 0 Reactivity: 0

Precautionary Statements:

Laboratory test reagent-DO NOT INGEST.

Do not attempt to remove dispenser spout from bottle.

Keep out of reach of children.

Keep only in original container.

If product freezes, allow to thaw at room temperature-do not microwave.

Do not get in eyes, in mouth, on skin, on clothing, or on surrounding surfaces.

IF ON SKIN: Wash with plenty of soap and water

IF IN EYES: Remove contact lenses, if present and easy; continue rinsing.

If eye irritation persists, get medical advice/attention

IF INGESTED: Dilute immediately with water or milk. DO NOT induce vomiting. Call a physician.

2.3 Hazards Not Otherwise Classified or Not Covered by GHS

None

3 COMPOSITION INFORMATION ON INGREDIENTS

3.2 Mixtures

Components of Substance or Mixture

Component	Identifiers	Concentration (by weight)
METHYLENE BLUE	CAS # 61-73-4	<1%
METHANOL	CAS# 67-56-1	≈ 3.5%
WATER	CAS# 7732-18-5	>90%
PLATINUM	CAS# 7440-06-4	trace

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

4 FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Consult a physician. Show the safety data sheet to the physician in attendance. Move away from dangerous area.

In case of skin contact: Wash off with soap and water

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes keeping eyelids open. Consult a physician if irritation persists.

If swallowed: DO NOT induce vomiting. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

Described in the labeling section (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed: No data available

5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable - Foam, Dry Powder, Carbon Dioxide, Water Spray, Sand

Unsuitable – Heavy Water Stream

5.2 Special hazards arising from the substance or mixture

Fire Hazard – Not Flammable

Explosion Hazard – Not Explosive

Reactivity - None

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For personal protection see section 8.

6.2 Environmental precautions Prevent further leakage or spillage if safe to do so.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected (GFI) vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections: For disposal see section 13.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling – Laboratory test reagent not intended to be ingested. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

7.2 Conditions for safe storage, **including any incompatibilities**.

Keep container tightly closed in a cool, dry and well-ventilated place. Avoid freezing; if frozen, allow to thaw at room temperature for 8 hours; do not accelerate thawing by heating.

7.3 Specific end use(s)-Apart from the uses mentioned in section 1.2; no other specific uses are stipulated

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters

METHYLENE BLUE (61-73-4)	
ACGIH/OSHA	NOT APPLICABLE
WATER (7732-18-5)	
OSHA	NOT APPLICABLE
METHANOL (67-56-1)	
ACGIH/OSHA	NOT APPLICABLE
PLATINUM (7440-06-4)	
ACGIH/OSHA	NOT APPLICABLE

8.2 Exposure controls

Personal protective equipment

Eye contact should be prevented through the use of chemical safety glasses with side shields or splash-proof goggles. An emergency eye wash should be readily accessible to the work area.

To avoid staining of skin, wear gloves when handling.

To avoid staining of clothes, wear protective apron.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance/Form:	Color; Blue, Liquid
b) Odor	No data available
c) Odor Threshold	No data available
d) pH	3-4
e) Melting point/freezing point	No data available
f) Initial boiling point and range	Lowest known value is 100°C (212°F)
g) Flash point	>93.5°C (200 °F) - closed cup
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) U/L flammability limits	No data available
k) Vapor pressure	Highest known value is 23.8 torr (@ 25°C)
l) Vapor density	Highest known value is 0.8 g/L
m) Relative density	No data available
n) Water solubility	Miscible in water
o) Partition coefficient	No data available
p) Auto-ignition temp	No data available
q) Decomposition temp	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available
u) Specific gravity	0.996 at 25 °C
v) VOC (g/L)	31.82

9.2 Other safety information No data available

10 STABILITY AND REACTIVITY

10.1 Reactivity

Not reactive under recommended usage and storage conditions.

10.2 Chemical stability

Stable under recommended usage and storage conditions.

10.3 Possibility of hazardous reactions

Not established

10.4 Conditions to avoid

Direct sunlight, extremely high or low temperatures

10.5 Incompatible materials

Strong acids, strong bases

10.6 Hazardous decomposition products

Nitrogen oxides, carbon dioxide, sulfur compounds

11 TOXICOLOGICAL INFORMATION

Likely routes of exposure: skin and eye contact

11.1 Information on toxicological effects

METHYLENE BLUE (61-73-4)	
LD50 oral rat ATE US (oral)	1180 mg/kg 1180.000 mg/kg body weight
METHANOL (67-56-1)	
LD50 oral rat	10740 mg/kg (rat; exp. value)
ATE US (oral)	100.000 mg/kg body weight
WATER (7732-18-5	
LD50 oral rat ATE US (oral)	>90000 mg/kg >90000.000 mg/kg body weight
PLATINUM (7440-06-4)	No Data Available

RTECS:	CAS# 61-73-4	SO5600000
Carcinogenicity:	CAS# 61-73-4	Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65
Acute toxicity:		No data available
Inhalation:		May cause respiratory irritation and breathing difficulty
Dermal:		May cause skin irritation
Skin corrosion/irritation		May cause skin irritation
Serious eye damage/irritation		May cause eye damage or irritation
Respiratory/skin sensitization		No data available
Germ cell mutagenicity		No data available
Reproductive toxicity		No data available
Spec. target organ tox. – sgl. exp.		No data available
Spec. target organ tox. – rptd. exp.		No data available
Aspiration hazard		No data available
Symptoms/injuries after skin contact		May stain skin

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12 ECOLOGICAL INFORMATION

12.1 Toxicity

METHYLENE BLUE (61-73-4)	
LC50 fish 1 EC50 Daphnia 1 LC50 fish 2 EC50 Daphnia 2 TLM fish 1	13 mg/L (48 h; Oryzias latipes) 2.26 mg/L (48 h; Daphnia magna) 18 mg/L (96 h; Mystus vittatus) 4.93 mg/L (24 h; Daphnia magna) 10-100 (48 h; Poecilia reticulate)
METHANOL (67-56-1)	
LD50 fish 1 LC50 fish 2 EC50 **Aquatic Plants** EC50 **Other adverse effects:** BOD; COD :	15,400 mg/L (96h;Lepomis macro.) 29,400 mg/L (96h;Fathead minnow) >10,000 mg/L (48h; Water flea) 22,000 mg/L (96h;Scene. capri.) 600 mg/g – 1120 mg/g 1420 mg/g
PLATINUM (7440-06-4)	No Data Available

12.2 Persistence and degradability – Not established

12.3 Bio-accumulative potential – No data available

12.4 Mobility in soil – No data available

12.5 Results of PBT and vPvB assessment - No data available

12.6 Other adverse effects - No data available

13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

General information Reuse or recycle products wherever possible. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor.

Disposal methods Absorb in vermiculite, dry sand or earth and place into containers. Place waste in labelled, sealed containers. Dispose of contents/container in accordance with national regulations. Small amounts of this material may be suitable for sewer or trash disposal.

Contaminated packaging

Dispose of as unused product.

14 TRANSPORT INFORMATION

DOT – Not regulated for transport

IATA – Not regulated for transport

Special provisions for transport – Not applicable

15 REGULATORY INFORMATION

15.1 US Federal

TSCA:

CAS# 61-73-4 is listed on the TSCA Inventory (8b)

SARA 302 Components	No chemicals in this product are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components	No chemicals in this product are subject to the reporting requirements of SARA Title III, Section 313.
OSHA Highly Hazardous	None of the components are listed.

15.2 US State

Massachusetts Right To Know Components – Methanol CAS# 67-56-1 is listed

Pennsylvania Right To Know Components – Methanol CAS# 67-56-1 is listed

New Jersey Right To Know Components - Methylene Blue CAS# 61-73-4; Methanol CAS# 67-56-1 is listed

California Prop. 65 Components - WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. METHANOL CAS# 67-56-1 Revision date 2012-03-16

15.3 International

Canadian DSL/NDSL - CAS# 61-73-4 is listed on Canada's DSL list

Canada Ingredient Disclosure List - CAS# 61-73-4 is listed on Canada's Ingredient Disclosure List

EU regulations - No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP] - No additional information available

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD} - No additional information available

16 OTHER INFORMATION

Full text of H-Statements referred to under sections 2, 3 and 11.

Acute Tox 4 (Oral)	Acute toxicity oral, category 4
Spec. target organ tox. – sgl. exp.	Specific target organ toxicity – single exposure
Spec. target organ tox. – rptd. exp.	Specific target organ toxicity – repeated exposure
Eye Irrit.	Eye irritation
H301	Toxic if Swallowed
H302	Harmful if swallowed
H331	Toxic if inhaled
H401	Toxic to aquatic life

HMIS Rating

Health Hazard:	1
Flammability Hazard	0
Physical Hazard	0

NFPA Rating

Health Hazard:	1
Flammability Hazard:	0
Reactivity Hazard:	0

Other Information

 The above information is believed to be correct but does not claim 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 only to the product as named in section 1.1 with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. H2 Sciences Inc. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.h2sciencesinc.com for additional terms and conditions of sale.

Preparation Information

H2 Sciences Inc. Product Safety Department

Revision Level: 2.4 Revision Date: 12/16/2022