

# SDS Safety Data Sheet – H2 Sciences Inc.

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## PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product Identifiers

Product Brand Name H2Blue  
Manufacturer H2 Sciences Inc.  
Synonyms Reagent alcohol; Denatured ethanol; SDA40B

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

Identified Uses 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 randy@h2sciencesinc.com  
Website www.h2sciencesinc.com

### 1.4 Emergency Telephone Number

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

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## HAZARDS IDENTIFICATION

### 2.1 Classification of the Substance or Mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)  
Flammable liquids (Cat 3), H225  
Eye Irritation (Cat 2A), H319  
For the full text of the H-Statements mentioned in this section, see Section 16.

### 2.2 GHS Label Statements, Including Precautionary Statements

#### Pictograms



GHS02



GHS07

#### Signal Word

Danger

#### Hazard Statements

H225 Flammable liquid and vapor  
H319 Causes serious eye irritation

#### Precautionary Statements

P102 Keep out of reach of children.

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P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking
P211	Do not spray on an open flame or other ignition source.
P220 + 233	Keep/store away from combustible materials. Keep tightly closed.
P280	Wear protective goggles/eye protection.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water
P305 + P351 + P338	IF IN EYES: Remove contact lenses, if present and easy; continue rinsing.
P337 + P313	If eye irritation persists, get medical advice/attention
P370 + P378	In case of fire, use sand, dry chemical or alcohol-resistant foam to extinguish.
P403 + P235	Store in a well-ventilated place. Keep cool
P501	Dispose of contents/container at an approved waste disposal plant.

## 2.3 Hazards Not Otherwise Classified or Not Covered by GHS - none

## 3 COMPOSITION INFORMATION ON INGREDIENTS

### 3.2 Mixtures

#### Hazardous Components

Component	Classification	Concentration (by weight)
<b>ETHANOL</b>		
CAS # 64-17-5	Flammable liquid 2, H225 Eye irritant 2A, H319	>90%, <100%
EC # 200-578-6		
INDEX # 603-002-00-5		
<b>METHYLENE BLUE</b>		
CAS # 61-73-4	Acute Tox 4, H302	<1%
EC # 200-515-2		
INDEX # 603-002-00-5		
<b>WATER</b>		
CAS # 7732-18-5	Not Classified	<5%
EC # 231-791-2		

All percentages by weight.

Exact percentages have been withheld to protect the proprietary nature of product.

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. 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

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## FIRE FIGHTING 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

Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas

### 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.

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## ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected 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.

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## HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge. For precautions see section 2.2.

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

Keep container tightly closed in a cool, dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): Flammable liquids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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## EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control Parameters

ETHANOL (64-17-5)		
ACGIH	NOT APPLICABLE	
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1900 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
METHYLENE BLUE (61-73-4)		
ACGIH	NOT APPLICABLE	
OSHA	NOT APPLICABLE	
WATER (7732-18-5)		
ACGIH	NOT APPLICABLE	
OSHA	NOT APPLICABLE	

### 8.2 Exposure controls

#### Engineering controls

Maintain air concentrations in work space with standards outlined in sections 2 and 3.

#### 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, handle with gloves.

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## PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance Form:	Color, Blue; Liquid
b) Odor	Moderate alcohol odor
c) Odor Threshold	No data available
d) pH	3-4
e) Melting point/freezing point	No data available
f) Initial boiling point and range	No data available
g) Flash point	15 °C (60 °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	No data available
l) Vapor density	No data available
m) Relative density	No data available
n) Water solubility	No data available
o) Partition coefficient	No data available
p) Auto-ignition temp	No data available
q) Decomposition temp	No data available

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r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available
u) Specific gravity (ethanol)	0.789 at 20 °C

**9.2 Other safety information** No data available

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## STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended usage and storage conditions.

### 10.3 Possibility of hazardous reactions

Vapors may form explosive mixture with air.

### 10.4 Conditions to avoid

Heat, flames and sparks.

### 10.6 Hazardous decomposition products

Other decomposition products - No data available. In the event of fire: see section 5

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## TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

RTECS:	CAS# 64-17-5	KQ6300000
	CAS# 61-73-4	SO5600000
Carcinogenicity:	CAS# 64-17-5	Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65
	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:		No data available
Dermal:		No data available
Skin corrosion/irritation		No data available
Serious eye damage/irritation		No data available
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

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated., Central nervous system depression, Gastrointestinal disturbance, Nausea, Dizziness, Headache, narcosis, May cause convulsions.

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Stomach - Irregularities

Based on Human Evidence

Kidney - Irregularities

Based on Human Evidence

Stomach - Irregularities

Based on Human Evidence (Ethanol)

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## ECOLOGICAL INFORMATION

### 12.1 Toxicity

No data available

### 12.2 Persistence and degradability

No data available

### 12.3 Bio-accumulative 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 Other adverse effects

No data available

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## 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. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

**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.

#### Contaminated packaging

Dispose of as unused product.

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## TRANSPORT INFORMATION

### DOT (US)

UN number: 1170  
Class: 3  
Packing group: II  
Proper shipping name: Ethanol solution

### IMDG

UN number: 1170  
Class: 3  
Packing group: II  
EMS-No: F-E, S-D  
Proper shipping name: Ethanol Solution

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## IATA

UN number: 1170  
Class: 3  
Packing group: II  
Proper shipping name: Ethanol solution

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## REGULATORY INFORMATION

### 15.1 US Federal

#### TSCA:

CAS# 64-17-5 is listed on the TSCA Inventory

CAS# 67-56-1 is listed on the TSCA Inventory

CAS# 61-73-4 is listed on the TSCA Inventory

**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.

#### SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

#### OSHA Highly Hazardous

None of the components are listed.

### 15.2 US State

#### Massachusetts Right To Know Components

Ethanol CAS-No. 64-17-5 Revision Date 2007-03-01

#### Pennsylvania Right To Know Components

Ethanol CAS-No. 64-17-5 Revision Date 2007-03-01

#### New Jersey Right To Know Components

Ethanol CAS-No. 64-17-5 Revision Date 2007-03-01

Methylene Blue CAS-No. 61-73-4

#### California Prop. 65 Components

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

### 15.3 International

#### Canadian DSL/NDSL

CAS# 64-17-5 is listed on Canada's DSL list.

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

#### Canada Ingredient Disclosure List

CAS# 64-17-5 is listed on Canada's 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]**

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No additional information available

**Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]**

No additional information available

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## 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
Flam. Liq.	Flammable liquids
H225	Highly flammable liquid and vapors
H302	Harmful if swallowed
H319	Causes serious eye irritation.

### HMIS Rating

Health hazard:	2
Flammability:	3
Physical Hazard	0

### NFPA Rating

Health hazard:	2
Fire Hazard:	3
Reactivity Hazard:	0

### Further information

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### Preparation Information

H2 Sciences Inc. Product Safety Department

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