

Material Safety Data Sheet  
**METHYLENE BLUE WORKING SOLUTION**

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Methylene Blue Working Solution.

**Catalog Numbers:** A-100-2A, A-101-2A, A-103-2A, A-117-4, SO-961

**Company Identification:** ROWLEY BIOCHEMICAL  
10 ELECTRONICS AVENUE  
DANVERS, MA 01923

**For information, call:** 978-739-4883

**Emergency Number:** 800-424-9300

**For CHEMTREC assistance, call:** 800-424-9300

Section 2 - Hazards Identification

## GHS Classifications

### Health Hazards

H302 **Acute Oral Toxicity:** 4

H312 **Acute Dermal Toxicity:** 4

H315 **Skin Corrosion/Skin Irritation:** 2

H319 **Eye damage/Irritation:** 2B

H334 **Respiratory Sensitization:** 1B

H317 **Skin Dermal Sensitization:** 1B

### Physical Hazards:

Not Classified

### Environmental Hazards:

H402 Acute Aquatic environmental hazards: 3

Chronic environmental hazards: Not Classified

### Pictograms or Hazard symbols and Hazard statement.



Warning! Harmful if swallowed.  
Harmful in contact with skin.  
Causes skin irritation.  
Causes eye irritation.



Harmful to aquatic life

## Precautionary Statements

### H302

**P264** Wash thoroughly after handling

**P270** Do not eat, drink, or smoke when using this product.

**P301 + P312** If swallowed, call a physician if you feel unwell.

**P330** Rinse mouth.

**P501** Dispose of contents/container in accordance with local/regional/national/international regulations.

### H312

**P280** Wear protective gloves, clothing, and eye and face protection.

**P302 + P352** If on skin, wash with plenty of water. Remove contact lenses if present and easy to do so. Continue rinsing.

**P312** Call a physician if you feel unwell.

**P363 Wash** contaminated clothing before reuse.

### H315

**P264** Wash thoroughly after handling

**P332 + P313** If skin irritation occurs, get medical advice/attention.

**P362** Take off contaminated clothing and wash before reuse

### H319

**P305 + P351 + P338** If in eyes, rinse cautiously with water for several minutes.

**P337 + P313** If eye irritation persists, get medical advice/attention.

### H334

**P285** In case of inadequate ventilation, wear respiratory protection.

**P304 + P341** IF INHALED: if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

**P342 + P311** if experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

### H317

**P272** Contaminated work clothing should not be allowed out of the work place.

**P333 + P313** IF ON SKIN: Wash with plenty of soap and water

**P405** Store locked up

### H373

**P260** Do not breathe fume/gas/mist/vapors.

**P314** Get medical advice/attention if you feel unwell

**H402**

**P273** Avoid release to the environment

Section 3 – Composition, Information on Ingredients

CAS#	Chemical Name	Percent
7220-79-3	Methylene Blue	1 w/v
64-17-5	Ethyl Alcohol	9.025 v/v
67-56-1	Methyl Alcohol	0.475v/v
7732-18-5	Water	Balance

Section 4 - First Aid Measures

**Eye Exposure:** In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

**Dermal Exposure:** In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes.

**Oral Exposure:** If Swallowing seek immediate medical advice.

**Inhalation Exposure:** If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Section 5 - Fire Fighting Measures

**NFPA** HEALTH 1 FLAMMABILITY 0 REACTIVITY 0

Firefighters should wear proper protective clothing and self contained breathing apparatus with full piece operated in positive pressure mode to prevent contact with skin and eyes. Water may be ineffective in fighting fire. Use water spray to keep for exposed containers cool.

**Extinguishing Media:** Use water spray, dry chemical powder, or appropriate foam.

**Flash Point:** N/A

**Auto ignition Temperature:** N/A

**Explosion Limits:** N/A

**Upper:** N/A

Section 6 - Accidental Release Measures

**Procedure(s) of Personal Precaution(s):**

Wear protective gear.

**Methods for Cleaning up:** Absorb with sand, earth or vermiculite. Carefully sweep up and containerize for proper disposal.

### Section 7 - Handling and Storage

Use care when handling. Wash thoroughly after handling. Store capped at room temperature. Keep away from incompatible materials.

### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:**

Mechanical exhaust

**Personal Protective Equipment:**

Other: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

### Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** Blue

**pH:** N/A

**Water.**

**Vapor Pressure:** 2.3 kPa @ 20deg. C

**Vapor Density:** 0.62 (Air=1)

**Evaporation Rate:** N/A

**Viscosity:** N/A

**Boiling Point:** 100 deg. C

**Solubility:** N/A

### Section 10 - Stability and Reactivity

**Chemical Stability:** Stable at room temperature in closed containers under normal storage and handling conditions.

**Hazardous Decomposition Products:** not known

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

**RTECS#:**

**Routes of entry:** Ingestion.

**RTECS#:** SO5600000

**LD50/LC50:**

CAS# 7220-79-3: No information available.

**Carcinogenicity:**

CAS# 7220-79-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 64-17-5 Ethyl Alcohol: Not listed by ACGIH, NTP, IARC or CA Prop 65

CAS# 67-56-1 Methyl Alcohol: Not listed by ACGIH, NTP, IARC or CA Prop 65

**Route of exposure:**

**Multiple routes:** May be harmful by inhalation, ingestion, or skin absorption. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Basic Fuchsin and Phenol are cancer suspect agents.

## Section 12 - Ecological Information

**Ecotoxicity:**

CAS# 569-61-9: Basic Fuchsin: Not Available

CAS# 108-95-2: Phenol: Ecotoxicity in water (LC50): 125mg/l 24 hours [Fish (Goldfish)]. >50mg/l 1 hours [Fish (Fathead minnow)]. >50mg/l 24 hours [Fish (Fathead minnow)]. >33mg/l 72 hours [(Fathead minnow)]. >33ppm 96 hours [Fish (Fathead minnow)].

CAS# 64-17-5 Ethyl Alcohol: 14000 mg/l 96 hours [Rainbow trout]. 11200 mg/l 24 hours [fingerling trout].

CAS# 67-56-1 Methyl Alcohol: 29400 mg/l 96 hours [Fathead minnow].

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation are less toxic than the product itself.

## Section 13 - Disposal Considerations

**Appropriate method of disposal of substance or preparation:**

Handled as hazardous waste and sent to an RCRA approved incinerator or disposed in an RCRA approved wasted facility.

## Section 14 – Transport Information

### **DOT**

Non-Regulated

## Section 15 - Regulatory Information

### Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

### **European/International Regulations**

#### **European Labeling in Accordance with EC Directives**

#### **Hazard Symbol:**

Xn: Harmful if swallowed.

Xi: Irritant

#### **Risk Phrases:**

R20/21/22 Harmful in contact with skin and if swallowed

R36/38 Irritating to eyes and skin

R42/43 May cause sensitization by inhalation and skin contact

R48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed

R61 May cause damage to the unborn child

R52 Harmful to aquatic organisms

#### **Safety Phrases:**

S3/7/9 Keep container closed in a cool, well-ventilated place

S24/25 Avoid contact with skin and eyes

S20/21 When using do not eat, drink or smoke

S2 Keep out of the reach of children.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S28 After contact with skin, wash immediately with plenty of soap and water

S37/39 Wear suitable gloves and eye/face protection

S29/35 Do not empty into drains; dispose of this material and its container in a safe way

## Section 16 - Additional Information

**MSDS Creation Date:** 1/18/11

**Revision #1** 10/10/13 MH

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