

# Safety Data Sheet

## MAYER'S HEMATOXYLIN

### Section 1 - Chemical Product and Company Identification

**SDS Name:** Mayer's Hematoxylin

**Catalog Numbers:** A-117-3, A-140-5, A-141-1, B-173-3, E-303-2, E-305-2, E-306-1, E-310-6, F-380-2, F-381-2, F-401-4, G-480-3, H-503-2, H-504-2, J-602-2, J-609-3, L-756-1A, O-912-4, SO-369, M-100-3

**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**

H300-Acute Oral Toxicity: 1  
H311-Acute Dermal Toxicity: 3  
H302-Acute Inhalation toxicity: 4  
H314-Skin Corrosion/Skin Irritation: 1B  
H318-Eye damage/Irritation: 1  
H334-Respiratory Sensitization: 1B  
H317-Skin Dermal Sensitization: 1  
H340-Germ Cell Mutagenicity: 1B  
H361-Reproductive Toxicity: 2  
H362-Reproductive Toxicity: 2  
H370-Specific Target Organ Toxicity: 1

##### **PHYSICAL HAZARDS**

H290-May be corrosive to metals: 1

##### **ENVIRONMENTAL HAZARDS**

H400- Aquatic acute environmental Hazards: 1

**Pictograms or Hazard symbols and Hazard statement.**



**Fatal if swallowed.  
Toxic in contact with skin.**



**Causes serious eye damage.  
May be corrosive to metals.**



**May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause genetic defects.  
Causes damage to organs.**



**May cause an allergic skin reaction.  
Harmful if inhaled.**



**Very toxic to aquatic life.**

### **Precautionary Statement Prevention**

#### **H300**

**P264** Wash thoroughly after handling.

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

**P301 + P310** If swallowed, immediately call a physician.

**P330** Rinse mouth.

**P405** Store locked up.

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

#### **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.

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

**P330** Rinse mouth.

#### **H311**

**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

**P361 + P363** Take off immediately all contaminated clothing and wash it before reuse.

**P405** Store locked up.

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

#### **H314**

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

**P264** Wash thoroughly after handling.

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

**P301 + P330 + P331** If swallowed, rinse mouth. Do not induce vomiting.

**P303 + P361 + P353** If on skin (or hair) take off immediately all contaminated clothing. Rinse skin with water.

**P363** Wash contaminated clothing before reuse.

**P304 + P340** If inhaled, remove person to fresh air and keep comfortable for breathing.

**P310** Seek medical assistance if exposed.

**P405** Store locked up.

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

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

### H318

**P280** Wear eye and face protection.

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

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

### H334

**P261** Avoid breathing fumes/mist/vapors.

**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.

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

### 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.

**P363** Wash contaminated clothing before reuse.

### H340

**P201** Obtain special instructions before use.

**P202** Do not handle until all safety precautions have been read and understood.

**P281** Use personal protective equipment as required.

**P308 + P313** If exposed or concerned: Get medical advice/attention.

**P405** Store Locked up

**P501** Dispose of contents/container to... in accordance with local/regional/national/international regulations (to be specified)

### H361

**P201** Obtain special instructions before use.

**P202** Do not handle until all safety precautions have been read and understood.

**P281** Use personal protective equipment as required.

**P308 + P313** IF exposed or concerned: Get medical advice/attention.

**P405** Store locked up

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

### H362

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

**P263** Avoid contact during pregnancy/while nursing.

**P264** Wash thoroughly after handling.

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

**P308 + P313** If exposed or concerned, get medical advice/attention.

### H290

**P234**-Keep only in original container.

**P390**-Absorb spillage to prevent material damage.

**P406**-Store in corrosive resistant/container with a resistant inner liner

### H340

**P201** Obtain special instructions before use.

**P202** Do not handle until all safety precautions have been read and understood.

**P281** Use personal protective equipment as required.

**P308 + P313** If exposed or concerned: Get medical advice/attention.

**P405** Store Locked up

**P501** Dispose of contents/container to... in accordance with local/regional/national/international regulations (to be specified)

### H370

**P60 Do not breathe dust/fume/gas/mist/vapors/spray.** Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling.

**P264 Wash thoroughly after handling.** ...Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling.

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

**P307 + P311 If exposed call a POISON CENTER or doctor/physician.**

**P321** Specific treatment (see..on this label) ..Reference to supplemental first aid instruction. If immediate measures are required.

**P405 Store locked up**

**P501 Dispose of contents/container to...**in accordance with local/regional/national/international regulations (to be specified)

## Section 3 - Composition, Information on Ingredients

| CAS#      | Chemical Name   | Percent  |
|-----------|-----------------|----------|
| 517-28-2  | Hematoxylin     | 0.1 w/v  |
| 7784-26-1 | Ammonium Alum   | 5 w/v    |
| 7681-55-2 | Sodium Iodate   | 0.02 w/v |
| 77-92-2   | Citric Acid     | 0.1 w/v  |
| 302-18-5  | Chloral Hydrate | 5 w/v    |
| 7732-18-5 | Water           | 100 v/v  |

## 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

**General Information:** Containers can build up pressure if exposed to heat and/or fire. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire.

**Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

**Flash Point:** N/a

**Autoignition Temperature:** N/A

**Explosion Limits, Lower:** N/A

**Upper:** N/A

**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 0

#### Section 6 - Accidental Release Measures

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

Wear protective gear. Eliminates all sources of ignition.

**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:** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

### Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** Dark brown-purplish.

**Vapor Pressure:** N/A

**Vapor Density:** N/A

**Evaporation Rate:**N/A

**Viscosity:** N/A

**Boiling Point:** N/A

**Freezing/Melting Point:** N/A

**Decomposition Temperature:**N/A

**Solubility:** Soluble.

**Specific Gravity/Density:**N/A

### Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, ignition sources, excess heat, oxidizers.

**Incompatibilities with Other Materials:** Strong oxidizing agents, acids, alkali metals, ammonia, hydrazine, peroxides, sodium, acid anhydrides, calcium hypochlorite, chromyl chloride, nitrosyl perchlorate, bromine pentafluoride, perchloric acid, silver nitrate, mercuric nitrate, potassium-tert-butoxide, magnesium perchlorate, acid chlorides, platinum, uranium hexafluoride, silver oxide, iodine heptafluoride, acetyl bromide, disulfuryl difluoride, tetrachlorosilane + water, acetyl chloride, permanganic acid, ruthenium (VIII) oxide, uranyl perchlorate, potassium dioxide.

**Hazardous Decomposition Products:** Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

**Hazardous Polymerization:** Will not occur.

### Section 11 - Toxicological Information

**Routes of entry:** Absorbed through skin, eye contact, inhalation or ingestion.

**RTECS#:** KQ6300000

**LD50/LC50:**

CAS# 517-28-2:

Not Available

CAS# 7784-26-1

Not Available

CAS# 7681-55-2  
Not Available

CAS#77-92-9  
Oral, mouse: LD50 = 5040 mg/kg.  
Oral, rat: LD50 = 3000 mg/kg.

CAS#302-17-0  
Oral, mouse: LD50 = 1100 mg/kg.  
Oral, rat: LD50 = 479 mg/kg.  
Dermal, rat: LD50 = 3030 mg/kg; <BR.

**Solution Carcinogenicity:**

(Not classifiable by human) by IARC. May cause cancer based on animal test data.

**Epidemiology:** Citric Acid: The substance may be toxic to teeth and hypocalcaemia (calcium deficiency in blood)

**Teratogenicity:** May cause adverse reproductive effects and birth defects based on animal test data.

**Reproductive Effects:** Chloral Hydrate: Human: passes through the placenta, excreted in maternal milk.

**Neurotoxicity:** Chloral Hydrate: May cause damage to the central nervous system and optic nerves.

**Mutagenicity:** Chloral Hydrate: May affect genetic material. Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.

**Other Studies:** LDL Rabbit- Oral, Dose: 7000 mg/kg

Section 12 - Ecological Information

**Ecotoxicity:** N/A

**Environmental:** Possible hazardous short term degradation products are not likely. However long term degradation products may arise.

**Physical:** No information available.

**Other:** No information available.

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.

### California Prop 65

WARNING: California. No Significant Risk Level: None of the chemicals in this product are listed.

### European/International Regulations

#### European Labeling in Accordance with EC Directives

#### Hazard Symbols:

Xn: Harmful.

#### Risk Phrases:

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

R36/38 Irritating to eyes and skin

#### R51 Toxic to aquatic organisms

R46 May cause heritable genetic damage.

R60 May impair fertility.

R61 May cause harm to the unborn child

#### Safety Phrases:

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

S2 Keep out of the reach of children

S16 Keep away from sources of ignition - No smoking.

S33 Take precautionary measures against static discharges.

S7 Keep container tightly closed.

S9 Keep container in a well-ventilated place

## Section 16 - Additional Information

**MSDS Creation Date:** 10/21/12

**Revision #2. YM 2/24/14. Co-sign RC 11/14/15**

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