WEIGERT'S IRON HEMATOXYLIN A

Section 1 - Chemical Product and Company Identification

MSDS Name: Weigert's Iron Hematoxylin A

Catalog Numbers: A-102-1A, A-109-1A, A-122-1A, E-304-1A, E-320-3, F-350-4, F-352-4, F-355-3A, F-362-5, F-364-3, F-370-4A, F-375-5, F-383-2A, F-384-1, F-385-2A, F-390-4C,

G-458-4A, G-470-2A, G-486-1A, L-757-1, L-758-1, N-853-4A, SO-465 & M-101-2

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

H303 Acute Oral Toxicity: 5

H312 Acute Dermal Toxicity: 4

H332 Acute Inhalation Toxicity: 4

H315 Skin Corrosion/ Skin Irritation: 2

H319 Eye damage/Irritation: 2A

H334 Respiratory Sensitization: 1B

H317 Skin Dermal Sensitization: 1B

H341 Germ Cell Mutagenicity: 2

H361 Reproductive Toxicity: 2

H373 Specific target Organ Toxicity: 2

Physical Hazards

H225 Flammability: 2

Environmental Hazards

Aquatic acute environmental Hazards: Not Classified

Chronic environmental Hazards: Not Classified

Pictograms or Hazard symbols and Hazard statement.

Warning! ! Harmful if swallowed. Harmful if inhaled. Causes skin irritation. Causes severe eye irritation. May cause allergic skin reaction.



Danger! Highly flammable liquid and vapour.

Warning! May cause allergy or asthma symptoms or breathing difficulties if inhaled. Mutagenic for mammalian somatic cells. May effect genetic material. May cause birth defects and adverse reproductive effects. May cause damage to the following organs blood, kidneys, liver, brain, peripheral nervous system, upper respiratory tract, skin, central nervous system (CNS), optic nerve and reproductive system through prolonged or repeated exposure.

Precautionary Statements

H303

P312 Call a physician if you feel unwell.

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.

P363 Wash contaminated clothing before reuse.

P501 Dispose of contents/container in accordance with

local/regional/national/international regulations.

H332

P261 Avoid breathing fumes/mist/vapors.

P271 Use only outdoors or in a well-ventilated area.

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

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

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.

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.

H341 + 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.

H373

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

P314 Get medical advice/attention if you feel unwell.

H225

P210 Keep away from heat, flames, and hot surfaces. No smoking.

P233 Keep container tightly closed.

P241 Use explosive-proof equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

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

P403 + P235 Store in a well-ventilated place. Keep cool.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
517-28-2	Hematoxylin	1w/v
64-17-5	Ethyl alcohol	90.25v/v
67-56-1	Methyl alcohol	4.75v/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 3 REACTIVITY 0

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: 16.6 deg C (61.88 deg F)

Autoignition Temperature: 363 deg C (685.40 deg F)

Explosion Limits, Lower:3.3 vol %

Upper: 19.0 vol %

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. Protect from heat. Vapors are heavier than air, may travel considerable distance and ignite or explode.

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.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Ethanol	1000 ppm TWA	1000 ppm TWA; 1900 mg/m3 TWA 3300 ppm IDLH	1000 ppm TWA; 1900 mg/m3 TWA

OSHA Vacated PELs: Ethanol: 1000 ppm TWA; 1900 mg/m3 TWA

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.

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: Amber. Darkens with age.

Odor: Alcohol-like

pH: N/A

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

CAS# 517-28-2 Hematoxylin

RTECS: MH7875000

LD50/LC50: Not Available CAS# 64-17-5 Ethyl Alcohol

RTECS: KQ6300000

Oral (LD50): Acute mg/kg [Rat]. 3450 mg/kg [Mouse].

Vapor (LC50): Acute: 20000 ppm 8 hrs [Rat]. 39000 mg/m 4 hours [Mouse]

CAS# 67-56-1 Methyl Alcohol

Oral (LD50): Acute: 5628 mg/kg [Rat]. Dermal (LD50): Acute: 15800 mg/kg

[Rabbit].

Vapor (LC50): Acute: 64000 ppm 4 hours [Rat]

Route of exposure:

Multiple routes: May be harmful by inhalation, ingestion, or skin absorption.

Conditions aggravated by exposure:

The toxicological properties have not been thoroughly investigated.

Solution Carcinogenicity:

Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: Ethanol has been shown to produce fetotoxicity in the embryo or fetus of laboratory animals. Prenatal exposure to ethanol is associated with a distinct pattern of congenital malformations that have collectively been termed the "fetal alcohol syndrome".

Teratogenicity: Oral, Human - woman: TDLo = 41 gm/kg (female 41 week(s) after conception) Effects on Newborn - Apgar score (human only) and Effects on Newborn - other neonatal measures or effects and Effects on Newborn - drug dependence.

Reproductive Effects: Intrauterine, Human - woman: TDLo = 200 mg/kg (female 5 day(s) pre-mating) Fertility - female fertility index (e.g. # females pregnant per # sperm positive females; # females pregnant per # females mated).

Neurotoxicity: No information available.

Mutagenicity: DNA Inhibition: Human, Lymphocyte = 220 mmol/L.; Cytogenetic Analysis: Human, Lymphocyte = 1160 gm/L.; Cytogenetic Analysis: Human, Fibroblast = 12000 ppm.; Cytogenetic Analysis: Human, Leukocyte = 1 pph/72H (Continuous).; Sister Chromatid Exchange: Human, Lymphocyte = 500 ppm/72H (Continuous).

Other Studies: Standard Draize Test(Skin, rabbit) = 20 mg/24H (Moderate) Standard Draize Test: Administration into the eye (rabbit) = 500 mg (Severe).

Section 12 - Ecological Information

Ecotoxicity

CAS# 517-28-2 Hematoxylin: No data available.

CAS# 64-17-5 Ethyl Alcohol: Ecotoxicity in water (LC50): 14000 mg/l 96 hrs [Rainbow trout]. 11200 mg/l 24 hours [fingerling trout].

CAS#67-56-1 Methyl Alcohol: Ecotoxicity in water (LC50): 29400 mg/l 96 hours [Fathead Minnow].

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products 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.

DOT

Proper shipping name: Alcohols, N.O.S.

UN1987 PG II

Hazard class 3 (flammable)

Section 15 - Regulatory Information

US Classification and label test

US Statements: Caution: Avoid contact and inhalation

United States Regulatory Information

SARA Listed: No

California Prop 65

WARNING: Ethanol, is a chemical known to the state of California to cause developmental reproductive toxicity.

California No Significant Risk Level: None of the chemicals in this product are liste

Canada Regulatory Information

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

DSL: no NDSL: no

European/International Regulations European Labeling in Accordance with EC Directives Hazard Symbols:

F

Risk Phrases:

R11 Highly flammable.

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

R36/38 Irritating to eyes and skin

R42/43 May cause sensitization by inhalation and skin contact

R61 May cause harm to the unborn child

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

Safety Phrases:

S37/39 Wear suitable gloves and eye/face protection

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

S24/25 Avoid contact with skin and eyes

Section 16 - Additional Information

MSDS Creation Date: 10/13/10

Revision #1 10/9/13 MH

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