Safety Data Sheet
Harris' Hematoxylin

Section 1 - Chemical Product and Company Identification

SDS Name: Harris' Hematoxylin
Catalog Numbers: SO-942, A-108-1, A-109-1, A-123-8, A-142-2, E-312-2B, F-390-4B, F-392-3A, F-396-6, H-500-2, H-504-2A, L-754-1A, M-800-1
Company Identification: Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.
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

H316-Skin corrosion/irritation: 3
H319-Serious eye damage/eye irritation: 2A
H371-Specific target organ toxicity, single exposure: 2
H373-Specific target organ toxicity, repeated exposure: 2

9.5% of the mixture consists of ingredients of unknown acute oral toxicity.
4.8% of the mixture consists of ingredients of unknown acute dermal toxicity.
10% of the mixture consists of ingredients of unknown acute inhalation toxicity.

Pictograms or Hazard symbols and Hazard statement(s):

Signal Word: Warning

Hazard Statements:

H316-Causes mild skin irritation
H319-Causes serious eye irritation
H371-May cause damage to organs (target organs: respiratory system, central nervous system, optic nerve)

H373-May cause damage to organs through prolonged or repeated exposure (target organs: kidney, liver, spleen, and blood)

Precautionary Statements:

P260-Do not breathe dust/fume/gas/mist/vapours/spray.
P264-Wash thoroughly after handling.
P270-Do not eat, drink, or smoke when using this product.
P280-Wear eye protection/face protection.
P305+P351+P338-If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P311-If exposed or concerned: Call a Poison Center/doctor.
P314-Get medical advice/attention if you feel unwell.
P332+P313-If skin irritation occurs: Get medical advice/attention.
P337+P313-If eye irritation persists: Get medical advice/attention.
P405-Store locked up.
P501-Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - Composition, Information on Ingredients

CAS #	Chemical Name	Percent
7784-26-1	Ammonium Aluminum Sulfate Dodecahydrate	9.5 w/v
517-28-2	Hematoxylin	0.5 w/w
7681-55-2	Sodium Iodate	0.04 w/v
64-17-9	Ethyl Alcohol	4.3 v/v
67-56-1	Methyl Alcohol	0.2 v/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. Seek medical attention.

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

Oral Exposure: If swallowed, seek immediate medical advice. Do not induce vomiting. Rinse mouth with water.

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

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating gases may be generated by thermal decomposition or combustion.
Extinguishing Media: Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam.

Hazardous Combustion Products: Carbon oxides, nitrogen oxides, sulfur oxides, sodium oxides, aluminum oxides, hydrogen iodide, formaldehyde, irritating and toxic fumes and gases.

Flash Point: Not available
Autoignition Temperature: Not available
Explosion Limits, Lower: Not available
Upper: Not available
NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):
Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation.

Methods for Cleaning up: Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Do not release to the environment. Do not release to drains.

Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Wash thoroughly after handling. Ensure adequate ventilation. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Store in a tightly closed container in a cool, dry, and well-ventilated area. Light sensitive. 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.

Exposure Limits:

Chemical Name	ACGIH - TLV	NIOSH - IDLH	OSHA - Final PELs
Ammonium Aluminum Sulfate Dodecahydrate CAS#7784-26-1	Not listed	2 mg/m3 TWA	2 mg/m3 TWA (vacated)
Hematoxylin CAS#517-28-2	Not listed	Not listed	Not listed
Sodium Iodate CAS#7681-55-2	Not listed	Not listed	Not listed
Ethyl Alcohol CAS#64-17-5	1000 ppm STEL	1000 ppm TWA 1900 mg/m3 TWA 3300 ppm IDLH	1000 ppm TWA 1900 mg/m3 TWA
Methyl Alcohol CAS#67-56-1	200 ppm TWA 250 ppm STEL	200 ppm TWA 260 mg/m3 TWA 250 ppm STEL 325 mg/m3 STEL 6000 ppm IDLH	200 ppm TWA 260 mg/m3 TWA

OSHA Vacated PELs: Ammonium Aluminum Sulfate Dodecahydrate: 2 mg/m3 TWA
Ethyl Alcohol: 1000 ppm TWA; 1900 mg/m3 TWA
Methyl Alcohol: 200 ppm TWA; 260 mg/m3 TWA

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: Dark brown-purple
Odor: Odorless
Vapor Pressure: Not available
Odor Threshold: Not available
Vapor Density: Not available
pH: Approx. 2.6
Relative Density: Not available
Melting point/freezing point: Not available
Solubility: Soluble in water
Boiling Point: Not available
Flash Point: Not available
Evaporation Rate: Not available
Flammability (solid, gas): Not available
Partition coefficient: n-octanol/water: Not available
Autoignition Temperature: Not available
Decomposition Temperature: Not available
Viscosity: Not available
Specific Gravity/Density: Not available

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials and excess heat. Light sensitive.
Incompatibilities with Other Materials: Strong oxidizing agents, reducing 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, organic material, sulfides, peroxides, finely powdered metals, combustible material, and metals.
Hazardous Decomposition Products: Carbon oxides, nitrogen oxides, sulfur oxides, sodium oxides, hydrogen iodide, formaldehyde, irritating and toxic fumes and gases.

Section 11 - Toxicological Information

CAS#7784-26-1 Ammonium Aluminum Sulfate Dodecahydrate:
LD50 Oral: Not available
LD50 Dermal: >2000 mg/kg (rat)
LC50 Inhalation: Not available

Carcinogenicity: Ammonium Aluminum Sulfate Dodecahydrate CAS#7784-26-1 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

CAS#517-28-2 Hematoxylin: RTECS#: MH7875000
LD50 Oral: >2000 mg/kg (rat)
LD50 Dermal: Not available
LC50 Inhalation: Not available

Carcinogenicity: Hematoxylin CAS#517-28-2 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

CAS#7681-55-2 Sodium Iodate: RTECS#: NN1400000
LD50 Oral: 505 mg/kg (mouse)
LD50 Dermal: Not available
LC50 Inhalation: Not available

Carcinogenicity: Sodium Iodate CAS#7681-55-2 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

CAS#64-17-5 Ethyl Alcohol: RTECS#: KQ6300000
LD50 Oral: 10470 mg/kg (rat)
LD50 Dermal: Not available
LC50 Inhalation: 124.7 mg/L 4h (rat)

Draize test, rabbit, eye: 500 mg/24h Mild Irritant.
Skin: Repeated Exposure may cause skin dryness and cracking.

Ethyl Alcohol overexposure may lead to headache, dizziness, tiredness, nausea, and vomiting.

Carcinogenicity: Ethyl Alcohol CAS#64-17-5 is not listed by OSHA. Ethyl Alcohol is listed by IARC (Group 1, Carcinogenic to Humans), NTP (Known Carcinogen), and ACGIH (A3, Animal Carcinogen). Ethyl Alcohol is listed by California Prop. 65 as a developmental carcinogen (alcoholic beverages only).

CAS#67-56-1 Methyl Alcohol: RTECS#: PC1400000
LD50 Oral: 100.1 mg/kg (expert judgement)
LD50 Dermal: 300.1 mg/kg (expert judgement)
LC50 Inhalation: 3.1 mg/L 4h vapor (expert judgement)
Investigated as a mutagen, reproductive effecter.

Draize test, rabbit, eye: 100 mg/24h Moderate Irritant.
Draize test, rabbit, skin: 20 mg/24h Moderate Irritant.

Carcinogenicity: Methyl Alcohol CAS#67-56-1 is not listed by IARC, NTP, ACGIH, or OSHA. Methyl Alcohol is listed by California Prop. 65 as a developmental carcinogen.

Information on the likely routes of exposure: Routes of entry anticipated: oral, dermal, inhalation, and eye.

Epidemiology: Not available.
Teratogenicity: Not available.
Reproductive Effects: Not available.
Developmental Effects: Not available.
Neurotoxicity: Not available.
Mutagenicity: Not available.
Specific Target Organ Toxicity, Single Exposure: Respiratory system, central nervous system, optic nerve.
Specific Target Organ Toxicity, Repeated Exposure: Kidney, liver, spleen, and blood.

Symptoms associated with exposure: May cause damage to organs. Eye contact may result in pain, irritation, watering, redness, blurred or double vision. Skin contact may cause irritation, cracking, dermatitis.

The toxicological properties of this material have not been thoroughly investigated.

Section 12 - Ecological Information

Ecotoxicity: Do not release to the environment. Do not release to drains. Harmful to aquatic life.

CAS#517-28-2 Hematoxylin:
LC50, freshwater fish: >35 mg/L 96h (oncorhynchus mykiss)(rainbow trout)
EC50, freshwater algae: >100 mg/L 7d (lemna minor)
EC50, water flea: 29.7 mg/L 48h (daphnia magna)

CAS#7681-55-2 Sodium Iodate:
LC50, freshwater fish: 220 mg/L 96h (oncorhynchus mykiss)(rainbow trout)

CAS#64-17-5 Ethyl Alcohol:
LC50, freshwater fish: 14200 mg/L 96h (pimephales promelas)(fathead minnow)
EC50, freshwater algae: 275 mg/L 72h (chlorella vulgaris)
EC50, water flea: 9268 mg/L 48h
EC50, water flea: 10800 mg/L 24h
EC50, microtox: 34634 mg/L 30min (photobacterium phosphoreum)
EC50, microtox: 35470 mg/L 5min (photobacterium)(phosphoreum)

CAS# 67-56-1 Methyl Alcohol:
LC50, freshwater fish: 15400 mg/L 96h flow-through (lepomis macrochirus)(bluegill)
LC50, freshwater fish: 19000 mg/L 96h (oncorhynchus mykiss)(rainbow trout)
EC50, water flea: 18260 mg/L 96h semi-static (daphnia magna)
ErC50, algae: 22000 mg/L 96h static (pseudokirchneriella subcapitata)(green algae)
IC50, bacteria: >1000 mg/L 3h (activated sludge)

Persistence and degradability: Not available.
Bio-accumulative potential: Not available.
Mobility: Will likely be mobile in the environment due to its water solubility.

Section 13 - Disposal Considerations

DISPOSAL: Dispose of in accordance with all federal, state, and local regulations.

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.

Section 16 - Additional Information

SDS Creation Date: 1/8/2010
Revision #1: 11/13/14 YM co-sign RC

Revision #2: 6/29/15
Revision #3: 7-2-20
Revision #4: 8-29-23

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