

EMS CATALOG NO: 26030-XX  
EMS PRODUCT: GILLS HEMATOXYLIN  
DATE: 06/15/2006  
PAGE NUMBER: ONE OF FOUR

MATERIAL SAFETY DATA SHEET

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof.

Electron Microscopy Sciences assumes no responsibility for personal injury or property damage to vendees, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of the material.

ELECTRON MICROSCOPY SCIENCES

321 MORRIS ROAD

P.O. BOX 251

FORT WASHINGTON, PA 19034

(215) 646-1566

24 HOUR EMERGENCY PHONE NUMBER

CHEMTREC: (800) 424-9300

---

FOR PRODUCT AND SALES INFORMATION

---

CONTACT ELECTRON MICROSCOPY SCIENCES OFFICE ABOVE.

---

PRODUCT IDENTIFICATION

---

IDENTITY (AS USED ON LABEL AND LIST): Gill's Hematoxylin #3

---

HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

---

HAZARDOUS COMPONENTS

CHEMICAL: HEMATOXYLIN (C16H14O6) (Natural Black 1)

CAS# 517-28-2

OSHA PEL: N/A

ACGIH TLV: N/A

OTHER LIMITS RECOMMENDED: N/A TXDS

% (OPTIONAL): 0.6

CHEMICAL: Aluminum Sulfate (Al<sub>2</sub>(SO<sub>4</sub>).18H<sub>2</sub>O)

CAS# 7784-31-8

OSHA PEL: N/A

ACGIH TLV: 2mg/M3

OTHER LIMITS RECOMMENDED: 2PR-MUS LD-50 270MG/KG

% (OPTIONAL): 5.28

CHEMICAL: Glacial Acetic Acid (CH<sub>3</sub>COOH) (Ethanoic Acid, Methane Carboxylic Acid, Ethylic Acid)

CAS# 64-19-7

OSHA PEL: 25mg/m<sup>3</sup>

ACGIH TLV: 10ppm

OTHER LIMITS RECOMMENDED:

TOXICITY: LD50 (oral-rat) (mg/Kg)-3310

LD50 (iv-mouse) (mg/Kg)-525

LD50 (skin-rabbit) (mg/kg)-1060

Ld (inhl-mouse) (ppm) -5620

% (OPTIONAL): 6

CHEMICAL: SODIUM IODATE (NaIO<sub>3</sub>)

CAS# 7681-55-2

OSHA PEL: N/A

ACGIH TLV: N/A

OTHER LIMITS RECOMMENDED: TXDS oral hmnLDLo: 50mg/kg

% (OPTIONAL): 0.06

CHEMICAL: ETHYLENE GLYCOL 1, 2-ETHANEDIOL (HOC<sub>2</sub>H<sub>4</sub>OH)

CAS# 107-21-1

OSHA PEL: N/A

ACGIH TLV: 100ppm

OTHER LIMITS RECOMMENDED: TXDS:LD-50 7.5GM/KG MICE

% (OPTIONAL): 25

\*\*\* HEMATOXYLIN IS A SUSPECTED CARCINOGEN !!!

---

#### PHYSICAL/CHEMICAL CHARACTERISTICS

---

BOILING POINT: N/A

VAPOR PRESSURE (MM/HG.): N/A

VAPOR DENSITY (AIR=1): N/A

SPECIFIC GRAVITY (H<sub>2</sub>O=1): N/A

MELTING POINT: N/A

EVAPORATION RATE (BUTYL ACETATE=1): N/A

SOLUBILITY IN WATER: Yes

APPEARANCE AND ODOR: Purplish-red liquid: odor of acetic acid

---

#### FIRE AND EXPLOSION HAZARD

---

FLASH POINT: N/A

FLAMMABLE LIMITS: N/A

LEL:

UEL:

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical

SPECIAL FIRE FIGHTING PROCEDURES: Wear full protective gear and self-contained breathing apparatus operated in the positive pressure mode. Emits toxic and corrosive fumes under fire conditions.

UNUSUAL FIRE AND EXPLOSION HAZARDS: No information is available.

---

REACTIVITY DATA

---

STABILITY: The product is stable.  
CONDITIONS TO AVOID: Flame and intense heat.  
INCOMPATIBILITY: Strong oxidizers  
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: N/A  
HAZARDOUS POLYMERIZATION: Will not occur.

---

HEALTH HAZARD DATA

---

ROUTES OF ENTRY:

INHALATION: YES  
SKIN: YES  
INGESTION: YES

HEALTH HAZARDS: Harmful if inhaled or ingested. Irritant to skin, eyes and respiratory tract. Hematoxylin is a cancer suspect agent! Avoid all routes of exposure. Prolonged or repeated breathing of vapor can cause drunkenness rapidly passing into a coma associated with a serious or fatal kidney injury.

CARCINOGENICITY: Yes

NTP: N/A

IARC MONOGRAPHS: N/A

OSHA REGULATED? N/A

SIGNS AND SYMPTOMS OF EXPOSURE: Irritation of the respiratory tract, burns to the skin and eyes, burning to mouth and stomach, vomiting, loss of consciousness, and lung damage.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N/A

EMERGENCY AND FIRST AID PROCEDURES: Get medical attention for all cases of overexposure.

CONTACT: Flush with plenty of water for at least 15 minutes.  
CALL A PHYSICIAN for eyes.

INHALATION: Remove to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, administer oxygen. CALL A PHYSICIAN!

---

PRECAUTIONS FOR SAFE HANDLING AND USE

---

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Cover spill with soda ash, mix and form slurry. Scoop into beaker, dilute with water and neutralize. Place in a suitable container for disposal.

WASTE DISPOSAL METHOD: Dispose of following federal, state and local regulations. Contact a professional waste disposal service.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Use care in handling - store in controlled room temperature. Avoid contact with skin, eyes and clothing. Remove contaminated clothing and wash before reuse. Do not breathe vapors; use with adequate ventilation. Wash thoroughly after handling.

OTHER PRECAUTIONS: USE CARE WHEN HANDLING!!

---

CONTROL MEASURES

---

RESPIRATORY PROTECTION: Sufficient to prevent inhalation of mist and fumes.

VENTILATION: Local exhaust, mechanical, fume hood.

PROTECTIVE GLOVES: Rubber

EYE PROTECTION: Face shield/ Safety goggles

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Approved work clothes.

WORK/HYGIENIC PRACTICES: Use care in handling.

N/A=NOT APPLICABLE OR NOT AVAILABLE.