Material Safety Data Sheet

VWR® Harris Hematoxylin

1. Product and Preparation Information

Product Identifier
VWR® Hematoxylin, Harris

Product Use
Biological stain

Date Prepared
July, 2009

Synonym / Chemical Name
Denatured ethyl alcohol, primary aliphatic alcohol, hematoxline, hydroxybrazlin, natural black 1

VWR Product # 95057-858

Manufacturer/ Preparer
Leica Biosystems Richmond, Inc.
5205 Route 12
Richmond, IL 60071

Distributor
VWR International
1310 Goshen Parkway
West Chester, PA 19380
800.932.5000

Emergency Contact

Chemtrec USA and Canada	800.424.9300
Chemtrec International	703.527.3887
Canutec	613.996.6666

2. Preventive Measures

Personal Protection

NFPA

US DOT

Not Regulated

Canadian WHMIS

B3

D2A

Personal Protection

Eyes	Safety glasses
Body	Laboratory coat
Respiratory	NIOSH/MSHA approved respirator when ventilation is inadequate
Hands	Latex or nitrile gloves

Emergency Overview

WARNING! Combustible liquid and vapor. May be harmful if absorbed through skin or if swallowed. Contains material that may cause nervous system, respiratory tract, skin and eye damage. Keep away from heat, sparks and flame. Avoid contact with eyes, skin and clothing. Do not ingest. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. For In Vitro Diagnostic Use. For Laboratory Use.

Engineering Controls

General mechanical ventilation or laboratory fume hood. Ensure that eyewash stations and quick drench showers are proximal to the workstation or tissue processor.

Handling and Storage

Dissipate static electricity during transfer by grounding and bonding containers and equipment. Keep containers closed and out of reach of children. Do not use near open flames or sparks. Store at room temperature. Store in flammable liquid safety cabinet when possible.

Small Spill and Leak

Dilute with water and mop, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill and Leak

Keep away from heat and ignition sources. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Avoid skin and eye contact. Prevent entry into sewers, basements or confined areas: dike if needed. Eliminate all ignition sources. Be careful that airborne concentrations do not exceed published exposure and lower explosive limits.

Waste Disposal

Follow all federal, state, local and provincial regulations.

3. Hazardous Ingredients

Hazardous Ingredient	% wt.	CAS Number	LD50	LC50	TDG PIN
Hematoxylin powder	<1	517-28-2	NA	NA	Not Regulated
Sodium iodate	<1	7681-55-2	505 mg/kg oral mouse		
Ammonium aluminum sulfate	0-30	7784-26-1	NA	NA	
Ethanol	<4	64-17-5	7,060 mg/kg oral rat 3,450 mg/kg oral mouse	20,000 ppm/10 hr. inhalation rat 39 gm/m³/4hr inhalation mouse	
Isopropanol	<0.5	67-63-0	5,045 mg/kg oral rat 3,600 mg/kg oral mouse	72,600 mg/m³ inhalation rat 53,000 mg/m³ inhalation mouse	
Methanol	<0.5	67-56-1	5,600 mg/kg oral rat 7,300 mg/kg oral mouse	64,000 ppm/4 hr. inhalation rat 81,000 mg/m³/14hr rabbit	

4. First Aid Measures

Eye Contact Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.

Skin Contact Remove contaminated clothing immediately. Wash the affected areas with soap or mild detergent and large amounts of water for at least 15 minutes.

Inhalation Move individual to fresh air immediately. If breathing is difficult, give oxygen. If breathing has stopped, administer artificial respiration. Get medical attention.

Ingestion Never give anything by mouth to an unconscious person. Induce vomiting. Give no more than 2 glasses of water. Get medical attention immediately.

5. Physical Data

Physical State	Odor and Appearance	Odor Threshold (ppm)	Solubility	Auto-ignition Temp
Liquid	Dark purple, alcohol odor	180 ppm Ethanol	Easily soluble in water	685° F (363° C)
Vapor Pressure	**Vapor Density**	**Evaporation Rate**	**Boiling Point**	**Flash Point CC**
40mmHg @ 20C (MeOH)	1.6 Ethanol (air-1)	N/A	173° F (78° C)	144° F (62° C)
pH	**Specific Gravity**	**Coeff. Water/oil Dist.**	**Freezing Point**	**Flammable Limits**
N/A	<1.5 Water=1	N/A	-70° F (-16° C)	3.3% LEL 19% UEL

6. Fire and Explosion

Flammability	Conditions	Fl. Pt - Auto Ignition - Flammable Limits
Combustible Liquid II (Canada B2)	Excessive heat, sparks and open flames.	See Physical Data above

Explosivity

Not explosive under normal conditions of use. Vapors are heavier than air and may settle in low areas. Not sensitive to impact. Properly ground equipment during transfer (NFPA 77).

Hazardous Combustion Products	Means of Extinction
CO, CO2 Some metallic oxides	Small Fire – Use DRY chemical powder. Large Fire – Use alcohol foam, water spray or fog

7. Reactivity

Stability	Hazardous Decomposition Products
Product is stable under normal conditions of use.	CO from incomplete combustion, CO2

Conditions of Reactivity	Hazardous Polymerization	Incompatibility
NA	No hazardous polymerization.	Oxidizing agents

8. Toxicological Properties

Routes of Entry eyes, ingestion **Target Organs** Liver, kidney, gastrointestinal tract, reproductive and nervous systems

Effects of Acute Exposure

Eye Slightly hazardous in case of eye contact (irritant)
Skin Slightly hazardous (irritant). Skin inflammation is characterized by itching, scaling, reddening or occasionally blistering.
Absorption NA
Inhalation Slightly hazardous in case of inhalation
Ingestion Slightly hazardous in case of ingestion.

Effects of Chronic Exposure

Repeated exposure by inhalation may cause system poisoning, impaired vision or blindness. Inhalation may worsen conditions such as emphysema or bronchitis. Repeated skin exposure may cause defatting of the skin.

Carcinogenic Effects

Ethanol and methanol are not classified as a human carcinogen. Isopropanol is classified as Group 3 (not classifiable) by IARC.

Reproductive Toxicity

Ethyl alcohol when used as a beverage has proven to be toxic to blood, nervous system, reproductive system, liver, gastrointestinal tract, respiratory tract, skin and eyes.

Teratogenic and Mutagenic Effects NA

Exposure Limits	OSHA PEL TWA	ACGIH TLV TWA	STEL	TWAEV (Ont.)	STE V (Ont.)	CEV (Ont.)
Hematoxylin powder	NA	NA	NA	NA	NA	NA
Sodium iodate	NA	NA	NA	NA	NA	NA
Ammonium aluminum sulfate	NA	NA	NA	NA	NA	NA
Ethanol	1,900 ppm	1,000 ppm	NA	1,000 ppm	NA	NA
Isopropanol	980 mg/m³	400 ppm	500 ppm	200 ppm	400 ppm	NA
Methanol	260 ppm	200 ppm	250 ppm	200 ppm	250 ppm	NA

9. Regulatory Information

OSHA Hazardous	**Cal. Prop. 65**	**Canadian WHMIS**	**RCRA Regulated**
Irritant	Not listed	B3, D2A	Not listed
SARA 302/304	**SARA 313**	**CERCLA 102A**	**RQ**
Not Listed	MeOH Listed	MeOH Listed	5000 lbs. MeOH
CWA 307	**CWA 311**	**CAA 112 Release Prevention**	**CAA 112 Reg. Flam. Substance**
Not Listed	Not Listed	MeOH Listed	Not Listed
CAA 112 Reg. Toxic Substance	**TSCA Inventory**	**EEC Flammability**	**CEPA DSL**
Not Listed	All ingredients listed	NA	All Ingredients Listed
Proper US DOT Shipping Name	**TDG Classification**	**IATA Classification**	**Limited Quantity**
Not regulated	Not regulated	Not regulated	NA

The information provided above is based upon unused product. Product characteristics may change after processing, requiring further classification.

This Material Safety Data Sheet has been prepared in accordance with the Canadian Controlled Products Regulations and 29CFR1910.1200. To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries make any warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. In no event shall Leica Biosystems be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages resulting from use of or reliance upon this information.