Safety Data Sheet

Hematoxylin 560

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

1.1 Product Identifier

Trade Name	:	Hematoxylin 560
Product Number	:	3801570; 3801571
SDS Date	:	June 1, 2015

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product Use	:	Nuclear Stain.
Uses Advised Against	:	All other uses.

1.3 Details of the Supplier of the Substance or Mixture

Manufacturer/Preparer :

Leica Biosystems Richmond, Inc
5205 Route 12
Richmond, IL 60071
800-225-3035
LBSNA-LBS-QA@LEICABIOSYSTEMS.COM

1.4 Emergency Telephone Number

Emergency Spill	:	1-800-424-9300 (ChemTrec) +1 703-527-3887 International calls (call collect) 13 11 26 (Australia 24 Hr Poisons Information Centre)
Other Information	:	1-800-225-3035

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

CLP/GHS Classification (1272/2008) : None required.

2.2 Label Elements

Hazard Pictograms	:	None required.
Signal Word	:	None required.
Hazard Statements	:	None required.
Precautionary Statements	:	None required.

2.3 Other Hazards

Other hazards which do not result in classifications : None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number / EINECS Number / REACH Reg. Number	% (w/w)	CLP/GHS Classification (1272/2008)
Ethylene Glycol	107-21-1 203-473-3	<40	Acute Toxicity – Category 4 (H302)
Aluminum Sulfate	10043-01-3 233-135-0	<5	Eye Irritation – Category 2A (H319) Acute Aquatic Toxicity – Category 3 (H402) Chronic Aquatic Toxicity – Category 3 (H412)
Aluminum Ammonium Sulfate	7784-26-1 232-055-3	<5	Acute Aquatic Toxicity – Category 3 (H402) Chronic Aquatic Toxicity – Category 3 (H412)

See Section 16 for full text of GHS and EU Classifications.

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting upper and lower eyelids. Get medical attention immediately.

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly after handling. Get medical attention immediately.

Inhalation : Call medical doctor or poison control center immediately. Move exposed person to fresh air. If not breathing, if breathing is irregular, or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing, such as a collar, tie, belt, or waistband. Get medical attention immediately.

Ingestion : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

See Section 11 for more detailed information on health effects.

4.2 Most important symptoms and effects, both acute and delayed

Eye contact : May cause eye irritation.
Skin contact : May cause mild skin irritation.
Inhalation : May cause respiratory tract irritation.
Ingestion : May be harmful if swallowed.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Immediate medical treatment is required for ingestion.
Specific treatments : No specific treatment.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing Media

Suitable extinguishing media	:	Use dry chemical, alcohol foam, carbon dioxide (CO_2), or water spray.
Unsuitable extinguishing media	:	None known.

5.2 Special hazards arising from the substance or mixture

Unusual fire and explosion hazards	:	None known.
Combustion products	:	Oxides of carbon, nitrogen, and sulfur.

5.3 Advice for fire-fighters

Special protective equipment for fire-fighters	:	Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals.
Special protective action for fire-fighters	:	Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment, and emergency procedures

For emergency responders	:	Wear appropriate protective equipment.

6.2 Environmental precautions

Environmental precautions	:	Prevent entry in storm sewers and waterways. Report spill as required by local and federal regulations.

6.3 Methods and materials for containment and cleaning up

For small and large spill	:	Stop spill at the source if it is safe to do so. Absorb with an inert material and place into appropriate container for disposal.

6.4 Reference to other sections

Refer to Section 8 for personal protective equipment, and Section 13 for disposal information.

SECTION 7: HANDLING and STORAGE

7.1 Precautions for safe handling

Protective measures	:	Avoid contact with eyes, skin, and clothing. Avoid breathing mists. Wash thoroughly after handling. Keep containers closed when not in use.

7.2 Conditions for safe storage, including any incompatibilities

Protect containers from physical damage. Store in a cool area. Keep containers closed when not in use. Store away from oxidizers and other incompatible materials. Empty containers retain product residues. Follow all SDS precautions in handling empty containers.

7.3 Specific end use(s)

Industrial uses	:	None identified.
Professional uses	:	Nuclear stain.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Chemical Name	US OEL	EU IOEL	UK OEL	Germany OEL
Ethylene Glycol	100 ppm TWA ACGIH TLV	10 ppm TWA (particulate) 20 ppm TWA (vapor) 40 ppm (STEL)	20 ppm TWA 40 ppm STEL	10 ppm TWA 20 ppm STEL

Refer to local or national authority for exposure limits not listed above.

8.2 Exposure controls

Appropriate engineering controls : Use with adequate local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

Personal protective measures

Eye/face protection : Wear safety glasses or chemical goggles.

Skin protection : Impervious clothing as needed to avoid skin contact.

Hands : Impervious gloves recommended (butyl rubber).

Respiratory protection : None needed with adequate ventilation. If the occupational exposure limit is exceeded, use an approved organic vapor respirator. Selection of respiratory protection depends on the contaminant type, form, and concentration. Select in accordance with OSHA 1910.134 or other applicable regulations and good industrial hygiene practice.

Other protection : Suitable washing facilities should be available.

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance : Deep red liquid

Odor : None

Odor threshold : Not applicable

pH : 2.0 – 3.0

Melting/freezing point : Not available

Boiling point : Not available

Flash point : >212°F (>100°C)

Lower flammability limit : Not available

Upper flammability limit : Not available

Evaporation rate : Not available

Vapor density (air = 1) : Not available

Vapor pressure : Not available

Specific gravity (H_2O = 1) : 1.06

Relative density : 1.06

Solubility : Soluble in water

Octanol/water partition coefficient : Not available

Autoignition temperature : Not available

Decomposition temperature : Not available

Viscosity	:	Not available
Explosive properties	:	Not explosive
Oxidizing properties	:	None
Molecular formula	:	Not available
Molecular weight	:	Not available

9.2 Other information

No additional information available

SECTION 10: STABILITY and REACTIVITY

10.1 Reactivity	:	This material is not reactive under normal conditions.
10.2 Chemical stability	:	Normally stable.
10.3 Possibility of hazardous reactions	:	Not expected to be reactive.
10.4 Conditions to avoid	:	Avoid excessive heat.
10.5 Incompatible materials	:	May react violently with chlorosulfonic acid, oleum, sulfuric acid, perchloric acid, phosphorus pentasulfide, bases, and strong oxidizers.
10.6 Hazardous decomposition products	:	Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: oxides of carbon, oxides of nitrogen, oxides of sulfur, or ammonia gas.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Potential health effects:

Eye contact	:	May cause irritation with redness, tearing, and swelling.
Skin contact	:	Prolonged skin contact may cause irritation or drying.
Inhalation	:	May cause respiratory tract irritation.
Ingestion	:	Swallowing may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Acute toxicity:

Product/ingredient name	Result	Species	Dose	Exposure
Ethylene Glycol	LD50 Oral	Rat	4,700 mg/kg	-
	LD50 Oral	Mouse	5,500 mg/kg	-

Skin corrosion/irritation	:	No data available for mixture.
Eye damage/irritation	:	No data available for mixture.
Respiratory irritation	:	No data available for mixture.
Respiratory sensitization	:	No data available for mixture.
Skin sensitization	:	No data available for mixture.
Germ cell mutagenicity	:	No data available for mixture.
Carcinogenicity	:	No data available for mixture.
Reproductive Toxicity	:	No data available for mixture.

Specific Target Organ Toxicity:

Single exposure	:	Ingestion of ethylene glycol has been shown to cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, blurring of vision, irritability, back pain, decrease in urine output, kidney failure, and central nervous system effects.
Repeat exposure	:	Prolonged overexposure to ethylene glycol has been shown to cause liver and kidney damage in mice and rats.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Ethylene glycol	LC50 49,000 – 57,000 mg/L EC50 46,300 mg/L	Fathead minnow Dapnia magna	96 hours 48 hours

12.2 Persistence and degradability : No data available.

12.3 Bioaccumulative potential : No data available.

12.4 Mobility in soil : No data available.

12.5 Results of PVT and vPvB assessment : No data available.

12.6 Other adverse effects : No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORTATION INFORMATION

	14.1 UN Number	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 Packing group	14.5 Environmental hazards
US DOT	Not regulated	-	-	-	-
Canada TDG	Not regulated	-	-	-	-
EU ADR/RID	Not regulated	-	-	-	-
IMDG	Not regulated	-	-	-	-
IATA	Not regulated	-	-	-	-

14.6 Special precautions for user : None.

14.7 Transport in bulk according to Annex : Not determined

III MARPOL 73/78 and the IBC Code

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

US Regulations

OSHA hazard classification : Irritant, target organ effects
TSCA Inventory : All of the components are listed on the TSCA Inventory.
SARA 302 : This product does not contain chemicals that are regulated under SARA 302.
SARA 311 Hazard Classification : Acute health hazard; chronic health hazard
SARA 313 : This product contains the following chemicals that are regulated under SARA Title III, Section 313:

	Product name	**CAS number**	**%**
Form R – Reporting requirements	Ethylene Glycol	107-21-1	<40
Supplier notifications	Ethylene Glycol	107-21-1	<40

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to the copies of the SDS subsequently redistributed.

CERCLA Section 103 : This product does not contain chemicals that are regulated under CERCLA.
California Prop 65 : This product contains the following chemical(s) which are known to the state of California to cause cancer, reproductive toxicity, or birth defects: Ethylene glycol.

SECTION 16: OTHER INFORMATION

Revision history : Updated formatting

CLP/GHS Classification and H Phrases for Reference (See Section 3)

H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H402 Harmful to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

NFPA Rating	Health: 1	Fire: 0	Instability: 0
HMIS Rating	Health: 1	Fire: 0	Physical Hazard: 0

Notice to reader:
This Safety Data Sheet (SDS) has been prepared in accordance with the Classification, Labelling, and Packaging (CLP) regulation in the EU and the Globally Harmonized System (GHS) (29CFR 1910.1200) in the US. It complies with the requirements of the Canadian Controlled Products Regulations. To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.