

SAFETY DATA SHEET



Conforms to regulation (EC) no. EU 453/2010

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

1.1 Product Identifier

Product Name: Harris' Hematoxylin

Product Number: HS-400

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

Investigational research by professional users

1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer

National Diagnostics
305 Patton Drive
Atlanta, GA 30036
(404) 699-2121
(800) 526-3867
info@nationaldiagnostics.com

1.4 Emergency Telephone Number

ChemTel Inc.

Contract number MIS8894340
1-800 255-3924 (United States, Canada, Puerto Rico & US Virgin Islands)
01-800-099-0731 (Mexico)
400-120-0751 (China)
000-800-100-4086 (India)
1-300-954-583 (Australia)
0-800-591-6042 (Brazil)
+1-813-255-3924 (All other regions)

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 [EU-GHS/CLP]

H320 - Serious Eye Damage/Eye Irritation (Category 2B)

2.2 Label Elements

GHS LABEL ELEMENTS AND CLASSIFICATION

GHS Label Elements



WARNING

H320 - Causes eye irritation.
P264 - Wash skin thoroughly after handling.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P337+P313 - IF eye irritation persists: Get medical advice/attention.

2.3 Other Hazards

None found.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture

Chemical Names/Description

Component List

Component	% Comp.	CAS #	EC #	1278/2008 Classification
Ammonium alum	5 - 10	7784-26-1	232-055-3	N.A.
Ethanol	< 10	64-17-5	200-578-6	H225, H319
Hematoxylin	< 1	517-28-2	N.A.	N.A.

SECTION 4 - FIRST AID MEASURES

4.1 Description of First Aid Measures

Inhalation

Remove victim to fresh air. Get medical attention if irritation persists.

Ingestion

If small quantities are swallowed, rinse out mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious or drowsy person. If large amounts are swallowed or if irritation or discomfort occurs, get medical attention.

Skin

Wash with soap and water. Get medical attention if irritation develops. Remove contaminated clothing and launder before reuse

Eyes

Flush eye with water while lifting the upper and lower lids apart. Get medical attention if irritation persists.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Inhalation

Ammonium alum:

No information found.

Ethanol:

Cough, drowsiness, headache and fatigue.

Hematoxylin:

No information found.

Ingestion

Ammonium alum:

No information found.

Ethanol:

Burning sensation, confusion, dizziness, headache and unconsciousness.

Hematoxylin:

No information found.

Skin

Ammonium alum:

No information found.

Ethanol:

Dryness.

Hematoxylin:

No information found.

Eyes

Ammonium alum:

No information found.

Ethanol:

Redness, pain and burning.

Hematoxylin:

No information found.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Unknown/not applicable

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use any media suitable for the surrounding fire.

5.2 Special Hazards Arising from the Substance/Mixture

Hazardous Combustion Products

Toxic oxides of nitrogen, sulfur.

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: oxides of carbon, nitrogen and sulfur.

Hazardous Polymerization

Not expected to occur.

5.3 Advice for Firefighters

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the

pressure demand or other positive pressure mode.

5.4 Further Information

No data available.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions

Wear appropriate protective equipment. Eliminate all ignition sources and ventilate the area. Prevent entry into basements or confined areas.

6.2 Environmental Precautions

Prevent discharge into the environment. Dike spills and stop leakage where practical. Do not allow material to enter drains.

6.3 Methods and Materials for Containment and Cleaning Up

Stop spill at the source if it is safe to do so. Absorb with an inert material. Use non-sparking tools and equipment.

6.4 References to Other Sections

For disposal information, see Section 13. For protective clothing and equipment, see Section 8.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Avoid eye and skin contact. Avoid breathing vapors. Use with adequate ventilation. Wash thoroughly after handling. Removing contaminated clothing and launder before reuse.

7.2 Conditions for Safe Storage (including any incompatibles)

Keep product away from heat, sparks and all other sources of ignition. Keep containers closed when not in use.

Incompatibles

Ammonium alum:
None found.

Ethanol:

Strong oxidants, silver salts, acid chlorides, alkali metals, hydrazine, and many other substances.

Hematoxylin:

None.

7.3 Specific End Uses

Investigational research by professional users

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PRECAUTIONS

8.1 Control Parameters

Component: Ammonium alum

ACGIH Threshold Limit Value (TLV): None established

OSHA Permissible Exposure Limit (PEL): N.A.

Component: Ethanol

ACGIH Threshold Limit Value (TLV): 1000 ppm

OSHA Permissible Exposure Limit (PEL): None established

Component: Hematoxylin

ACGIH Threshold Limit Value (TLV): Not determined

OSHA Permissible Exposure Limit (PEL): Not determined

8.2 Exposure Controls

Engineering Controls

Use with adequate local exhaust ventilation to maintain exposure levels below the the occupational exposure limits.

Respiratory Protection

None needed with adequate protection. If the occupational exposure limit is exceeded use an approved air 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 hygiene practice.

Eye Protection

Wear safety glasses.

Skin Protection

Impervious clothing as needed to avoid skin contact.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical & Chemical Properties

a. Appearance	Purple liquid	b. Odor	None
c. Odor Threshold	N.A.	d. pH	N.A.
e. Melting/Freezing Point (°C)	-3	f. Boiling point (°C)	90
g. Flash Point (°C)	N.A.	h. Evaporation Rate	Not determined
i. Flammability	N.A.	j. Upper/Lower Flammability or Explosive Limits	LEL 3.3%, UEL 19%
k. Vapor Pressure	40 mmHg @ 20 C	l. Vapor Density (Air = 1)	1.6
m. Relative Density	1.5	n. Water Solubility	Soluble in water
o. Partition Coefficient n-octanol/water	Mixture	p. Autoignition Temperature (°C)	N.A.
q. Decomposition Temperature (°C)	N.A.	r. Viscosity	
s. Explosive Properties	N.A.	t. Oxidizing Properties	Not an oxidizer

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

Not reactive under normal conditions of use

10.2 Chemical Stability

Stable under recommended conditions of use and storage

10.3 Possibility of Hazardous Reactions

Not expected to occur.

10.4 Conditions to Avoid

Heat, sparks flames and all other sources of ignition.

10.5 Incompatible Materials

Ammonium alum:
None found.

Ethanol:
Strong oxidants, silver salts, acid chlorides, alkali metals, hydrazine, and many other substances.

Hematoxylin:
None.

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, nitrogen and sulfur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Product LD50 Values

Oral Rat LD50 (mg/kg)

Dermal Rabbit LD50 (mg/kg)

Component Cancer List Status

	NTP Carcinogen		IARC Category
	Known	Anticipated	
Ammonium alum	N.A.	N.A.	N.A.
Ethanol	No	No	None
Hematoxylin	Unknown	N.A.	N.A.

Potential Health Effects

Inhalation

Ammonium alum
May be harmful if inhaled. Causes respiratory tract irritation.

Ethanol
Can cause irritation to the lungs and upper respiratory tract. May cause headache or fatigue.

Hematoxylin
No information found.

Ingestion

Ammonium alum
May be harmful if swallowed.

Ethanol

May cause irritation or central nervous system effects if swallowed.

Hematoxylin

No information found.

Skin**Ammonium alum**

May be harmful if absorbed through skin. Causes skin irritation.

Ethanol

May cause drying or irritation to the skin.

Hematoxylin

No information found.

Eyes**Ammonium alum**

Causes eye irritation

Ethanol

May cause irritation to the eyes.

Hematoxylin

No information found.

Carcinogenicity**Ammonium alum**

No information found.

Ethanol

Not listed as a known or possible carcinogen by NTP or IARC.

Hematoxylin

Not listed as carcinogen.

Mutagenicity**Ammonium alum**

No data available.

Ethanol

No information available.

Hematoxylin

No information found.

Reproductive Toxicity**Ammonium alum**

No data available.

Ethanol

Consumption during pregnancy may adversely affect the unborn child.

Hematoxylin

No information found.

Teratogenic Effects**Ammonium alum**

No data available.

Ethanol

No information available.

Hematoxylin

No information found.

Routes of Entry**Ammonium alum**

No data available.

Ethanol

Inhalation, ingestion, skin contact.

Hematoxylin

Ingestion, inhalation.

Target Organ Statement

Ammonium alum
No data available.

Ethanol

Persons with pre-existing skin disorders or eye problems or impaired liver or kidney function may be more susceptible to the effects of the substance.

Hematoxylin

No information found

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity

COMPONENT: Ammonium alum

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	LC50 (96hr, zebrafish) 104mg/l	NOEC (48hr, daphnia) >160mg/l	EC50 14mg/l	EC50>1000mg/l

	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

COMPONENT: Ethanol

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	LC50 (96 hour, fathead minnow) 14g/L	EC50 (48hr, daphnia) 5g/L	EC50 (72hrs) 275mg/L	IC50 >1g/L

	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	EC50 155ppm vapor	No data

COMPONENT: Hematoxylin

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

12.2 Persistence and Degradability

Ammonium alum
No data

Ethanol

Readily biodegradable (95% degradation in 15 days)

Hematoxylin

No data

12.3 Bioaccumulative Potential

Ammonium alum
No data

Ethanol

No data

Hematoxylin

No data

12.4 Mobility in Soil

Ammonium alum
No data

Ethanol

No data

Hematoxylin

No data

12.5 Results of PBT and vPvB Assessment

Ammonium alum

No data

Ethanol
Not PBT or vPvB

Hematoxylin
No data

12.6 Other Adverse Effects

Ammonium alum
None

Ethanol
None

Hematoxylin
None

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Offer surplus or non-recyclable product to licensed disposal company. Disposal is subject to user compliance with applicable law and product characteristics at time of disposal. Dispose of packaging as product.

SECTION 14 - TRANSPORT INFORMATION

	ADR/RID	IATA	IMO	DOT
14.1 UN Number	N.A.	N.A.	N.A.	N.A.
14.2 Shipping Name	N.A.	N.A.	N.A.	N.A.
14.3 Hazard Class	N.A.	N.A.	N.A.	N.A.
14.4 Packing Group	N.A.	N.A.	N.A.	N.A.
14.5 Environmental Hazards	N.A.	N.A.	N.A.	N.A.
14.6 Special Precautions	N.A.	N.A.	N.A.	N.A.

SECTION 15 - REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance/Mixture

United States

TSCA Regulatory Statement
N.A.

SARA 311/312 Hazard Categories

Component	Fire	Pressure	Reactivity	Acute	Chronic
Ammonium alum	No	No	No	Yes	No
Ethanol	Yes	No	No	Yes	Yes
Hematoxylin	N.A.	N.A.	N.A.	N.A.	N.A.

Europe

EEC Regulatory
N.A.

SECTION 16 - OTHER INFORMATION

Revisional Updates

4/26/2019 - Updated Section 1.4
5/29/2015 - Updated Sections 2.1 and 3.2
12/13/2013 - Released Version 1.0

NFPA Codes

Health 1 Flammability 1 Reactivity 0

Dangers

Ammonium alum
None

Ethanol
H225 - Highly flammable liquid and vapor.
H319 - Causes serious eye irritation.

Hematoxylin
None

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