

Hematoxylin

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)
Issue date: 2/10/2025 Revision date: 6/26/2025 Supersedes: 6/9/2025 Version: 2.0

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : Hematoxylin
Product code : 7016 all sizes

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : For laboratory and manufacturing use only, For professional use only
Restrictions on use : Not for food, drug or household use

1.4. Supplier's details

Ethos Biosciences, Inc.
2070 Center Square Road
Logan Township, New Jersey 08085
United States
T +1-856-224-0900; +1-800-441-0366 Technical Service; Monday-Friday: 8:00 AM-5:00 PM, Eastern US Time
www.ethosbiosciences.com

1.5. Emergency phone number

Emergency number : 800-424-9300 CHEMTREC (USA) -- 24 Hours/Day, 7 Days/Week

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Full text of H statements : see section 16		

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Warning

Hazard statements (GHS US)

: H302 - Harmful if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

Precautionary statements (GHS US)

: P264 - Wash hands, forearms and face thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.

P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.

P302+P352 - If on skin: Wash with plenty of water.

Hematoxylin

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P330 - Rinse mouth.
P332+P313 - If skin irritation occurs: Get medical advice or attention.
P337+P313 - If eye irritation persists: Get medical advice or attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Conc.	GHS US classification
water	CAS-No.: 7732-18-5	≥ 65	Not classified
ethylene glycol	CAS-No.: 107-21-1	25	Not classified
aluminum sulfate octadecahydrate	CAS-No.: 7784-31-8	≤ 4	Not classified
acetic acid, glacial	CAS-No.: 64-19-7	< 2	Flam. Liq. 3, H226
hematoxylin	CAS-No.: 517-28-2	< 1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
sodium iodate	CAS-No.: 7681-55-2	< 1	Ox. Sol. 2, H272 Acute Tox. 4 (Oral), H302

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	: Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Call a poison center/doctor/physician if you feel unwell.
Personal protection for first-aid responders.	: First aid workers will be equipped with suitable personal protective equipment.

Hematoxylin

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: None under normal conditions.
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: Harmful if swallowed.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: Treat symptomatically.
-----------------------------------	--------------------------

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.
------------------	---

For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes.

For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Evacuate unnecessary personnel. Stop leak if safe to do so.

Environmental precautions	: Avoid release to the environment.
---------------------------	-------------------------------------

6.2. Methods and materials for containment and cleaning up

For containment	: Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up	: Take up liquid spill into absorbent material.
Other information	: Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

Hematoxylin

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Keep cool. Protect from sunlight.
Packaging materials	: Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

ethylene glycol (107-21-1)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Ethylene glycol
ACGIH® TLV® TWA	25 ppm (V - Vapor fraction)
ACGIH® TLV® STEL	10 mg/m³ (I - Inhalable particulate matter, H - Aerosol only)
	50 ppm (V - Vapor fraction)
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2024

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Hematoxylin

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Color	: No data available
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: Water: Solubility in water of component(s) of the mixture : • hematoxylin: • acetic acid, glacial: 60.3 g/100ml
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

hematoxylin

Boiling point	≥ 267 °C Atm. press.: 1013 hPa Decomposition: 'yes' Decomp. temp.: 267 °C
Flash point	Not applicable
Auto-ignition temperature	Not applicable

acetic acid, glacial

Boiling point	118 °C (1013 hPa, Anhydrous form)
Flash point	39 °C (Anhydrous form, 1013 hPa)
Auto-ignition temperature	463 °C (Anhydrous form, T1)
Vapor pressure	< 16 hPa (20 °C)
Vapor pressure at 50°C	< 75 hPa

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

Hematoxylin

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : No data available
Acute toxicity (inhalation) : No data available

Hematoxylin	
ATE US (oral)	500 mg/kg body weight
hematoxylin (517-28-2)	
LD50 oral rat	400 mg/kg (Rat, Literature study, Oral)
ATE US (oral)	400 mg/kg body weight
sodium iodate (7681-55-2)	
LD50 oral	505 mg/kg body weight Animal: mouse, Animal sex: female
ATE US (oral)	505 mg/kg body weight
ethylene glycol (107-21-1)	
LD50 oral rat	7712 mg/kg body weight Animal: rat
ATE US (oral)	7712 mg/kg body weight
aluminum sulfate octadecahydrate (7784-31-8)	
LD50 oral rat	9000 mg/kg Source: ChemIDPlus
ATE US (oral)	9000 mg/kg body weight
Skin corrosion/irritation	: Causes skin irritation.
acetic acid, glacial (64-19-7)	
pH	2.4 (6 %)

Hematoxylin

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Serious eye damage/irritation : Causes serious eye irritation.

acetic acid, glacial (64-19-7)

pH	2.4 (6 %)
----	-----------

Respiratory or skin sensitization : No data available

Germ cell mutagenicity : No data available

Carcinogenicity : No data available

Reproductive toxicity : No data available

STOT-single exposure : No data available

hematoxylin (517-28-2)

STOT-single exposure	May cause respiratory irritation.
----------------------	-----------------------------------

STOT-repeated exposure : No data available

Aspiration hazard : No data available

hematoxylin (517-28-2)

Viscosity, kinematic	Not applicable
----------------------	----------------

acetic acid, glacial (64-19-7)

Viscosity, kinematic	0.996 – 1.006 mm ² /s
----------------------	----------------------------------

Symptoms/effects after inhalation : None under normal conditions.

Symptoms/effects after skin contact : Irritation.

Symptoms/effects after eye contact : Eye irritation.

Symptoms/effects after ingestion : Harmful if swallowed.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : No data available

Hazardous to the aquatic environment, long-term (chronic) : No data available

hematoxylin (517-28-2)

LC50 - Fish [1]	> 35 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
-----------------	--

EC50 - Crustacea [1]	≈ 29.7 mg/l Test organisms (species): Daphnia magna
----------------------	---

sodium iodate (7681-55-2)

LC50 - Fish [1]	350 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
-----------------	---

ethylene glycol (107-21-1)

LC50 - Fish [1]	> 72860 mg/l Test organisms (species): Pimephales promelas
-----------------	--

EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
----------------------	--

NOEC (chronic)	≥ 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'
----------------	--

Hematoxylin

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

12.2. Persistence and degradability

Hematoxylin	
Persistence and degradability	Not rapidly degradable
hematoxylin (517-28-2)	
Persistence and degradability	Biodegradability in water: no data available.
acetic acid, glacial (64-19-7)	
Persistence and degradability	Biodegradable in the soil, Readily biodegradable in water.
water (7732-18-5)	
Persistence and degradability	Not rapidly degradable
sodium iodate (7681-55-2)	
Persistence and degradability	Not rapidly degradable
ethylene glycol (107-21-1)	
Persistence and degradability	Not rapidly degradable
aluminum sulfate octadecahydrate (7784-31-8)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

hematoxylin (517-28-2)	
Partition coefficient n-octanol/water (Log Pow)	0.71 (Calculated, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
acetic acid, glacial (64-19-7)	
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

hematoxylin (517-28-2)	
Ecology - soil	No (test)data on mobility of the substance available.
acetic acid, glacial (64-19-7)	
Ecology - soil	Contains component(s) with potential for mobility in the soil. May be harmful to plant growth, blooming and fruit formation.

12.5. Other adverse effects

Ozone	: No data available
Fluorinated greenhouse gases	: No

SECTION 13 Disposal considerations

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

Hematoxylin

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT)	: Not regulated
Proper Shipping Name (TDG)	: Not regulated
Proper Shipping Name (IMDG)	: Not regulated
Proper Shipping Name (IATA)	: Not regulated

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not regulated

TDG
Transport hazard class(es) (TDG) : Not regulated

IMDG
Transport hazard class(es) (IMDG) : Not regulated

IATA
Transport hazard class(es) (IATA) : Not regulated

14.4. Packing group

Packing group (DOT)	: Not regulated
Packing group (TDG)	: Not regulated
Packing group (IMDG)	: Not regulated
Packing group (IATA)	: Not regulated

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT
Not regulated

TDG
Not regulated

IMDG
Not regulated

IATA
Not regulated

Hematoxylin

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

aluminum sulfate octadecahydrate	CAS-No. 7784-31-8	≤ 4%
----------------------------------	-------------------	------

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

ethanediol, ethylene glycol	CAS-No. 107-21-1	25%
-----------------------------	------------------	-----

acetic acid, glacial (64-19-7)

CERCLA RQ	5000 lb
-----------	---------

ethylene glycol (107-21-1)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	5000 lb
-----------	---------

15.2. International regulations

CANADA

hematoxylin (517-28-2)

Listed on the Canadian DSL (Domestic Substances List)

acetic acid, glacial (64-19-7)

Listed on the Canadian DSL (Domestic Substances List)

water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

sodium iodate (7681-55-2)

Listed on the Canadian DSL (Domestic Substances List)

ethylene glycol (107-21-1)

Listed on the Canadian DSL (Domestic Substances List)

aluminum sulfate octadecahydrate (7784-31-8)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

EU-Regulations

No additional information available

National regulations

acetic acid, glacial (64-19-7)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Hematoxylin

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

water (7732-18-5)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

ethylene glycol (107-21-1)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. State regulations

 **WARNING:** This product can expose you to ethylene glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
acetic acid, glacial(64-19-7)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
ethylene glycol(107-21-1)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date : 6/26/2025

Issue date : 2/10/2025

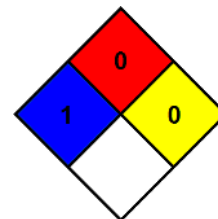
Full text of hazard classes and H-statements

H226	Flammable liquid and vapor
H272	May intensify fire; oxidizer
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Safety Data Sheet (SDS), USA

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness