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Date: June 1, 2015

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SECTION 1: IDENTIFICATION

Product: Hematoxvlin Normal

Product number: 812

Synonyms: Nuclear stain solution

Recommended use: Laboratory chemical

Company

Anatech Ltd	24 hour Transportation Emergency	800.424.9300 CHEMTREC
1020 Harts Lake Road	Product Technical Information	800.262.8324, M-F, 8 AM-5 PM, ET
Battle Creek, MI 49037, USA	Supplier General Contact	800.262.8324, M-F, 8 AM-5 PM, ET

SECTION 2: HAZARD(S) IDENTIFICATION

Classification of substance

Acute toxicity, oral (Category 4)
Specific target organ toxicity, repeated exposure (STOT-RE) (Category 2) (Kidneys)

Signal word

Warning

Hazard statement

Harmful if swallowed.

May cause damage to kidneys through prolonged or repeated exposure (oral routes).

Pictogram





Precautionary statements

Prevention

Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product.

Do not breath mist/vapors/spray.

Response

If swallowed or feel unwell: Call poison center or get medical advice/attention. Rinse mouth.

Disposal

Dispose of contents/containers in accordance with governmental regulations.

Hazards not otherwise classified

Causes eye irritation.

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SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical name	CAS#	Concentration	
Acetic acid	64-19-7	1-2%	
Aluminum sulfate	10043-01-3	3-5%	
Ethylene glycol	107-21-1	18-28%	
Hematoxylin	517-28-2	<1%	
Sodium iodate	7681-55-2	<1%	

^{*}As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals in accordance with applicable provisions of paragraph (i).

SECTION 4: FIRST-AID MEASURES

Description of first-aid measures

Inhalation	Remove victim to fresh air if coughing or difficulty in breathing is experienced. Consult a physician if symptoms persist or worsen. Administer oxygen or artificial respiration as needed.	
Eye	Flush eyes for at least 15 minutes in an eyewash station. Consult a physician.	
Skin	Remove contaminated clothing, including footwear; wash before reuse or discard. For minor exposure, wash affected area with water and mild soap, rinsing thoroughly. In cases of prolonged, repeated or extensive exposure, rinse affected area or entire body for at least 15 minutes. Consult a physician.	
Ingestion	Call a poison center immediately.	

Important symptoms, acute and delayed

No information available.

Recommendations for immediate medical care and special treatment

See listed first-aid procedures. No information available for special treatment. Treat according to symptoms.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable and unsuitable extinguishing media

Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

Specific hazards arising from the product

Hazardous products of combustion: carbon monoxide and carbon dioxide.

Special protective equipment/precautions for fire-fighters

Fire-fighters may wear self-contained breathing apparatus if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions

Ensure adequate ventilation.
Avoid inhalation of vapors.
Avoid contact with skin and eyes.

Protective equipment

Wear protective gloves, impermeable aprons and splash-proof goggles.

Emergency procedures

See information in sub-section above.

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Methods and materials for containment and cleanup

Contain and soak up spill with inert absorbent material. Small spills can be cleaned with a damp sponge. Discard absorbents and other contaminated solids in a suitable trash receptacle. Wash contaminated area with soap and water.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes.

Avoid inhalation of vapors.

Wear protective gloves, impermeable aprons and splash-proof goggles.

Conditions for safe storage including incompatibilities

Keep containers tightly closed. Store at room temperature.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure limits

Chemical name	CAS#	Exposure Limit	Value
Acetic acid	64-19-7	OSHA (8 hr TWA)	10 ppm
Aluminum sulfate	10043-01-3		Not established for
			solutions
Ethylene glycol	107-21-1	ACGIH Ceiling	100 mg/m ³ Aerosol
			only
Hematoxylin	517-28-2	None established	
Sodium iodate	7681-55-2	None established	

Appropriate engineering controls

Good general room ventilation should be provided so that exposure limits are not exceeded. If required provide local exhaust ventilation to control vapors.

Personal protective measures

Respiratory protection	None needed for this concentration. When risk assessment shows one is necessary, wear respirator with organic vapor cartridge.
Eye protection	Use splash-proof goggles. Wear face shield if splashing hazard exists. An eyewash station must be nearby, no more than 10 seconds away.
Skin protection	Wear nitrile or chemical resistant gloves. Do not use latex surgical gloves for protection. Safety shower must be nearby, no more than 10 seconds away.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Value
Appearance	Dark purple, liquid
Odor	Slight vinegar odor
Odor threshold	No data available
pH	2.1-2.7
Melting point/freezing point	No information available
Initial boiling point and boiling range	No information available
Flash point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Upper/lower flammability or explosive limits	No information available
Vapor pressure	No information available
Vapor density	No information available
Relative density	No information available
Solubility(ies)	Complete in water
Partition coefficient: n-octanol/water	No information available
Auto-ignition temperature	No information available
Decomposition	No information available
Viscosity	No information available

SECTION 10: STABILITY AND REACTIVITY

Reactivity

No hazardous reactions if stored and handled as indicated.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reaction

The product is chemically stable.

Conditions to avoid

None under normal use conditions.

Incompatible materials

Strong oxidants, acids and alkalis.

Hazardous decomposition products

No hazardous decomposition products if stored and handled as indicated.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely routes of exposure

Skin, eye, inhalation.

Symptoms related to physical, chemical and toxicological characteristics

None under normal use conditions.

Eye contact causes irritation.

Delayed and immediate effects

See information in sub-section above.

Chronic effects from short- and long-term exposure

No information available for this product.

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Numerical measures of toxicity

No data to classify the product. The following information is for 100% ethylene glycol.

Acute toxicity, dermal (rabbit)	LD ₅₀ >10,626 mg/kg
Acute toxicity, oral (rat)	LD ₅₀ >4,700 mg/kg

Assessment of other acute effects

No data to classify the product. The following information is for 100% ethylene glycol.

Specific target organ toxicity, repeated exposure (STOT-RE): may cause damage to organs through prolonged or repeated exposure. Route: Oral. Affected organs: Kidneys.

Rabbit: mild eye irritation, 24 hours

Carcinogenicity

None as defined by 29 CFR 1900.1200.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

No environmental information is known for product.

The following data are from studies using 100% ethylene glycol.

LC=lethal concentration; EC=effective concentration

Test	Duration	Organism	Test Results
Toxicity-fish	96 hours	Rainbow trout	LC ₅₀ =18,500 mg/l
Toxicity-aquatic invertebrates	48 hours	Daphnia (water flea)	$LC_{50} = 41,000 \text{ mg/l}$

Persistence and degradability

No information available.

Bioaccumulative potential

Bioconcentration factor for 100% ethylene glycol: 0.60, 61 days.

Mobility in soil

Full strength glyoxal will not evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is not expected.

Other adverse effects

No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

Drain disposal may be possible with the permission of local wastewater treatment authorities. Otherwise contact a licensed professional waste disposal service to dispose of this material. Proper waste disposal is the generator's responsibility. Follow federal, state (provincial) and local regulations.

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SECTION 14: TRANSPORT INFORMATION

DOT (USA)

Not regulated as a dangerous good.

IATA

Not regulated as a dangerous good.

Marine pollutant

No information available.

SECTION 15: REGULATORY INFORMATION

OSHA Hazard Communication Standard

This product is considered hazardous in accordance with 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NFPA (National Fire Protection Association) Rating

General note: The ratings provide information to emergency personnel on the fire hazards associated with the chemical. It is not descriptive of hazards under normal conditions of occupational use.

Health 0 Materials that, under emergency conditions, would offer no hazard beyond that coordinary combustible materials. Flammability 1 Materials that must be moderately preheated before ignition can occur. Instability 0 Materials that in themselves are normally stable, even under fire conditions.		Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.
		Materials that must be moderately preheated before ignition can occur.
		Materials that in themselves are normally stable, even under fire conditions.

Disclaimer

Anatech Ltd. believes the information in the SDS was obtained from reliable sources. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn may be from sources other than direct test data on the substance itself. It is the user's responsibility to determine suitability of the product for his/her own use, and to assure proper use and disposal of it to protect the safety and health of employees and the protection of the environment.

Date of preparation

June 1, 2015