StatLab medical products

Material Safety Data Sheet

Eosin Multichrome Reserve

Section 1. Product and Preparation Information

Product Identifier
Eosin Multichrome Reserve

Product Use
Routine hematoxylin and eosin staining

Date Prepared
Dec 2009

Synonyms / Chemical Name
Denatured ethyl alcohol, disodium eosine

Manufacturer/ Preparer
Stat Lab
407 Interchange St.
McKinney, Texas 75071
469.525.4825
Fax: 972.436.1369
Tech Support: 1.800.442.3573

Emergency Contact
Chemtrec USA and Canada 800.424.9300
Chemtrec International 703.527.3887
USA Non-Transport Calls 800.225.8867

Section 2. Protective Measures

NFPA

US DOT

Personal Protection

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

Emergency Overview

HIGHLY FLAMMABLE LIQUID AND VAPOR, VAPOR MAY CAUSE FLASH FIRE. CANNOT BE MADE NON-POISONOUS. MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED. CONTAINS MATERIAL THAT MAY CAUSE BLOOD, NERVOUS SYSTEM, REPRODUCTIVE SYSTEM, LIVER, GASTROINTESTINAL TRACT, RESPIRATORY TRACT, SKIN AND EYE DAMAGE. KEEP AWAY FROM HEAT, SPARKS AND FLAME. KEEP CONTAINER CLOSED. USE ONLY WITH ADEQUATE VENTILATION. FOR LABORATORY USE ONLY.

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. If air concentrations may exceed lower explosive limit, use explosion-proof 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
Unused Product – Dispose as a regulated hazardous waste.
Spent product or spill clean up - Follow all provincial and federal rules.

Section 3. Hazardous Ingredients

Hazardous Ingredient	% wt.	CAS Number	LD50	LC50
Eosin Y Dye	N/A	17372-87-1	2,344 mg/kg oral mouse	N/A
Glacial Acetic acid	N/A	64-19-7	1,060 mg/kg acute dermal rat	5,620 ppm/1hr inhalation mouse
Ethanol	75.1	64-17-5	7,060 mg/kg oral rat	20,000 ppm/10 hr. inhalation rat
			3,450 mg/kg oral mouse	39 gm/m³/4hr inhalation mouse
Isopropanol	4.1	67-63-0	5,045 mg/kg oral rat	72,600 mg/m³ inhalation rat
			3,600 mg/kg oral mouse	53,000 mg/m³ inhalation mouse
Methanol	3.7	67-56-1	5,600 mg/kg oral rat	64,000 ppm/4 hr. inhalation rat
			7,300 mg/kg oral mouse	81,000 mg/m³/14hr rabbit
Phloxine B dye	<0.3	18472-87-2	84,00 mg/kg oral rat	N/A
Orange G dye	<0.1	1936-15-8	N/A	5,620 ppm/1hr inhalation mouse

TDG PIN

Section 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 least15 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.

Section 5. Physical Data

Physical State	Odor and Appearance	Odor Threshold (ppm)	Solubility	Auto-ignition Temp
Liquid	Fragrant odor, orange, reddish	180 ppm Ethanol	Soluble in water	685°F (362°C)
Vapor Pressure	**Vapor Density**	**Evaporation Rate**	**Boiling Point**	**Flash Point CC**
97mmHg @ 20C (MeOH)	1.88 (air-1)	N/A	178°F (81.1°C)	73°F (23°C)
pH	**Specific Gravity**	**Coeff. Water/oil Dist.**	**Freezing Point**	**Flammable Limits**
4-5	0.80 Water=1	N/A	-65.4°F (-54.1°C)	LEL – 3.3% UEL – 19%

Section 6. Fire and Explosion

Flammability
Flammable Liquid IB

Conditions
Excessive heat, sparks and open flames.

Fl. Pt - Auto Ignition - Flammable Limits
See Physical Data above

Explosivity
Not explosive under normal conditions of use. Vapors are heavier than air and may settle in low areas. Vapors may travel long distances to an ignition source and flash back explosively. Flame may be invisible. Not sensitive to impact. Probably will not accumulate static charge due to high electrical conductivity, however proper grounding during transfer is recommended

Hazardous Combustion Products
CO, CO_2, NO, NO_2, SO_2, SO_3

Means to Extinguish
Small Fire – Use DRY chemical powder. Large Fire – Use alcohol foam, water spray or fog

Section 7. Reactivity

Stability
Product is stable under normal conditions of use.

Hazardous Decomposition Products
CO from incomplete combustion

Conditions of Reactivity
N/A

Hazardous Polymerization
No hazardous polymerization.

Incompatibility
Slightly reactive to reactive with oxidizing agents.

Section 8. Toxicological Properties

Routes of Entry N/A Target Organs Skin, eyes and respiratory tract

Effects of Acute Exposure

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

Exposure Limits	OSHA PEL TWA	ACGIH TLV TWA	STEL	TWAEV (Ont.)	STEV (Ont.)	CEV (Ont.)
Ethanol	1,900 ppm	1,000 ppm	N/A	1,000 ppm	N/A	N/A
Isopropanol	980 mg/m³	400 ppm	500 ppm	200 ppm	400 ppm	N/A
Methanol	260 ppm	200 ppm	250 ppm	200 ppm	250 ppm	N/A
Glacial Acetic acid	25 mg/m³	10 ppm 15 ppm C	15 ppm	10 ppm	15 ppm	N/A
Eosin Y Dye	N/A	N/A	N/A	N/A	N/A	N/A
Phloxine B Dye	N/A	N/A	N/A	N/A	N/A	N/A
Orange G Dye	N/A	N/A	N/A	N/A	N/A	N/A

Section 9. Regulatory Information

OSHA Hazardous
Yes

Cal. Prop. 65
Not listed

Canadian WHMIS
B2, D1B

RCRA Regulated
D001, F003

SARA 302/304
Not listed

SARA 313
MeOH, IPA listed

CERCLA 102A
MeOH Listed

RQ
5000 lbs. MeOH

CWA 307
Glacial acetic acid listed

CWA 311
Not Listed

CAA 112 Release Prevention
MeOH listed

CAA 112 Reg. Flam. Substance
Not listed

CAA 112 Reg. Toxic Substance
Not Listed

TSCA Inventory
All ingredients listed

EEC Flammability
R11 – Highly Flammable

CEPA DSL
All Ingredients Listed

Proper US DOT Shipping Name
Ethyl alcohol solutions, 3, UN1170 Pg. II

TDG Classification
Class 3 Flammable Liquid

IATA Classification
Class 3 Flammable Liquid

Limited Quantity
49CFR & IMDG only

The information provided above is based upon unused product.

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