

ACC# 94621

Print Date: 4/28/08 Revision Date: 4/28/2008 Version:1

Safety Data Sheet Eosin-Y Alcoholic

Section 1-Chemical Product and Company Identification

SDS Name: **Eosin-Y Alcoholic** Catalog Numbers: 71204,71211,71225 Synonyms: None Known. Company Identification: **Richard Allan Scientific** 4481 Campus Drive Kalamazoo, MI49008 Company Phone Number: 800-522-7270 **Emergency Phone Number:** 800-424-9300 CHEMTREC Phone Number, US: (800) 424-9300 CHEMTREC Phone Number, Europe: (202) 483-7616

Section 2 - Composition, Information on Ingredients

CAS#	ChemicalName:	Percent	EINECSI ELINCS	Hazard Symbols	RlakPh
64-17-5	Ethyl alcohol	52-55	200-578-6	F	11
7732-18-5	Deionized Water	37-40	231-791-2		
67-56-1	Methyl alcohol	2.5-3.5	200-659-6	FT	11 23/24/25 39/23/24/25
67-63-0	Isopropyl alcohol	2.5-3.5	200-661-7	FXI	11 36 67
64-19-7	Acetic acid	<1	200-580-7		
17372-87-1	Acid red 87	<1.0	241-409-6		





Safety Data Sheet Eosin-Y Alcoholic

Section 3-Hazards Identification

EMERGENCY OVERVIEW

Appearance: Light orange liquid

Warning! Causes severe eye irritation. Flammable liquid and vapor. Causes respiratory tract irritation. This substance has caused adverse reproductive and fetal effects in humans. May cause central neNous system depression. May cause liver, kidney and heart damage. Causes moderate skin irritation. Flash Point: 22°C. Target Organs: Kidneys, Heart, Central neNous system, Liver, Eyes, Optic nerve

Potential Health Effects

Eye:

Causes severe eye irritation. May cause painful sensitization to light. May cause chemical conjunctivitis and corneal damage. Inhalation, ingestion or skin absorption of methanolcan cause significant disturbances in vision, including blindness.

Skin:

Causes moderate skin irritation. May cause cyanosis of the extremities. Methanol can be absorbed through the skin, producing systemic effects that include visual disturbances.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea.May cause systemic toxicity with acidosis.May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.

Inhalation:

Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May cause narcotic effects in high concentration. Vapors may cause dizziness or suffocation.

Chronic:

May cause reproductive and fetal effects.Laboratory experiments have resulted in mutagenic effects. Animal studies have reported the development of tumors. Prolonged exposure may cause liver, kidney, and heart damage.

Section 4 - First Aid Measures

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Get medical aid.Wash clothing before reuse. Flush skin with plenty of soap and water.

Ingestion:

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water.Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.



Safety Data Sheet Eosin-Y Alcoholic

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

GeneralInfonnation:

Treat symptomatically and supportively. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may fonn an explosive mixture with air. Vapors can travelto a source of ignition and flash back. Will burn if involved in a fire.Flammable Liquid. Can release vapors that fonn explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers.Water may be ineffective. Do NOT use straight streams of water.

Autoignition Temperatura:

Not available

Explosion Limits:

Lower: Not available Upper: Not available

Flash Point:

22°C (71.60°F)

NFPA Rating:

(estimated) Health: 2; Flammability: 3; Instability: 0

Section 6 - Accidental Release Measures

GeneralInfonnation:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation.A vapor suppressing foam may be used to reduce vapors.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Use only in a well-ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Do not store near perchlorates, peroxides, chromic acid or nitric acid.



Safety Data Sheet Eosin-Y Alcoholic

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name:	ACGIH	NIOSH	OSHA
Ethylalcohol	1000 ppmIWA	1000 ppm TWA;1900 mglm3 TWA 3300 ppm IDLH {10% FL)	1000 ppm TWA; 1900 mglm31WA;
Deionized Water	None listed	None listed	None listed
Methylalcohol	200 ppm 1WA;250 ppm STEL;Skin - potential significant contribution to overall exposure by the cutaneous route	200 ppm TWA; 260 mg/m3 TWA 6000 ppm IDLH	200 ppm TWA;260 mg/m31WA;
Isopropylalcohol	200 ppm 1WA;400 ppm STEL	400 ppm TWA; 980 mg/m3 TWA 2000 ppm IDLH {10% LEL)	400 ppm TWA;980 mg/m31WA;
Acetic acid	10 ppm 1WA;15 ppm STEL	10 ppm TWA; 25 mg/m3 TWA 50 ppm IDLH	10 ppm TWA; 25 mg/m31WA;
Acid red 87	None listed	None listed	None listed
OSHA Vacated PELs			

Ethyl alcohol: 1000 ppm TWA; 1900 mg/m3 TWA Methyl alcohol: 200 ppm TWA: 260 mg/m3 TWA Isopropyl alcohol: 400 ppm TWA; 980 mg/m3 TWA Acetic acid:10 ppm TWA; 25 mg/m3 TWA

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemicalsafety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: Clear - light orange Odor: No information found



ACC# 94621

Safety Data Sheet Eosin-Y Alcoholic

pH: No information found Vapor Pressure: No information found Vapor Density: No information found Evaporation Rate: No information found VIscosity: No information found Boiling Point: No information found Freezing/Melting Point: No information found Decomposition Temperature: No information found Solubility in water: No information found Specific Gravity/Density: No information found Molecular Formula: Solution Molecular Weight: No information found

Section 10 – Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, ignition sources, excess heat, oxidizers

Incompatibilities with Other Materials

Strong oxidizing agents, acids, alkali metals, ammonia, hydrazine, peroxides, sodium, acid anhydrides, calcium hypochlorite, chromyl chloride,nitrosyl perchlorate,bromine pentafluoride,perchloric acid, silver nitrate,mercuric nitrate, potassium tert-butoxide,magnesium perchlorate, acid chlorides, platinum, uranium hexafluoride, silver oxide,iodine heptafluoride, acetyl bromide, disulfuryl difluoride, tetrachlorosilane + water, acetyl chloride, permanganic acid, ruthenium (VIII) oxide,uranyl perchlorate, potassium dioxide

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide

Hazardous Polymerization

Has not been reported.

Section 11-Toxicological Information

RTECS:

CAS# 64-17-5: KQ630000 CAS# 7732-18-5: ZC0110000 CAS# 67-56-1: PC1400000 CAS# 67-63-0: NT8050000 CAS# 64-19-7: AF1225000 CAS# 17372-87-1: LM5850000



Print Date: 4/28/08 Revision Date: 4/28/2008 Version:1

Safety Data Sheet Eosin-Y Alcoholic

LD50/LC50:

CAS# 64-17-5: Draize test, rabbit, eye: 500 mg Severe Draize test, rabbit, eye: 500 mg/24H Mild Draize test, rabbit, skin: 20 mg/24H Moderate Inhalation, mouse:LC50 = 39 gm/m3/4H Inhalation, rat: LC50 = 20000 ppm/1OH Oral, mouse:LD50 = 3450 mg/kg Oral, rabbit: LD50 = 6300 mg/kg Oral, rat: LD50 = 7060 mg/kg Oral, rat: LD50 = 9000 mg/kg. CAS# 7732-18-5: Oral, rat: LD50 = >90 mUkg. CAS# 67-56-1: Draize test, rabbit, eye: 40 mg Moderate Draize test, rabbit, eye: 100 mg/24H Moderate Draize test, rabbit, skin: 20 mg/24H Moderate Inhalation, rabbit: LC50 = 81000 mg/m3/14H Inhalation, rat: LC50 = 64000 ppm/4H Oral, mouse:LD50 = 7300 mg/kg Oral, rabbit: LD50 = 14200 mg/kg Oral, rat: LD50 = 5600 mg/kg Skin, rabbit: LD50 = 15800 mg/kg. CAS# 67-63-0: Draize test. rabbit, eye: 100 mg Severe Draize test, rabbit, eye: 10 mg Moderate Draize test, rabbit, eye: 100 mg/24H Moderate Draize test. rabbit, skin: 500 mg Mild Inhalation, mouse:LC50 = 53000 mg/m3 Inhalation, rat: LC50 = 16000 ppm/8H Inhalation, rat: LC50 = 72600 mg/m3 Oral, mouse:LD50 = 3600 mg/kg Oral, mouse:LD50 = 3600 mg/kg Oral, rabbit: LD50 = 6410 mg/kg Oral, rat: LD50 = 5045 mg/kg Oral, rat: LD50 = 5000 mg/kg Skin, rabbit: LD50 = 12800 mg/kg. CAS# 64-19-7: Draize test, rabbit, skin: 50 mg/24H Mild Inhalation, mouse:LC50 = 5620 ppm/1H Oral, rat: LD50 = 3310 mg/kg Skin, rabbit: LD50 = 1060 uUkg. CAS# 17372-87-1: Oral, mouse:LD50 = 2344 mg/kg.

Carcinogenicity:

CAS# 64-17-5 ACGIH: Not listed
California:Not listed NTP: Not listed IARC:Group 1 carcinogen
CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NTP, orCA Prop 65.
CAS# 67-56-1: Not listed as a carcinogen by ACGIH, IARC, NTP, orCA Prop 65.



Safety Data Sheet

Eosin-Y Alcoholic

CAS# 67-63-0: Not listed as a carcinogen by ACGIH, IARC, NTP, orCA Prop 65. CAS# 64-19-7: Not listed as a carcinogen by ACGIH, IARC, NTP, orCA Prop 65. CAS# 17372-87-1: Not listed as a carcinogen by ACGIH, IARC, NTP, orCA Prop 65.

Epidemiology:

Ethanol has been shown to produce fetotoxicity in the embryo or fetus of laboratory animalsPrenatal exposure to ethanol is associated with a distinct pattern of congenital malformations that have collectively been termed the "fetal alcohol syndromew.Methanolhas been shown to produce fetotoxicity in the embryo or fetus of laboratory animals. Specific developmental abnormalities include cardiovascular, musculoskeletal, and urogenitalsystems.

Teratogenicity:

Oral, Human-woman: TOLe=41 gm/kg (female 41 week(s) after conception) Effects on Newborn-Apgar score {human only) and Effects on Newborn - other neonatal measures or effects and Effects on Newborn - drug dependence.

Reproductive:

Intrauterine,Human -woman:TDLo = 200 mg/kg {female 5 day(s) pre-mating) Fertility -female fertility index (e.g. #females pregnant per# sperm positive females; #females pregnant per# females mated).

Mutagenicity:

DNA Inhibition: Human,Lymphocyte = 220 mmoi/L.;Cytogenetic Analysis: Human, Lymphocyte = 1160 grn/L.; Cytogenetic Analysis: Human, Fibroblast= 12000 ppm.;Cytogenetic Analysis: Human, Leukocyte = 1 pphn2H (Continuous).; Sister Chromatid Exchange: Human, Lymphocyte= 500 ppm/72H (Continuous).

Neurotoxicity:

No information found

Other:

Standard Draize Test(Skin, rabbit)= 20 mg/24H (Moderate) Standard Draize Test: Administration into the eye (rabbit)= 500 mg (Severe).

Section 12 – Ecological Information

Ecotoxicity:

Fish: Rainbow trout: LC50 = 12900-15300 mg/L; 96 Hr; Flow-through@ 24-24.3°C Fish: Rainbow trout: LC50 = 11200 mg/L; 24 Hr; Fingerling (Unspecified) Bacteria: Phytobacterium phosphoreum:EC50 = 34900 mg/L; 5-30 min; Microtox test

When spilled on land it is apt to volatilize,biodegrade, and leach into the ground water, but no data on the rates of these processes could be found. Its fate in ground water is unknown. When released into water it will volatilize and probably biodegrade. It would not be expected to adsorb to sediment or bioconcentrate in fish.

Environmental:

When released to the atmosphere it will photodegrade in hours (polluted urban atmosphere) to an estimated range of 4 to 6 days in less polluted areas.Rainout should be significant.

Physical:

No information found

Other:

No information found



Safety Data Sheet Eosin-Y Alcoholic

Section 13 - Disposal Considerations

Chemicalwaste generators must detennine whether a discarded chemical is classified as a hazardous waste.US EPA guidelines for the classification determination are listed in 40 CFR Part 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. **RCRA P Series Wastes** None of the components are on this list. **RCRA U Series Wastes** CAS# 67-56-1: waste number U154 (Ignitable waste). Section 14 – Transport Information US DOT Canadian TOG Proper Shipping ALCOHOLS, ALCOHOLS, N.O.S. Name: N.O.S. (Ethanol, Methanol) 3 Hazard Class: 3 UN1987 UN Number: UN1987 Ш Packing Group: Ш USA RQ:CAS# 67-56-1: 5000 lb finalRQ;2270 kg final RQ USA RQ:CAS# 64-19-7: 5000 lb finalRQ;2270 kg final RQ

Section 15 - Regulatory Information

US Federal

TSCA

CAS# 64-17-5 is listed on the TSCA Inventory. CAS# 7732-18-5 is listed on the TSCA Inventory. CAS# 67-56-1 is listed on the TSCA Inventory. CAS# 67-63-0 is listed on the TSCA Inventory. CAS# 64-19-7 is listed on the TSCA Inventory. CAS# 17372-87-1 is listed on the TSCA Inventory. CAS# 17372-87-1 is listed on the TSCA Inventory. Health and Safety Reporting List CAS# 67-63-0: Effective 12/15/86, Sunset 12/15/96 Chemical Test Rules CAS# 67-63-0:40 CFR 799.2325 TSCA Section 12b None of the components are on this list. TSCA Significant New Use Rule {SNUR} None of the components are on this list.



Print Date: 4/28/08 Revision Date: 4/28/2008 Version:1

Safety Data Sheet

Eosin-Y Alcoholic

CERCLA Hazardous Substances and corresponding RQs CAS# 67-56-1: 5000 lb final RQ; 2270 kg final RQ

CAS# 64-19-7: 5000 lb finalRQ;2270 kg final RQ

SARA Section 302 Extremely Hazardous Substances

None of the components are on this list.

SARA Hazard Categories

CAS# 64-17-5: immediate, delayed, fire. CAS# 67-56-1: immediate, fire. CAS# 67-63-0: immediate, delayed, fire. CAS# 64-19-7: immediate, delayed, fire. CAS# 17372-87-1: immediate.

SARA Section 313

This material contains Methyl alcohol (CAS# 67-56-1, 2.5-3.5%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 372. This material contains Isopropyl alcohol (CAS# 67-63-0, 2.5-3.5%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 372.

Clean Air Act - Hazardous Air Pollutants (HAPs)

CAS# 67-56-1 is listed as a hazardous air pollutant (HAP).

Clean Air Act - Class 1 Ozone Depletors

None of the components are on this list.

Clean Air Act - Class 2 Ozone Depletors

None of the components are on this list.

Clean Water Act - Hazardous Substances

CAS# 64-19-7 is listed as a Hazardous Substance under the CWA.

Clean Water Act-Priority Pollutants

None of the components are on this list.

Clean Water Act -Toxic Pollutants

None of the components are on this list.

OSHA- Highly Hazardous

None of the components are on this list.

OSHA -Specifically Regulated Chemicals

None of the components are on this list.

US State

State Right to Know

Ethyl alcohol can be found on the following state Right-to-Know lists:California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

Methylalcoholcan be found on the following state Right-to-Know lists: California, New Jersey,

Pennsylvania, Minnesota, Massachusetts.

Isopropyl alcohol can be found on the following state Right-to-Know lists:California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

Acetic acid can be found on the following state Right-to-Know lists:California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

No information found

California Prop 65

None of the components are on this list.



Print Date: 4/28/08 Revision Date: 4/28/2008 Version:1

Safety Data Sheet Eosin-Y Alcoholic

California No Significant Risk Level

None of the components are on this list. None of the components are on this list.

European/International Regulations

European Labelling in Accordance with EC Directives:

Hazard Symbols: F XN Risk Phrases: R 11 Highly flammable. R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R 68/20/21/22 Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed. Safety Phrases: S 7 Keep container tightly closed.

S 16 Keep away from sources of ignition - No smoking.

S 36/37 Wear suitable protective clothing and gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the labelwhere possible).

WGK (Water Danger/Protection)

No information found

United Kingdom Occupational Exposure Limits

No information found

United Kingdom Maximum Exposure Limits

No information found

Canadian DSUNDSL

CAS# 64-17-5 is listed on Canada's DSL List. CAS# 7732-18-5 is listed on Canada's DSL List. CAS# 67-56-1 is listed on Canada's DSL List. CAS# 67-63-0 is listed on Canada's DSL List. CAS# 64-19-7 is listed on Canada's DSL List. CAS# 17372-87-1 is listed on Canada's DSL List.

Canadian WHMIS Classifications

This product has a WHMIS classification of B2, D2A, D1B, D2B. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 64-17-5 is listed on the Canadian Ingredient Disclosure List. CAS# 67-56-1 is listed on the Canadian Ingredient Disclosure List. CAS# 67-63-0 is listed on the Canadian Ingredient Disclosure List. CAS# 64-19-7 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Other Information

No information found MSDS Creation Date: April28, 2008 Revision Date: April28,2008



ACC# 94621

Safety Data Sheet Eosin-Y Alcoholic

Revisions were made in Sections:

9, 14

This SDS is intended for review and guidance in the receipt, storage, handling, use and disposal of product purchased from us, and for no other purpose. Use this product only as directed and in accordance with applicable instructions and warnings provided with the product. Please consult your institution's policies regarding use of this product. If you have obtained this SDS other than in connection with the supply of this product from us, this SDS should be consulted for general information only, and should not be relied upon for any purpose. As with the use of all hazardous materials, you should in all instances follow the guidance of the SDS provided or available with the specific product purchased.