

# SAFETY DATA SHEET

Creation Date 03-Nov-2014 Revision Date 03-Nov-2014 **Revision Number 1** 

## 1. Identification

**Product Name Shandon Eosin-Y Alcoholic** 

Cat No.: 6766007, 6766008, 9990001

No information available **Synonyms** 

**Recommended Use** Laboratory chemicals.

Uses advised against No Information available

Details of the supplier of the safety data sheet

Company

Richard Allan Scientific A Subsidiary of Thermo Fisher Scientific

Kalamazoo, MI 49008 Tel: (800) 522-7270

4481 Campus Drive



# 2. Hazard(s) identification

**Emergency Telephone Number** 

Chemtrec EU: 001 (202) 483-7616

Chemtrec ÚS: (800) 424-9300

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids Category 1 Specific target organ toxicity (single exposure) Category 1

Target Organs - Central nervous system (CNS). Specific target organ toxicity - (repeated exposure)

Target Organs - Kidney, Liver, spleen.

Category 2

## **Label Elements**

## Signal Word

Danger

## **Hazard Statements**

Extremely flammable liquid and vapor May cause drowsiness or dizziness Causes damage to organs May cause damage to organs through prolonged or repeated exposure



## **Precautionary Statements**

#### Prevention

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Wear protective gloves/protective clothing/eye protection/face protection

Keep cool

#### Response

IF exposed: Call a POISON CENTER or doctor/physician

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

#### Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

#### Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

## Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

#### Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

#### Other hazards

WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

# 3. Composition / information on ingredients

Component	CAS-No	Weight %
Water	7732-18-5	37-40
Ethyl alcohol	64-17-5	54-56
Methyl alcohol	67-56-1	2-3
Isopropyl alcohol	67-63-0	2-3
Acetic acid	64-19-7	<1
Eosin-Y Dye	17372-87-1	<1

## 4. First-aid measures

General Advice If symptoms persist, call a physician. Show this safety data sheet to the doctor in

attendance.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye

wide open while rinsing. If symptoms persist, call a physician.

**Skin Contact**Wash off immediately with plenty of water for at least 15 minutes. Immediate medical

attention is required. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms

persist, call a physician.

Inhalation Move to fresh air. If breathing is difficult, give oxygen, Do not use mouth-to-mouth

> resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required. Immediate medical attention is not required. If symptoms persist, call a physician. Move to fresh air in case of

accidental inhalation of vapors or decomposition products.

Do not induce vomiting. Call a physician or Poison Control Center immediately. Clean Ingestion

> mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a

physician.

Most important symptoms/effects Breathing difficulties. Inhalation of high vapor concentrations may cause symptoms like

headache, dizziness, tiredness, nausea and vomiting

Notes to Physician Treat symptomatically

# 5. Fire-fighting measures

Suitable Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use:. Dry

chemical. Carbon dioxide (CO2). Water spray. alcohol-resistant foam.

**Unsuitable Extinguishing Media** No information available

22.0 °C / 71.6 °F **Flash Point** 

Method -No information available

**Autoignition Temperature** 

**Explosion Limits** 

No information available

No data available Upper No data available Lower Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

#### **Specific Hazards Arising from the Chemical**

Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Keep product and empty container away from heat and sources of ignition.

## **Hazardous Combustion Products**

Carbon monoxide (CO) Carbon dioxide (CO2)

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA\_

Health	Flammability	Instability	Physical hazards
3	4	0	N/A

#### Accidental release measures Use personal protective equipment. Remove all sources of ignition. Take precautionary **Personal Precautions** measures against static discharges. Do not get in eyes, on skin, or on clothing. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Pay attention to flashback. **Environmental Precautions** Should not be released into the environment. See Section 12 for additional ecological information. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

# Up

Methods for Containment and Clean Remove all sources of ignition. Soak up with inert absorbent material. Take precautionary measures against static discharges. Keep in suitable, closed containers for disposal.

# 7. Handling and storage

Handling

Use only under a chemical fume hood. Wear personal protective equipment. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Do not ingest. Pay attention to flashback. Contents under pressure. No information available. Do not take internally. Avoid contact with clothing.

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Flammables area. Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Keep in properly labeled containers.

# 8. Exposure controls / personal protection

## **Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl alcohol	STEL: 1000 ppm	(Vacated) TWA: 1000 ppm (Vacated) TWA: 1900 mg/m³ TWA: 1000 ppm TWA: 1900 mg/m³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m³
Methyl alcohol	TWA: 200 ppm STEL: 250 ppm Skin	(Vacated) TWA: 200 ppm (Vacated) TWA: 260 mg/m³ (Vacated) STEL: 250 ppm (Vacated) STEL: 325 mg/m³ Skin TWA: 200 ppm TWA: 260 mg/m³	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 325 mg/m³
Isopropyl alcohol	TWA: 200 ppm STEL: 400 ppm	(Vacated) TWA: 400 ppm (Vacated) TWA: 980 mg/m³ (Vacated) STEL: 500 ppm (Vacated) STEL: 1225 mg/m³ TWA: 400 ppm TWA: 980 mg/m³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m³ STEL: 500 ppm STEL: 1225 mg/m³
Acetic acid	TWA: 10 ppm STEL: 15 ppm	(Vacated) TWA: 10 ppm (Vacated) TWA: 25 mg/m³ TWA: 10 ppm TWA: 25 mg/m³	IDLH: 50 ppm TWA: 10 ppm TWA: 25 mg/m³ STEL: 15 ppm STEL: 37 mg/m³

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV		
Ethyl alcohol	TWA: 1000 ppm TWA: 1880 mg/m <sup>3</sup>	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>	STEL: 1000 ppm		
Methyl alcohol	TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ Skin	TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 310 mg/m³	TWA: 200 ppm STEL: 250 ppm Skin		
Isopropyl alcohol	TWA: 400 ppm TWA: 985 mg/m³ STEL: 500 ppm STEL: 1230 mg/m³	TWA: 400 ppm TWA: 980 mg/m³ STEL: 500 ppm STEL: 1225 mg/m³	TWA: 200 ppm STEL: 400 ppm		
Acetic acid	TWA: 10 ppm TWA: 25 mg/m³ STEL: 15 ppm STEL: 37 mg/m³	TWA: 10 ppm TWA: 25 mg/m³ STEL: 15 ppm STEL: 37 mg/m³	TWA: 10 ppm STEL: 15 ppm		

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

Engineering Measures Use only under a chemical fume hood. Use explosion-proof

electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers

are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Skin and body protection Respiratory Protection

**Hygiene Measures** 

Tightly fitting safety goggles.

Long sleeved clothing. Chemical resistant apron. Antistatic boots. Impervious gloves. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area

and clothing.

# 9. Physical and chemical properties

Not applicable

Physical StateLiquidAppearanceLight orangeOdorAlcohol-like

Odor Threshold No information available

На

Melting Point/RangeNo data availableBoiling Point/RangeNot applicableFlash Point22.0 °C / 71.6 °FEvaporation RateNo information availableFlammability (solid,gas)No information available

Flammability or explosive limits

Upper
Lower
No data available
No data available
No data available
No information available
Vapor Density
No information available

Partition coefficient; n-octanol/water

Autoignition Temperature Decomposition Temperature Viscosity

Molecular Formula

No data available No information available No information available No information available

Solution

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under normal conditions.

Conditions to Avoid Incompatible products. Heat, flames and sparks. Heating in air.

Incompatible Materials Strong oxidizing agents, Acids, Acid anhydrides, Acid chlorides

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2)

**Hazardous Polymerization** Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

## 11. Toxicological information

**Acute Toxicity** 

**Product Information**No acute toxicity information is available for this product

Oral LD50Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.Dermal LD50Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.Vapor LC50Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.

**Component Information** 

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	
Ethyl alcohol	Not listed	Not listed	20000 ppm/10H ( Rat )	
Methyl alcohol	6200 mg/kg (Rat)	Not listed	22500 ppm (Rat) 8 h	
Isopropyl alcohol	5840 mg/kg (Rat)	13900 mg/kg (Rat) 12870 mg/kg (Rabbit)	72.6 mg/L (Rat)4 h	
Acetic acid	3310 mg/kg (Rat)	1060 mg/kg (Rabbit)	11.4 mg/L (Rat) 4 h	

**Toxicologically Synergistic** 

**Products** 

No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

 Irritation
 Irritating to eyes and skin

 Sensitization
 No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed Not listed		Not listed	Not listed
Ethyl alcohol	thyl alcohol 64-17-5		Not listed	A3	X	Not listed
Methyl alcohol	67-56-1	Not listed	Not listed	Not listed	Not listed	Not listed
Isopropyl alcohol	67-63-0	Not listed	Not listed	Not listed	Not listed	Not listed
Acetic acid	64-19-7	Not listed	Not listed	Not listed	Not listed	Not listed
Eosin-Y Dye	17372-87-1	Not listed	Not listed	Not listed	Not listed	Not listed

IARC: (International Agency for Research on Cancer)

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans

ACGIH: (American Conference of Governmental Industrial A1 - Known Human Carcinogen Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

ACGIH: (American Conference of Governmental Industrial Hygienists)

Mutagenic Effects No information available

**Reproductive Effects** Adverse reproductive effects have occurred in humans.

**Developmental Effects**Substances known to cause developmental toxicity in humans.

**Teratogenicity** Teratogenic effects have occurred in humans.

STOT - single exposure Central nervous system (CNS)

STOT - repeated exposure Kidney Liver spleen

Aspiration hazard No information available

delayed tiredness

Symptoms / effects,both acute and Inhalation of high vapor concentrations may cause symptoms like headache, dizziness,

tiredness, nausea and vomiting

**Endocrine Disruptor Information** No information available

Other Adverse Effects Tumorigenic effects have been reported in experimental animals. See actual entry in

RTECS for complete information.

# 12. Ecological information

**Ecotoxicity** 

Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea

Ethyl alcohol	EC50 (72h) = 275 mg/l (Chlorella vulgaris)	LC50 = 14200 mg/l/96h	Photobacterium phosphoreum:EC50 = 34634 mg/L/30 min Photobacterium phosphoreum:EC50 = 35470 mg/L/5 min	EC50 = 9268 mg/L/48h EC50 = 10800 mg/L/24h
Methyl alcohol	Not listed	Pimephales promelas: LC50 > 10000 mg/L 96h	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	EC50 > 10000 mg/L 24h
Isopropyl alcohol	1000 mg/L EC50 > 72 h 1000 mg/L EC50 > 96 h	1400000 µg/L LC50 96 h 11130 mg/L LC50 96 h 9640 mg/L LC50 96 h	= 35390 mg/L EC50 Photobacterium phosphoreum 5 min	13299 mg/L EC50 = 48 h 9714 mg/L EC50 = 24 h
Acetic acid	-	Pimephales promelas: LC50 = 88 mg/L/96h Lepomis macrochirus: LC50 = 75 mg/L/96h	phosphoreum: EC50 = 8.8	EC50 = 95 mg/L/24h

Persistence and Degradability

No information available

**Bioaccumulation/ Accumulation** 

No information available.

Mobility

Component	log Pow
Ethyl alcohol	-0.32
Methyl alcohol	-0.74
Isopropyl alcohol	0.05
Acetic acid	-0.2

# 13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Methyl alcohol - 67-56-1	U154	-

# 14. Transport information

DOT

UN-No UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3 Packing Group II

TDG

UN-No UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3
Packing Group ||

**IATA** 

UN-No UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3 Packing Group II

IMDG/IMO

**UN-No** UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3 Packing Group II

# 15. Regulatory information

All of the components in the product are on the following Inventory lists: Australia X = listed China Canada The product is classified and labeled according to EC directives or corresponding national laws The product is classified and labeled in accordance with Directive 1999/45/EC Europe TSCA Korea Philippines

#### International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Water	Х	Х	-	231-791-2	-		Х	-	Х	Х	Χ
Ethyl alcohol	Х	Х	-	200-578-6	-		Χ	Χ	Х	Х	Х
Methyl alcohol	Х	X	-	200-659-6	-		Χ	Χ	Χ	Х	X
Isopropyl alcohol	Х	Х	-	200-661-7	-		Χ	Х	Χ	Х	X
Acetic acid	Х	X	-	200-580-7	-		Χ	Χ	Χ	Х	Χ
Eosin-Y Dye	X	Х	-	241-409-6	-		Х	Х	Х	Х	X

## Legend:

- X Listed
- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

## U.S. Federal Regulations

**TSCA 12(b)** 

Not applicable

#### **SARA 313**

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Methyl alcohol	67-56-1	2-3	1.0
Isopropyl alcohol	67-63-0	2-3	1.0

## SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

## **Clean Water Act**

Com	ponent	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Acet	ic acid	X	5000 lb	-	-

#### Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Methyl alcohol	X		-

**OSHA** Occupational Safety and Health Administration Not applicable

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Methyl alcohol	5000 lb	-
Acetic acid	5000 lb	-

**California Proposition 65** 

This product contains the following Proposition 65 chemicals: Ethyl alcohol is only a considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Ethyl alcohol	64-17-5	Developmental	-	Developmental Carcinogen
Methyl alcohol	67-56-1	Developmental	-	Developmental

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Ethyl alcohol	X	X	X	X	X
Methyl alcohol	X	X	X	X	X
Isopropyl alcohol	X	X	Х	-	Х
Acetic acid	Х	Х	Х	-	Х

## **U.S. Department of Transportation**

Reportable Quantity (RQ): Y
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

#### **U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

## Other International Regulations

Mexico - Grade Moderate risk, Grade 2

#### Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class

B2 Flammable liquid
D1B Toxic materials

D2A Very toxic materials



## 16. Other information

Prepared By Regulatory Affairs

Richard Allan Scientific

A Subsidiary of Thermo Fisher Scientific

Tel: (800) 522-7270

**Creation Date** 03-Nov-2014 **Revision Date** 13-Feb-2014

Revision Date 13-Feb-2014

#### **Shandon Eosin-Y Alcoholic**

Print Date

13-Feb-2014

**Revision Summary** 

This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

## Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of SDS**