

SAFETY DATA SHEET

Creation Date 20-Mar-2014 Revision Date 20-Mar-2014 Revision Number 1

1. Identification

Product Name Carbol Fuchsin Stain

Cat No.: 88001

Synonyms No information available.

Recommended Use Laboratory chemicals

Uses advised against No Information available

Details of the supplier of the safety data sheet

CompanyEmergency Telephone NumberRichard Allan ScientificChemtrec US: (800) 424-9300

A Subsidiary of Thermo Fisher Scientific Chemtrec EU: 001 (202) 483-7616

4481 Campus Drive Kalamazoo, MI 49008 Tel: (800) 522-7270

2. Hazard(s) identification

Classification

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

Flammable liquids

Skin Corrosion/irritation

Serious Eye Damage/Eye Irritation

Germ Cell Mutagenicity

Specific target organ toxicity (single exposure)

Category 2

Category 2

Category 2

Category 3

Target Organs - Respiratory system, Central nervous system (CNS).

Specific target organ toxicity - (repeated exposure) Category 2

Target Organs - Kidney, Liver, Blood.

Label Elements

Signal Word

Danger

Hazard Statements

Flammable liquid and vapor Causes skin irritation Causes serious eye damage May cause respiratory irritation May cause drowsiness or dizziness Suspected of causing genetic defects

May cause damage to organs through prolonged or repeated exposure



Precautionary Statements

Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

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

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

Keep cool

Response

IF exposed or concerned: Get medical attention/advice

Inhalation

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

Skin

If skin irritation occurs: Get medical advice/attention

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

Wash contaminated clothing before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician.

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

Haz/Non-haz

Component	CAS-No	Weight %
Water	7732-18-5	73 - 75
Glycerin	56-81-5	9 - 10
Ethyl alcohol	64-17-5	7-10

3. Composition / information on ingredients					
Phenol	108-95-2	4 - 5			
Isopropyl alcohol	67-63-0	< 1.0			
Methyl alcohol	67-56-1	< 1.0			
Basic Fuchsin, high purity biological stain, special for	58969-01-0	<1			
flagella					

4. First-aid measures

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

Immediate medical attention is required.

Skin ContactWash off immediately with plenty of water for at least 15 minutes. Immediate medical attention

is required.

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.

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

Most important symptoms/effects Breathing difficulties. Causes burns by all exposure routes. Causes eye burns. Symptoms of

overexposure may be headache, dizziness, tiredness, nausea and vomiting. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe

damage to the delicate tissue and danger of perforation.

Notes to Physician Treat symptomatically.

5. Fire-fighting measures

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

containers exposed to fire with water spray.

Unsuitable Extinguishing Media No information available.

Flash Point 37.22°C / 99°F

Method - No information available

Autoignition Temperature

Explosion Limits

No information available.

UpperNo data availableLowerNo data available

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 (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 0 N/A

Accidental release measures

Personal Precautions

Use personal protective equipment. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Take precautionary measures against

static discharges. Do not get in eyes, on skin, or on clothing.

Environmental Precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer

system. See Section 12 for additional ecological Information.

Methods for Containment and Clean Up

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

Handling and storage

Handling

Use only under a chemical fume hood. Wear personal protective equipment. Use explosionproof 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.

Storage

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

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Glycerin		(Vacated) TWA: 10 mg/m ³	
		(Vacated) TWA: 5 mg/m ³	
		TWA: 15 mg/m ³	
Eduction	0.751 4000	TWA: 5 mg/m ³	IDI II 0000
Ethyl alcohol	STEL: 1000 ppm	(Vacated) TWA: 1000 ppm	IDLH: 3300 ppm
		(Vacated) TWA: 1900 mg/m ³	TWA: 1000 ppm
		TWA: 1000 ppm	TWA: 1900 mg/m ³
		TWA: 1900 mg/m ³	15111 050
Phenol	TWA: 5 ppm	(Vacated) TWA: 5 ppm	IDLH: 250 ppm
	Skin	(Vacated) TWA: 19 mg/m ³	TWA: 5 ppm
		Skin	TWA: 19 mg/m ³
		TWA: 5 ppm	Ceiling: 15.6 ppm
		TWA: 19 mg/m ³	Ceiling: 60 mg/m ³
Isopropyl alcohol	TWA: 200 ppm	(Vacated) TWA: 400 ppm	IDLH: 2000 ppm
	STEL: 400 ppm	(Vacated) TWA: 980 mg/m ³	TWA: 400 ppm
		(Vacated) STEL: 500 ppm	TWA: 980 mg/m ³
		(Vacated) STEL: 1225 mg/m ³	STEL: 500 ppm
		TWA: 400 ppm	STEL: 1225 mg/m ³
		TWA: 980 mg/m ³	
Methyl alcohol	TWA: 200 ppm	(Vacated) TWA: 200 ppm	IDLH: 6000 ppm
	STEL: 250 ppm	(Vacated) TWA: 260 mg/m ³	TWA: 200 ppm
	Skin	(Vacated) STEL: 250 ppm	TWA: 260 mg/m ³
		(Vacated) STEL: 325 mg/m ³	STEL: 250 ppm
		Skin	STEL: 325 mg/m ³
		TWA: 200 ppm	-
		TWA: 260 mg/m ³	

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV	
Glycerin	TWA: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³	

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Ethyl alcohol	TWA: 1000 ppm	TWA: 1000 ppm	STEL: 1000 ppm
	TWA: 1880 mg/m ³	TWA: 1900 mg/m ³	
Phenol	TWA: 5 ppm	TWA: 5 ppm	TWA: 5 ppm
	TWA: 19 mg/m ³	TWA: 19 mg/m ³	Skin
	Skin	STEL: 10 ppm	
		STEL: 38 mg/m ³	
Isopropyl alcohol	TWA: 400 ppm	TWA: 400 ppm	TWA: 200 ppm
	TWA: 985 mg/m ³	TWA: 980 mg/m ³	STEL: 400 ppm
	STEL: 500 ppm	STEL: 500 ppm	
	STEL: 1230 mg/m ³	STEL: 1225 mg/m ³	
Methyl alcohol	TWA: 200 ppm TWA: 200 ppm		TWA: 200 ppm
	TWA: 262 mg/m ³	TWA: 260 mg/m ³	STEL: 250 ppm
	STEL: 250 ppm	STEL: 250 ppm	Skin
	STEL: 328 mg/m ³	STEL: 310 mg/m ³	
	Skin	_	

Legend

ACGIH - American Conference of Governmental Hygienists **OSHA** - Occupational Safety and Health Administration

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

Engineering MeasuresUse 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 Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's

eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection 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

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. Physical and chemical properties

Physical State Liquid Appearance Red

Odor No information available
Odor Threshold No information available.
No information available.

Melting Point/RangeNo data availableBoiling Point/Range>100°C / 212°FFlash Point37.22°C / 99°F

Evaporation Rate 1.13 (Butyl Acetate = 1.0)
Flammability (solid,gas) No information available
Flammability or explosive limits

Upper No data available
Lower No data available

Vapor PressureNo information available.Vapor Density1.3 (Air = 1.0)

Relative Density 0.975

Solubility Soluble in water Partition coefficient; n-octanol/water No data available

Autoignition TemperatureNo information available.Decomposition temperatureNo information available.ViscosityNo information available.

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.

Incompatible Materials Oxidizing agents, Acids, Bases, Halogens, Metals, 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 LD50 Category 4. ATE = 300 - 2000 mg/kg. Based on ATE data, the classification criteria are not

met. ATE > 2000 mg/kg.

Dermal LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Vapor LC50 Category 4. ATE = 10 - 20 mg/l. Based on ATE data, the classification criteria are not met.

ATE > 20 mg/l.

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	-	Not listed	Not listed
Glycerin	12600 mg/kg (Rat)	10 g/kg (Rabbit)	570 mg/m ³ (Rat) 1 h
Ethyl alcohol	7060 mg/kg (Rat)	Not listed	20000 ppm/10H (Rat)
Phenol	317 mg/kg (Rat)	630 mg/kg (Rabbit)	316 mg/m ³ (Rat) 4 h
Isopropyl alcohol	5840 mg/kg (Rat)	13900 mg/kg (Rat) 12870 mg/kg (Rabbit)	72.6 mg/L (Rat) 4 h
Methyl alcohol	5628 mg/kg (Rat)	15800 mg/kg (Rabbit)	64000 ppm (Rat) 4 h 83.2 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 Causes burns by all exposure routes

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
Glycerin	56-81-5	Not listed	Not listed	Not listed Not listed Not listed		Not listed
Ethyl alcohol	64-17-5	Group 1	Not listed	A3	Χ	Not listed
Phenol	108-95-2	Group 3	Not listed	Not listed	Not listed	Not listed
Isopropyl alcohol	67-63-0	Not listed	Not listed	Not listed	Not listed	Not listed
Methyl alcohol	67-56-1	Not listed	Not listed	Not listed	Not listed	Not listed
Basic Fuchsin, high	58969-01-0	Not listed	Not listed	Not listed	Not listed	Not listed
purity biological stain,						
special for flagella						

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

Hygienists)

A1 - Known Human Carcinogen 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 Respiratory system, Central nervous system (CNS).

Kidney, Liver, Blood. STOT - repeated exposure

Aspiration hazard No information available.

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Symptoms / effects, both acute and delayed Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible

perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling,

severe damage to the delicate tissue and danger of perforation.

Endocrine Disruptor Information No information available

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

for complete information.

12. Ecological information

Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Glycerin	Not listed	51 - 57 mL/L LC50 96 h	Not listed	500 mg/L EC50 > 24 h
Ethyl alcohol	EC50 (72h) = 275 mg/l	Fathead minnow (Pimephales	athead minnow (Pimephales Photobacterium	
	(Chlorella vulgaris)	promelas) LC50 = 14200	phosphoreum:EC50 = 34634	EC50 = 10800 mg/L/24h
		mg/l/96h	mg/L/30 min	
			Photobacterium	
			phosphoreum:EC50 = 35470	
			mg/L/5 min	
Phenol	46.42 mg/L EC50 = 96 h	4-7 mg/L LC50 96 h	EC50 21 - 36 mg/L 30 min	10.2 - 15.5 mg/L EC50 48 h
	187 - 279 mg/L EC50 72 h	32 mg/L LC50 96 h	32 mg/L LC50 96 h	
	0.0188 - 0.1044 mg/L EC50	EC50 = 25.61 mg/L 15 min		
	96 h		EC50 = 28.8 mg/L 5 min	
			EC50 = 31.6 mg/L 15 min	
Isopropyl alcohol	1000 mg/L EC50 > 96 h	1400000 µg/L LC50 96 h	= 35390 mg/L EC50	13299 mg/L EC50 = 48 h 9714 mg/L EC50 = 24 h
	1000 mg/L EC50 > 72 h	9640 mg/L LC50 96 h	•	
		11130 mg/L LC50 96 h	phosphoreum 5 min	
Methyl alcohol	Not listed	Pimephales promelas: LC50 EC50 = 39000 mg/L 25 min		EC50 > 10000 mg/L 24h
		> 10000 mg/L 96h	EC50 = 40000 mg/L 15 min	
			EC50 = 43000 mg/L 5 min	

Persistence and Degradability No information available. **Bioaccumulation/ Accumulation** No information available

Mobility

Component	log Pow
Glycerin	-1.76
Ethyl alcohol	-0.32
Phenol	1.47
Isopropyl alcohol	0.05
Methyl alcohol	-0.74

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
Phenol - 108-95-2	U188	-
Methyl alcohol - 67-56-1	U154	•

14. Transport information

DOT

UN-No UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3
Packing Group III

TDG

UN-No UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3
Packing Group III

IATA

UN-No UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3
Packing Group III

IMDG/IMO

UN-No UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3 Packing Group III

15. Regulatory information

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Water	X	Х	-	231-791-2	-		Х	-	Х	X	Х
Glycerin	X	Х	-	200-289-5	-		X	Х	Χ	X	Х
Ethyl alcohol	X	Х	-	200-578-6	-		Х	Х	Х	X	Х
Phenol	Х	Х	-	203-632-7	-		Х	Х	Χ	X	Х
Isopropyl alcohol	X	Х	-	200-661-7	-		Х	Х	Χ	Х	Х
Methyl alcohol	X	X	_	200-659-6	_		Х	X	X	X	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 %
Phenol	108-95-2	4 - 5	1.0
Isopropyl alcohol	67-63-0	< 1.0	1.0
Methyl alcohol	67-56-1	< 1.0	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

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Water	-	1 LB	-	=
Phenol	X	1000 lb	X	X

Clean Air Act

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

OSHA Occupational Safety and Health Administration **OSHA** - Occupational Safety and Health Administration

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	
Phenol	1000 lb	1000 lb	
Methyl alcohol	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
Ethyl alcohol	64-17-5	Developmental	-
Methyl alcohol	67-56-1	Methanol	-

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Glycerin	X	X	X	=	X
Ethyl alcohol	X	X	X	Х	X
Phenol	X	X	X	Х	X
Isopropyl alcohol	X	X	X	-	X
Methyl alcohol	X	X	X	X	X

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

E Corrosive material D1B Toxic materials D2A Very toxic materials



16. Other information

Prepared By Regulatory Affairs

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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