MEDICAL CHEMICAL CORPORATION
SINCE 1954

SDS for Carbol Fuchsin, Kinyoun

Catalog # 483A

Creation date: 11-27-17 **Revision date: 12-22-20** **Revision number: 1.1**

Section I - Product Identification

Product: This product is a carbol fuchsin stain consisting of basic fuchsin, DMSO, phenol and reagent alcohol in an aqueous solution.

Intended Uses: Carbol fuchsin is a stain used for demonstrating acid fastness in acid fast bacteria.

Uses advised against: This should only be used by trained laboratory professionals. Reagent alcohol is toxic and can not be made non-toxic.

Manufacturer Identification

Medical Chemical Corp.
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Customer Service: Phone (310)787-6800
Email. Christinaavena@med-chem.com
FAX (310)787-4464

Emergency Telephone Number

CHEMTREC Emergency Response Telephone Number: (800)424-9300. Note: The CHEMTREC phone number is only for emergencies involving spills, leaks, fire, exposure or accident. Please direct all other inquiries to our customer service phone number.

Section II - Hazard Identification

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

Flammable liquid: Category 2 (H225)
Eye damage/eye Irritation: Category 2A (H319). Causes serious eye irritation.
Acute toxicity (Oral): Category 4 (H302). Harmful if swallowed.
Acute toxicity (Inhalation): Category 4 (H332). Harmful if inhaled.
Acute toxicity (Dermal): Category 4 (H312). Harmful in contact with skin.
Skin Corrosion: Category 2 (H315). Causes skin irritation
Mutagen: Category 2 (H341). Suspected of causing genetic defects.
Carcinogenicity: Category 2 (H350). Suspected of causing cancer.

Signal word: Danger

Hazard statements: Highly flammable liquid and vapor. Keep away from heat, sparks, open flames and hot surfaces. No smoking. Keep container tightly closed. Use only non-sparking tools. Take precautions against static discharge. Wear protective clothes and eye protection. In case of skin contact immediately remove all contaminated clothing. Rinse with water or shower. In case of fire, use fire extinguishers approved for alcohol fires. Phenol and methanol are toxic by inhalation, absorption or ingestion. Suspected of causing genetic defects.

Precautionary statements

P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P242 Use only non-sparking tools.
P243 Take precautions against static discharge.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P270 Do not eat, drink or smoke when using this product.
P271 Use only in a well-ventilated area.
P280 Wear protective clothes and eye protection.
P281 Use personal protective equipment as required.

Safety Ratings

Health: Hazardous *Flammability*: Highly Flammable *Reactivity*: None *Contact*: Slight
Recommended safety equipment: safety goggles, lab coat and proper gloves

NFPA Ratings

Health = 2 Flammability = 3 Reactivity = 0

Potential Health Effects

The toxicology of this compound has not been completely examined. It is presumed that the toxicity of this item is similar to other aliphatic alcohols. Inhalation or contact with ethanol may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation. Exposure to methanol vapor causes eye irritation, headache, fatigue and drowsiness. High concentrations can produce central nervous system depression and optic nerve damage. Can be absorbed through skin. Swallowing methanol may cause death or eye damage.

Inhalation: Alcohols are absorbed through the mucous membranes and will produce irritation as well as the same effects as ingestion. Phenol is toxic by inhalation.

Ingestion: Ingestion will produce CNS disturbance, dizziness, photophobia, headache, stupor, coma and death. Phenol is toxic by ingestion.

Skin contact: Alcohols are absorbed through the skin. Repeated contact causes defatting of the skin with resultant irritation and flaking. Phenol is corrosive to skin.

Eye contact: May be irritating. Phenol can cause eye damage

Chronic Exposure: Unknown.

Aggravation of preexisting conditions: Impaired kidney and liver function may be aggravated by exposure to alcohols. Preexisting eye, skin, and respiratory conditions may also be aggravated. Methanol has shown genetic toxicity in some animals.

Section III - Composition/Information on Components

Ingredients	CAS#	EC List Number	% w/w
Ethanol	64-17-5	200-578-6	15 - 20% w/w
Isopropanol	67-63-0	200-661-7	0.8 - 1% w/w
Methyl alcohol	67-56-1	200-659-6	0.8 - 1% w/w
Phenol	108-95-2	203-632-7	4 - 5% w/w
Dimethyl sulfoxide	67-68-5	200-664-3	7 - 9% w/w
Basic Fuchsin	58969-01-0	684-520-9	1.5 - 2.5% w/w

Section IV - First Aid Measures

General Advice: Contact a doctor if symptoms persist

Inhalation: Remove from source of exposure and get medical attention for any breathing difficulty.

Ingestion: Do not induce vomiting. Aspiration of alcohol into the lungs may produce death. Get immediate medical attention even if symptoms improve.

Skin Contact: In case of skin contact, remove contaminated clothing and flush with water. Wash affected area with soap and water. DMSO will enhance the absorption through the skin of the other ingredients. Get medical advice if irritation develops. Phenol causes skin lesions that are slow to heal.

Eye Contact: In case of eye contact, flush with water for at least 15 minutes and get medical attention.

Section V - Fire Fighting Measures

Fire Extinguishing Media: Alcohol foam, carbon dioxide or dry chemical. Water is ineffective against alcohol fires but may be used to cool adjacent containers.

Flash point: 33 °C (91 °F) TCC
Flammable Limits (for ethanol): LEL 3% UEL 19%
Flammable Limits (for methanol): LEL 6% UEL 36.5%
Flammable Limits (for isopropanol): LEL 2% UEL 12%

Specific Hazards: Risk of vapor traveling to source of ignition and flashing back. Risk of exploding containers when heated. Vapor in air may form explosion risk.

Special information: Pyrolysis will release toxic carbon monoxide, formaldehyde, phenol and methanol.

Special protective gear and precautions: Self contained breathing apparatus and protective gear recommended.

Section VI - Accidental Release Measures

Use personal protective gear, remove all sources of ignition, absorb with a suitable absorbent and dispose. Take precautions against static ignition. Should not be released into the environment.

Section VII - Handling and Storage

P403+P233+P102; Store in a well-ventilated place. Keep container tightly closed. Store away from open flames or other sources of ignition. Keep out of reach of children.

Section VIII - Exposure Control/Personal Protection

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethanol	1000 ppm	1000 ppm	3300 ppm
Isopropanol	400 ppm	400 ppm	2000 ppm
Methyl alcohol	200 ppm (skin)	200 ppm (skin)	6000 ppm
Phenol	5 ppm (TWA)	19 mg/m^3 (TWA)	250 ppm
Dimethyl sulfoxide	Not listed	Not listed	Not listed
Basic fuchsin	Not listed	Not listed	Not listed

Legend

ACGIH: American Conference of Governmental Industrial Hygienists.
OSHA*:* Occupational Safety and Health Administration.
NIOSH: National Institute for Occupational Safety and Health.
IDLH: Immediately dangerous to life or health.

Ventilation System: Local exhaust such as explosion proof chemical fume hoods are recommended. When required, Refer to the ACGIH document, “Industrial Ventilation, a Manual of Recommended Practices” for details about ventilation.

Personal Respirator: Usually not required. In case of emergency, or when exposure levels are unknown, use a positive pressure, full face piece, air supplied respirator.

Skin protection: Protective gloves are recommended as part of good laboratory practice.

*Eye Protectio*n: Laboratory safety goggles or similar products are not required but recommended as part of good laboratory practice.

Section IX - Physical and Chemical Properties

Boiling Point: 187 °F (86 °C)
Vapor pressure (mm Hg): 40 @ 20 °C
Vapor Density (air = 1): 3.2
Density: 0.987 g/ml @ 22.5 °C
Evaporation Rate (Water = 1): 1
Solubility: Miscible with water
Appearance and Odor: A purple liquid with a sickening sweet smell.

Section X - Stability and Reactivity

Stability: Stable under normal conditions.

Hazardous Decomposition Products: Nothing unusual.

Hazardous polymerization: Will not occur.

Incompatibilities: Oxidizers.

Conditions to avoid: heat, flame and sources of ignition.

Section XI - Toxicological Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethanol	1047 mg/kg (Rat)	20 ml/kg (Rat)	125 mg/l/4h (Rat)
Isopropanol	>4700 mg/kg (Rat)	13,000 mg/kg (Rabbit	19,000 ppm/8h (Rat)
Methyl alcohol	5628 mg/kg (Rat)	15,800 mg/kg (Rabbit)	64,000 ppm/4h (Rat)
Dimethyl sulfoxide	14500 mg/kg (Rat)	40 g/kg (Rat)	5.33 mg/l (Rat) 4 h

Phenol	317 mg/kg (Rat)	630 mg/kg (Rabbit)	900 mg/m^3/8h (Rat)
Basic fuchsin	No data	No data	No data

Ingredient	*Known Carcinogenicity?*	*NTP?*	*Anticipated?*	*IARC Category*
Ethanol	No	No	No	None
Methanol	No	No	No	None
Isopropanol	No	No	No	3
Phenol	No	No	No	3
DMSO	No	No	No	None
Basic fuchsin	No	Yes	Yes	2B

Section XII - Ecological Information

Aliphatic alcohols evaporate quickly and are not expected to bioaccumulate. The half-life for ethanol in the atmosphere is one to ten days.

Environmental Fate: Biodegradable
Soil Mobility: Unknown

Environmental Toxicity: Low.

Component	Freshwater Fish	Water Flea	Freshwater algae
Ethanol	LC50 100 mg/l 96 h	EC50 100 mg/L 48 h	EC50 100 mg/l 72 h
Methanol	LC50 100 mg/l 96 h	EC50 1000 mg/l 48 h	EC50 22 g/l 96 h
Isopropanol	LC50 9640 mg/l 96 h	EC50 7550 mg/l 48 h	EC50 1000 mg/l 72 h
Dimethyl sulfoxide	LC50 40 g/l 96 h	EC50 7 g/l 24 h	EC50 12.4 g/l 96 h
Phenol	LC50 25 mg/l 48 h	EC50 12 mg/l 24 h	EC50 370 mg/l 96 h
Basic fuchsin	No data	No data	No data

Section XIII - Disposal Considerations

Incineration at a licensed chemical disposal facility is the preferred disposal method. Local governments often restrict the amounts of alcohol and other flammable liquids that may be flushed down the drain. The usual rule is that the effluent exiting the building can't be flammable. They also restrict the amount of phenol that may be introduced into the environment. Dispose of contents and container in accord with all applicable regulations.

Section XIV - Transportation Information

DOT Shipping name: Ethyl alcohol solution *Hazard Class*: 3 *Packaging Group*: III
DOT Hazard Label: Flammable liquid *DOT Identification Number:* UN1170

Bottles smaller than 32 Fl. Oz. are eligible to be shipped under limited quantity exemptions [49 CFR section 173.150(b)(2), 173.150(C) and IATA Y341].

Section XV - Regulatory Information

Chemical Inventory Status

Ingredient	TSCA	EC
Ethanol	Yes	Yes
Methanol	Yes	Yes
Isopropanol	Yes	Yes
Phenol	Yes	Yes
DMSO	Yes	Yes
Basic fuchsin	Yes	Yes

Federal and State Regulations

	SARA 302		SARA 313		RCRA	TSCA	
Ingredient	RQ	TPQ	List	Category	261.33	8(D)	Ca. Prop 65
Ethanol	No	No	No	No	No	No	No
Isopropanol	No	No	Yes	No	No	No	No
Methanol	No	No	Yes	No	U154	No	Yes
Phenol	Yes	Yes	Yes	Yes	No	No	No
DMSO	No	No	No	No	No	No	No
Basic fuchsin	No	No	No	No	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: Yes

SARA 311/312: Acute: Yes Chronic: Yes Fire: Yes Pressure: No Reactivity: No

⚠ This product contains methanol which is known to the state of California to cause birth defects or other reproductive harm. For more information go to www.P65warnings.ca.gov.

Section XVI - Other Information

This information is believed to be correct at the time of publication but is not guaranteed as such, nor does it purport to be all inclusive. Medical Chemical Corp. assumes no liability for the accuracy or completeness of the information. The user assumes all responsibility for compliance with federal, state and local laws.

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