

# MSDS for Carbol Fuchsin, Ziehl-Neelsen Catalog # 484A and 331

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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 1 - Product Identification**

An aqueous solution of basic fuchsin, phenol and reagent alcohol.

#### **Section II - Composition/Information on Components**

Ingredients	CAS#	OSHA Pel	ACGIH TLV	Other Limits	%
basic fuchsin	569-61-9				1% w/v
phenol	108-95-2	5 ppm (Skin) TWA	5 ppm (Skin) TWA		5% w/v
ethanol	64-17-5	1000 ppm	1000 ppm		9% v/v
methanol	67-56-1	200 ppm (skin)	200 ppm (skin)		0.5% v/v
isopropanol	67-63-0	400 ppm	400 ppm		0.5% v/v

#### **Section III - Hazards Identification**

Overview: Toxic by inhalation absorption or ingestion. Can not be made nontoxic. Methanol is a cumulative poison and death has been reported for ingestion of less than 30 milliliters. Causes CNS depression, headache, intoxication, dilation of the pupils, convulsions nausea, and dizziness. Unconsciousness and death may result. Methanol intoxication may produce visual disturbances and blindness. Phenol is very toxic.

# **Safety Ratings**

Health: Hazardous Flammability: Flammable

Reactivity: Slight

contact: Slight

Recommended safety equipment: safety goggles, lab coat and proper gloves

Storage: Room Temperature away from sources of ignition.

NFPA Ratings

Health = 2 Flammability = 2

Reactivity = 1



#### **Potential Health Effects**

The toxicology of this compound have not been completely examined. It is presumed that the toxicity of this item is similar to other solutions of phenol and aliphatic alcohols.

*Inhalation*: Alcohols are absorbed through the mucous membranes and will produce irritation as well as the same effects as ingestion.

*Ingestion:* Inhalation will produce CNS disturbance, dizziness, photophobia, headache, stupor, coma and death. Phenol is very toxic.

*Skin contact:* Alcohols and phenol are absorbed through the skin. Repeated contact causes defatting of the skin with resultant irritation and flaking. Contact with phenol can cause chemical burns.

Eye contact: May be irritating

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 IV - First Aid Measures**

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

*Ingestion:* Do not induce vomiting if patient is unconscious or extremely drowsy. Otherwise administer 2 glasses of water and induce vomiting. 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. Get medical advice if irritation develops.

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

#### **Section V - Fire Fighting Measures**

Flash point: 38°C (100°F) TCC

Flammable Limits (for ethanol): LEL 3% UEL 19%

Explosion: Not normally an explosion hazard.

Fire Extinguishing Media: Alcohol type foam, carbon dioxide or dry chemical. Water is ineffective against alcohol fires

but may be used to cool adjacent containers.

Special information: Pyrolysis will release phenol and toxic oxides such as carbon monoxide.

#### Section VI - Accidental Release Measures

Remove all sources of ignition, absorb with a suitable absorbent (such as paper towels) and dispose. The preferred disposal method is incineration. Many localities restrict the amount of alcohol and/or phenol that may be flushed down the drain. Insure compliance with all government regulations.

## Section VII - Handling and Storage

Store in a closed container, away from open flames or other sources of ignition.

#### **Section VIII - Exposure Control/Personal Protection**

Airborne Exposure Limits: See section II

Ventilation System: Usually not required. 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 Protection: Laboratory safety goggles or similar products are recommended as part of good laboratory practice.

## Section IX - Physical and Chemical Properties

Boiling Point: 98°C Density: 0.99 g/ml

Vapor pressure (mm Hg): Unknown Evaporation Rate (Water = 1): 1
Vapor Density (air = 1): 3.2 Solubility: Infinitely miscible with water

Appearance and Odor: A reddish purple solution with the characteristic odor of phenol.

# Section X - Stability and Reactivity

Stability: Freezes at low temperature.

Hazardous Decomposition Products: Nothing unusual.

Hazardous polymerization: Will not occur.

Incompatibilities: Oxidixers.

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

# Section XI - Toxicological Information

Chronic consumption of ethanol is believed to be linked to liver disease, cancer and birth defects.

Cancer lists

<u>Ingredient</u>	Known Carcinogenicity?	NTP?	Anticipated?	IARC Category
Basic Fuchsin	no	no	no	none
Phenol	no	no	no	3
Ethanol	no	no	no	none
Methanol	no	no	no	none
Isopropanol	no	no	no	3

## **Section XII - Ecological Information**

Environmental Fate: Reagent alcohol is biodegradable. Basic fuchsin and phenol are probably not.

Environmental Toxicity: Unknown, but expected to be toxic to aquatic organisms.

Ethanol evaporates quickly and is not expected to bioaccumulate. The half-life for ethanol in the atmosphere is one to ten days.

# **Section XIII - Disposal**

Local governments often restrict the amounts of alcohol and/or phenol that may be flushed down drain. Insure compliance with all government regulation

## **Section XIV - Transportation information**

DOT Shipping name: Not applicable DOT Hazard Label: Not applicable

DOT Identification Number: Not applicable

## **Section XV - Regulatory Information**

# **Chemical Inventory Status**

<u>Ingredient</u>	<b>TSCA</b>	<u>EC</u>
<b>Basic Fuchsin</b>	Yes	Yes
Phenol	Yes	Yes
DMSO	Yes	Yes
Ethanol	Yes	Yes
Methanol	Yes	Yes
Isopropanol	Yes	Yes

#### Federal, State and International Regulations

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

SARA 311/312: Acute: Yes, Chronic: Yes

## **Section XVI - Other Information**

This information is believed to be correct but is not waranteed as such, nor does it purport to be all inclusive.

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