

Safety Data Sheet

Carbol Fuchsin



SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

1.1 Product Identifier

Trade Name : Carbol Fuchsin
Product Number : 38016SS8A; 38017SS6
SDS Date : July 21, 2015

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product Use : For use with Acid Fast Stain Kit.
Uses Advised Against : All other uses.

1.3 Details of the Supplier of the Substance or Mixture

Manufacturer/Preparer : Leica Biosystems Richmond, Inc
5205 Route 12
Richmond, IL 60071
800-225-3035
LBSNA-LBS-QA@LEICABIOSYSTEMS.COM

1.4 Emergency Telephone Number

Emergency Spill : 1-800-424-9300 (ChemTrec)
+1 703-527-3887 International calls (call collect)
13 11 26 (Australia 24 Hr Poisons Information Centre)
Other Information : 1-800-225-3035

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

CLP/GHS Classification (1272/2008) :

Physical:	Health:	Environmental:
Not hazardous	Skin Corrosion – Category 1B Eye Damage – Category 1 Germ Cell Mutagen – Category 2 Specific Target Organ Toxicity (Repeat Exposure) – Category 2	Not hazardous

2.2 Label Elements

Hazard Pictograms :



Signal Word	:	DANGER!
Hazard Statements	:	H314 Causes severe skin burns and eye damage. H341 Suspected of causing genetic defects. H350 May cause cancer. H373 May cause damage to liver, kidneys, and eyes through prolonged exposure.
Precautionary Statements	:	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe mist/vapour/spray. P264 Wash thoroughly after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+361+353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. P304+340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+313 IF exposed or concerned: Get medical advice/attention. P310 Immediately call a POISON CENTER or doctor/physician. P363 Wash contaminated clothing before reuse. P405 Store locked up. P501 Dispose of contents/container in accordance with all local/regional/national/international regulations.

2.3 Other Hazards

Other hazards which do not result in classifications : None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number / EINECS Number / REACH Reg. Number	% (w/w)	CLP/GHS Classification (1272/2008)
Ethanol	64-17-5	<10	Flammable Liquid – Category 2 (H225)
Phenol	108-95-2 203-632-7	<5	Germ Cell Mutagen – Category 2 (H341) Acute Toxicity – Category 3 (H331, 311, 301) Specific Target Organ Toxicity (Repeat Exposure) – Category 2 (H373) Skin Corrosive – Category 1B (H314) Acute Aquatic Toxicity – Category 3 (H412)
Basic Fuchsin	569-61-9 209-321-2	<5	Carcinogen – Category 1B (H350)

See Section 16 for full text of GHS and EU Classifications.

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least

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- 20 minutes, occasionally lifting upper and lower eyelids. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly after handling. Get medical attention immediately.
- Inhalation** : Call medical doctor or poison control center immediately. Move exposed person to fresh air. If not breathing, if breathing is irregular, or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing, such as a collar, tie, belt, or waistband. Get medical attention immediately.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

See Section 11 for more detailed information on health effects.

4.2 Most important symptoms and effects, both acute and delayed

- Eye contact** : Causes burns to eyes.
- Skin contact** : Causes burns to skin.
- Inhalation** : May cause nervous system effects, including dizziness, drowsiness, nausea, vomiting, visual disturbances, and unconsciousness.
- Ingestion** : Harmful if swallowed. Causes burns of the upper respiratory and digestive tract.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Immediate medical treatment is required.
- Specific treatments** : No specific treatment.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing Media

- Suitable extinguishing media** : Use dry chemical, alcohol foam, carbon dioxide (CO₂), or water spray.
- Unsuitable extinguishing media** : None known.

5.2 Special hazards arising from the substance or mixture

- Unusual fire and explosion hazards** : Flammable vapors may collect in low or confined areas.
- Combustion products** : Oxides of carbon; oxides of sulfur.

5.3 Advice for fire-fighters

- Special protective equipment for fire-fighters** : Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals.
- Special protective action for fire-fighters** : Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment, and emergency procedures

- For emergency responders** : Evacuate spill area. Ventilate the area. Wear appropriate personal protective equipment. Eliminate all ignition sources. Prevent entry into basements or confined areas.

6.2 Environmental precautions

Environmental precautions : Prevent entry in storm sewers and waterways. Report spill as required by local and federal regulations.

6.3 Methods and materials for containment and cleaning up

For small & large spills : Contain and collect with an inert absorbent and place into container suitable for disposal.

6.4 Reference to other sections

Refer to Section 8 for personal protective equipment, and Section 13 for disposal information.

SECTION 7: HANDLING and STORAGE

7.1 Precautions for safe handling

Protective measures : Prevent eye and skin contact. Do not breathe vapors or mists. Use only with adequate ventilation. Wash thoroughly after handling. Keep containers closed when not in use. Keep product away from heat, sparks, and all other sources of ignition.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated, dry area. Protect containers from physical damage. Store away from oxidizers and other incompatible materials. Empty containers retain product residues. Follow all SDS precautions in handling empty containers.

7.3 Specific end use(s)

Industrial uses : None identified.
Professional uses : For use with Acid Fast Stain Kit.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Chemical Name	US OEL	EU IOEL	UK OEL	Germany OEL
Ethanol	1,000 ppm TWA OSHA PEL 1,000 ppm STEL ACGIH TLV	None established	1,000 ppm TWA	500 ppm TWA 1,000 ppm STEL
Phenol	5 ppm TWA ACGIH TLV	2 ppm TWA 4 ppm STEL	2 ppm TWA	2 ppm TWA 4 ppm STEL

Refer to local or national authority for exposure limits not listed above.

Chemical Name	Biological Limit Value
Phenol	Phenol in urine, 250 mg/g creatinine, end of shift (ACGIH)

8.2 Exposure controls

Recommended monitoring procedure	:	Ethanol:	Collection on charcoal tubes with analysis by gas chromatography.
	:	Phenol:	Collection on XAD-7 or ORBO 47 analysis by HPLC or gas chromatography.
Appropriate engineering controls	:	Use with adequate local exhaust ventilation to maintain exposure levels below the occupational exposure limits.	
Personal protective measures			
Eye/face protection	:	Wear safety glasses or chemical goggles.	
Skin protection	:	Impervious clothing as needed to avoid skin contact.	
Hands	:	Impervious gloves recommended (butyl rubber).	
Respiratory protection	:	None needed with adequate ventilation. If the occupational exposure limit is exceeded, use an approved organic vapor respirator. Selection of respiratory protection depends on the contaminant type, form, and concentration. Select in accordance with OSHA 1910.134 or other applicable regulations and good industrial hygiene practice.	
Other protection	:	Suitable washing facilities should be available.	

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	:	Red liquid
Odor	:	Phenolic
Odor threshold	:	Not applicable
pH	:	Not available
Melting/freezing point	:	Not available
Boiling point	:	Not available
Flash point	:	Not available
Lower flammability limit	:	Not available
Upper flammability limit	:	Not available
Evaporation rate	:	Not available
Vapor density (air = 1)	:	Not available
Vapor pressure	:	Not available
Specific gravity (H₂O = 1)	:	0.95
Relative density	:	0.95
Solubility	:	Complete
Octanol/water partition coefficient	:	Not available
Autoignition temperature	:	Not available
Decomposition temperature	:	Not available
Viscosity	:	Not available
Explosive properties	:	Vapors may be explosive in confined areas
Oxidizing properties	:	None
Molecular formula	:	Not available
Molecular weight	:	Not available

9.2 Other information

No additional information available

SECTION 10: STABILITY and REACTIVITY

- 10.1 Reactivity** : This material is not reactive under normal conditions.
- 10.2 Chemical stability** : Normally stable.
- 10.3 Possibility of hazardous reactions** : Reaction with oxidizers may generate heat.
- 10.4 Conditions to avoid** : Avoid heat, sparks, flames, and all other sources of ignition.
- 10.5 Incompatible materials** : Strong oxidizing agents, acids, bases, acid chlorides, phosphorus halides, reducing agents.
- 10.6 Hazardous decomposition products** : Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: oxides of carbon; oxides of sulfur.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Potential health effects:

- Eye contact** : May cause severe irritation and burns with redness, tearing, and stinging. May cause corneal damage.
- Skin contact** : May cause severe irritation and burns. Phenol may be absorbed through the skin in harmful amounts.
- Inhalation** : Inhalation of mists may cause mucous membrane and upper respiratory tract irritation with coughing and sore throat. May cause central nervous system effects, including headache, weakness, dizziness, confusion, and unconsciousness.
- Ingestion** : May cause burns to the mouth, throat, and stomach. May cause abdominal pain, nausea, vomiting, and diarrhea. May cause central nervous system effects, including dizziness, drowsiness, visual disturbances, and unconsciousness. May cause damage to the kidney and liver.

Acute toxicity:

Product/ingredient name	Result	Species	Dose	Exposure
Ethanol	LD50 Oral	Rat	7,060 mg/kg	-
	LC50 Inhalation	Rat	20,000 ppm	10 hr
Phenol	LD50 Oral	Rat	317 mg/kg	-
	LD50 Dermal	Rabbit	630 mg/kg	-
Basic Fuchsin	LD50 Oral	Mouse	5,000 mg/kg	-

- Skin corrosion/irritation** : No data available for mixture.
- Eye damage/irritation** : No data available for mixture.
- Respiratory irritation** : No data available for mixture.
- Respiratory sensitization** : No data available for mixture.
- Skin sensitization** : No data available for mixture.
- Germ cell mutagenicity** : No data available for mixture.
- Carcinogenicity** : No data available for mixture. Basic fuchsin is classified by IARC as Group 2B - Possibly Carcinogenic to Humans and by NTP as Reasonable Anticipated to be a Human Carcinogen.
- Reproductive Toxicity** : No data available for mixture. Ethanol is known to cause developmental toxicity when ingested during pregnancy. Phenol has been shown to cause reproductive effects at doses toxic to the mother.

Specific Target Organ Toxicity:

- Single exposure** : Observed effects from acute exposure to phenol may include shock, delirium, coma, pulmonary distress, phenolic breath, dark urine, and death.

Repeat exposure : Chronic exposure to phenol usually results in major damage to the liver, kidneys, and eyes.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Ethanol	LC50 13,000 mg/L	Rainbow trout	96 hours
	LC50 9,268-14,221 mg/L	Daphnia magna	48 hours
	EC50 9,310 mg/L	Green algae	48 hours
Phenol	LC50 36-41 mg/L	Fathead minnow	48-96 hours
	LC50 147 mg/L	Daphnia magna	24-48 hours

12.2 Persistence and degradability : No data available.

12.3 Bioaccumulative potential : No data available.

12.4 Mobility in soil : No data available.

12.5 Results of PVT and vPvB assessment : No data available.

12.6 Other adverse effects : No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORTATION INFORMATION

	14.1 UN Number	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 Packing group	14.5 Environmental hazards
US DOT	Not regulated	-	-	-	-
Canada TDG	Not regulated	-	-	-	-
EU ADR/RID	Not regulated	-	-	-	-
IMDG	Not regulated	-	-	-	-

IATA	Not regulated	-	-	-	-
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14.6 Special precautions for user : None.

14.7 Transport in bulk according to Annex III MARPOL 73/78 and the IBC Code : Not determined

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

US Regulations

OSHA hazard classification : Target organ effects, carcinogen
TSCA Inventory : All of the components are listed on the TSCA Inventory.
SARA 302 : This product contains the following chemicals regulated under SARA Section 302: Phenol.
SARA 311 Hazard Classification : Acute health hazard; chronic health hazard
SARA 313 : This product contains the following chemicals that are regulated under SARA Title III, Section 313:

	Product name	CAS number	%
Form R – Reporting requirements	Phenol	108-95-2	<5
Supplier notifications	Phenol	108-95-2	<5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to the copies of the SDS subsequently redistributed.

CERCLA Section 103 : The RQ for the product, based on the RQ for Phenol (5% maximum) of 1,000 lbs is 20,000 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state, and local regulations.

California Prop 65 : This product contains the following chemical(s) which are known to the state of California to cause cancer, reproductive toxicity, or birth defects:

Product name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Basic Fuchsin	Yes	No	Yes	Yes
Methanol	No	Yes	No	No

SECTION 16: OTHER INFORMATION

Revision history : Updated formatting

CLP/GHS Classification and H Phrases for Reference (See Section 3)

H225 Highly flammable liquid and vapour.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H331 Toxic if inhaled.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H373 May cause damage to liver, kidneys, and eyes through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

NFPA Rating	Health: 3	Fire: 0	Instability: 0
HMIS Rating	Health: 3*	Fire: 0	Physical Hazard: 0

Notice to reader:

This Safety Data Sheet (SDS) has been prepared in accordance with the Classification, Labelling, and Packaging (CLP) regulation in the EU and the Globally Harmonized System (GHS) (29CFR 1910.1200) in the US. It complies with the requirements of the Canadian Controlled Products Regulations. To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.