

S0150 CARBOL FUCHSIN

MATERIAL SAFETY DATA SHEET

1 Product identification and supplier

S0150 Carbol Fuchsin (ZN) solution

Solution of basic fuchsin dye in aqueous phenol solvent system for use as an organism stain in microbiology.

CAS: N/A EC No: N/A

Produced and supplied by Gainland Chemical Co(GCC Diagnostics). Factory Rd. Sandycroft. Deeside. Flintshire. UK CH5 2QJ Tel: 01244536326 Fx 01244531254 email Gainland@btconnect.com

2 Composition information

Hazardous components detailed

Phenol <5%

The above hazardous components are dissolved in an aqueous glycolic solvent system

3 Hazards identificationo

Health: Toxic by inhalation, skin contact and if swallowed. Irritating to eyes, skin and by inhalation especially if reagent is hot. Overall risk in normal use – minor.

4 First aid measures

- EYES - May cause irritation and discolouration. Irritation/burning sensation from the Phenol. This reagent can severely irritate and damage the eyes. IF IN EYES - rinse cautiously with water for several minutes with water.
- SKIN - Irritation and discolouration from the dyes and phenol. The Harmful/Toxic substances in this product can be absorbed through skin. Phenol in particular is strongly absorbed through the skin. In serious cases phenol poisoning may result in damage/paralysis of central nervous system (CNS) as well as liver and kidney damage. IF ON SKIN - wash with plenty of soap and water immediately. If irritation or other symptoms persist, seek medical attention.
- INGESTION - Toxic if ingested. Swallowing these substances will discolour internal cells, cause irritation possible burns (from phenol) nausea, vomiting, headache are likely. See under skin above related to the effect of phenol poisoning. IF SWALLOWED - wash out mouth with water and seek emergency medical advice.
- INHALATION - Avoid breathing vapour. If reagent is hot Phenol fumes will be released. Use in ventilated fume hood. IF INHALED - move to a clear air zone and seek emergency medical advice.

5 Fire fighting

- Extinguishing Media - Use water spray, fog, or alcohol resistant foam.
- Special Hazards - Although this reagent contains a small amount of aliphatic alcohols >20% It is combustible but not classified Flammable. Vapour could collect in hollows and form explosive mixtures with air.
- Further information - 0044 1244 53 63 26

6 Accidental release measures

Person-related safety precautions:

Use this reagent in an efficient fume hood. Wear appropriate protective equipment, impervious gloves etc. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources

Measures for environmental protection:

Do not allow material to be released to the environment without proper governmental permits.

Measures for cleaning/collecting:

Absorb with cloth or absorbent granules for further disposal.

Dispose of contaminated material as waste according to item 13. Ensure adequate ventilation. Keep away from ignition sources.

7 Handling procedures

Handling

Information for safe handling:

Keep containers tightly sealed. Store in cool, dry place in tightly closed containers. Keep out of direct sunlight. Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires: Keep away from sources of ignition.

Storage

Requirements to be met by storerooms and containers: Unsuitable material for container: none.

Store in cool location out of direct sunlight. Store in a locked cabinet or with access restricted to technical experts or their assistants

Information about storage in one common storage facility: Do not store together with oxidizing materials.

8 Exposure control and personal protection

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with critical values that require monitoring at the workplace:

Basic Fuchsin

Exposure limits have not been determined.

Phenol

This product contains less than 5% phenol.

No safe exposure limit has been identified, the Health & Safety Advisory Committee on Toxic Substances Has set a maximum exposure limit (MEL) on Phenol at:

8hr TWA 2 ppm

Additional information: No data

Personal protective equipment

We advise that this product be used only in an efficient fume hood or a very well ventilated place.

General protective and hygiene measures. The usual precautionary measures should be adhered to in handling any chemical product. Do not consume. Keep away from foodstuffs, beverages and food.

Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work. Store protective clothing separately. Avoid contact with the eyes and skin.

Breathing equipment: Will be required if this reagent is used hot or in a poorly ventilated place.

Protection of hands: Impervious gloves

Eye protection - Safety glasses - Face protection

Body protection: Protective work clothing and organic vapour/particle face mask depending on situation of use.

9 Physical and chemical properties

Form: Liquid Colour:

Red/purple Smell:

Phenolic

Melting point/Melting range: N/A

Boiling point/Boiling range: >100 C

Flash point: 11 ° C
Inflammability (liquid, gaseous) Not (but combustible)
Ignition temperature: 385 ° C
Decomposition temperature: Not determined

Danger of explosion:
Product is not explosive. However, formation of explosive air/steam mixtures is possible.

Critical values for explosion:

Lower: N/A
Upper: N/A
Steam pressure: at 20 ° C N/A
Density at 20 ° C 0.98 g/cm³

Solubility in / Miscibility with

Water: Fully miscible

10 Stability and reactivity

Avoid sources of ignition – product is not flammable but is combustible.
Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.

Materials to be avoided:
Oxidizing agents
Alkali metals

Dangerous reactions: No dangerous reactions known.

Dangerous products of decomposition: Carbon monoxide and carbon dioxide.

11 Toxicological information

Phenol

Inhalation LC50 inhalation 4hr (rat) 316mg/l
Skin contact Contact with skin and mucous membrane causes burns. Absorption through the skin
In large quantities may result in death by paralysis of the central nervous system.
LD50 dermal (rat) 525 – 714 mg/kg
Eye contact There is a danger of serious eye damage
Ingestion LD50 oral (rat) 340 – 650 mg/kg
Sensitisation No sensitising action is known (various tests)
Repeated-dose toxicity Repeated administration leads to changes of internal organs, the immune system and the central nervous system.
Carcinogenicity There is inadequate evidence for the carcinogenicity of phenol.
Reproductive toxicity Final assessment is not possible at present.

Basic Fuchsin

LD 50 (rat) > 2000 – mg/kg-body weight
Eye irritation: Irritating (rabbits)

12 Ecological information

Phenol

Ecotoxicity

Aquatic toxicity EC50 – 8d 7.5 mg/l (selenastrum capricornutum) LC50 – 48h 3.1mg/l (ceriodaphnia dubia)
LC50 – 96h 5.0mg/l (oncorhynchus mykiss)

Behaviour in Sewerage works EC50 – 3h 799mg/l (communal activated sludge)
EC50 – 5m 18mg/l (photobacterium phosphoreum)

Mobility On the basis of its solubility in water and assessment of the determined ground
Absorption coefficients enrichment of phenol in the soil is not expected

Persistence and degradability

Abiotic degradation	Medium	Mechanism	Half-life	Air
	Water (near surface)	Photo-oxidation	14 hours	
	Water (1m depth)	Photolysis	176 hours	
		Photolysis	19 days	
Biological degradation	Easily biologically biodegradable			
	85% (14 days)	86% (20 days)		

Bio accumulative potential Phenol is not enriched significantly in organisms

Other adverse effects

Effect on soil organisms LC50 – 14d 401 mg/l (eisenia fetida)

General notes:

Very small quantities may be run to public sewer for some biological degradation before release to the environment. Larger amounts - do not allow material to be released to the environment without proper governmental permits.

Phenol is a danger to the environment especially aquatic organisms although they will biodegrade.

Basic Fuchsin

No data available.

13 Disposal considerations

Product:

Recommendation

Consult state, local or national regulations for proper disposal. Small quantities on a lab scale maybe disposed of to the public sewer diluting greatly with water. Hand over larger amounts to licensed disposers of hazardous waste. Classify as Toxic Liquid, Organic. Must be specially treated under adherence to official regulations.

Uncleaned packagings:

Recommendation: If still full dispose of through a waste disposal contractor if empty, rinse with water and dispose of as shown below.

Cleaned packaging : Recycled as Polyethylene (PE)

14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic) Air
Transport IATA. Sea Transport IMDG.

Correct Technical name :

Toxic Liquid, Organic, NOS (Dyes + Phenol) UN No: 2810 Pk Grp III Class 6.1 TOXIC

15 Regulatory information

Designation according to EC guidelines:

Hazard phrases:

H331 Toxic by inhalation
H311 Toxic in contact with skin. H301 Toxic if swallowed
H315 Causes skin irritation. H320 Causes eye irritation.
H335 May cause respiratory irritation.

Precautionary phrases:

P262 Do not get in eyes, on skin or clothing.
P314 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).



National regulations

Information about limitation of use: For use only by technically qualified individuals.
Employment restrictions concerning young persons must be observed.

16 OTHER INFORMATION

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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