

SAFETY DATA SHEET

STRONG CARBOL FUCHSIN (ZN) SOLUTION

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

1.1. Product identifier

Product name Strong Carbol Fuchsin (ZN) Solution
Product No. S0150

1.2. Relevant identified uses of the substance or mixture and uses advised against

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

1.3. Details of the supplier of the safety data sheet

Supplier Gainland Chemical Co (GCC Diagnostics)
Factory Road
Sandycroft
Deeside
Flintshire
CH5 2QJ, UK
+44 (0)1244 536326
+44 (0)1244 531254 (Fax)
Contact Person gainland@btconnect.com

1.4. Emergency telephone number

+44 (0) 1244 536326

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Phenol	Human health	Acute Tox. 3; Skin Corr. 1B; STOT RE 2; H301 + H311 + H315 + H331 + H335 + H373
	Environment	Not classified.

Classification (67/548/EEC)

T;R23/24/25, R36/37/38

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

EC No. 67-56-1
Label In Accordance With (EC) No. 1272/2008

STRONG CARBOL FUCHSIN (ZN) SOLUTION



Signal Word	Danger	
Hazard Statements	H301	Toxic if swallowed.
	H311	Toxic in contact with skin.
	H331	Toxic if inhaled.
	H315	Causes skin irritation.
	H320	Causes eye irritation.
	H370	Causes damage to organs .
Precautionary Statements	P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
	P233	Keep container tightly closed.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P309	IF exposed or if you feel unwell:
	P313	Get medical advice/attention.

2.3. Other hazards

No further information given.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Product name	PHENOL
REACH Registration number	01-2119471329-32-xxxx
CAS-No.	108-95-2
EU Index No.	604-001-00-2
EC No.	203-632-7

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Remove victim immediately from source of exposure. Provide fresh air, warmth and rest, preferably in comfortable upright sitting position. Perform artificial respiration if breathing has stopped. Do not give victim anything to drink if they are unconscious. Do not induce vomiting.

Inhalation

Remove victim immediately from source of exposure. Move into fresh air and keep at rest. Perform artificial respiration if breathing has stopped. Get medical attention.

Ingestion

Immediately rinse mouth and provide fresh air. Get medical attention immediately! DO NOT induce vomiting

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water.

Eye contact

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get immediate medical attention.

4.2. Most important symptoms and effects, both acute and delayed

General information

The most important known symptoms and effects are described in the labelling (see section 2/section 11)

Inhalation

Vapours may cause drowsiness and dizziness. Headache. Unconsciousness.

4.3. Indication of any immediate medical attention and special treatment needed

Treat Symptomatically.

STRONG CARBOL FUCHSIN (ZN) SOLUTION

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with foam, carbon dioxide, dry powder or water fog, spray or mist.

5.2. Special hazards arising from the substance or mixture

Although product contains a small amount of aliphatic alcohols >20%, it is combustible but not classified Flammable. Vapour could collect in hollows and from explosive mixtures with air.

Specific hazards

The product is flammable, and heating may generate vapours which may form explosive vapour/air mixtures.

Dangerous products of decomposition: Carbon monoxide (CO). Carbon dioxide (CO₂).

5.3. Advice for firefighters

Special Fire Fighting Procedures

Keep up-wind to avoid fumes. If possible, fight fire from protected position. Move container from fire area if it can be done without risk. Use supplied air respirator if product is involved in a fire. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control. Ventilate closed spaces before entering them.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area. In case of inadequate ventilation, use respiratory protection. Do not smoke, use open fire or other sources of ignition. Do not breathe vapour. Eye contact MUST be prevented by means of suitable personal protection equipment. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.

6.2. Environmental precautions

Do not discharge onto the ground or into water courses. Do not allow ANY environmental contamination. Never use water by itself on spillage; this will spread the spill and cause further contamination. Avoid discharge into drains, water courses or onto the ground. Contain spillages with sand, earth or any suitable adsorbent material.

6.3. Methods and material for containment and cleaning up

If leakage cannot be stopped, evacuate area. Clean-up personnel should use respiratory and/or liquid contact protection. Wash thoroughly after dealing with a spillage. Avoid sparks, flames, heat and smoking. Ventilate. Absorb spillage with non-combustible, absorbent material. Dam and absorb spillage with sand, earth or other non-combustible material. Runoff or release to sewer, waterway or ground is forbidden. Inform Authorities if large amounts are involved. Spillage may be stored as chemical waste in approved area. When dealing with a spillage, please consult the section relating to suitable protective measures. Do not contaminate water sources or sewer.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Wear full protective clothing for prolonged exposure and/or high concentrations. Do not eat, drink or smoke when using the product. Container must be kept tightly closed. Do not use in confined spaces without adequate ventilation and/or respirator. Protect against direct sunlight.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed. Keep away from food, drink and animal feeding stuffs. Avoid contact with oxidising agents. Keep in original container.

STRONG CARBOL FUCHSIN (ZN) SOLUTION

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Phenol

Component	CAS No	Value	Control parameters	Basis
Phenol	108-95-2	TWA	2 ppm 8mg/m3	Europe. COMMISSION DIRECTIVE 2009/161/EU establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC

Identifies the possibility of significant uptake through the skin Indicative

STEL	4 ppm 16mg/m3	Europe. COMMISSION DIRECTIVE 2009/161/EU establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC
------	------------------	--

Identifies the possibility of significant uptake through the skin Indicative

TWA	2 ppm 7.8mg/m3	UK. EH40 WEL - Workplace Exposure Limits
-----	-------------------	--

Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.

Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity

8.2. Exposure controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling product.



Process conditions

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash, quick drench.

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided. At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used. Check that mask fits tight and change filter regularly.

Hand protection

Protective gloves must be used if there is a risk of direct contact or splash. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Eye protection

Wear splash-proof eye goggles to prevent any possibility of eye contact. If risk of splashing, wear safety goggles or face shield.

Other Protection

Use barrier creams to prevent skin contact. Provide eyewash station and safety shower. Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes wet or contaminated. Eating, smoking and water fountains prohibited in immediate work area.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Red/purple

STRONG CARBOL FUCHSIN (ZN) SOLUTION

Odour	Phenolic.
Solubility	Miscible with water
Boiling point/boiling range (°C)	<100
Melting point (°C)	N/A
Relative density	0.98 g cm ³
Steam pressure at 20°C	N/A
Flash point (°C)	N/A
Ignition Temperature (°C)	385
Danger of explosion	Product is not explosive. However, formation of explosive air/steam mixture is possible.
Inflammability(liquid/gaseous)	Not (but combustible)
Flammability Limit - Upper(%)	N/A
Decomposition temperature	Not determined

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Product is not flammable but is combustible.

10.5. Incompatible materials

Materials To Avoid:

Oxidising agents, alkali metals.

10.6. Hazardous decomposition products

None at ambient temperatures. Thermal decomposition or combustion may liberate carbon monoxides and carbon oxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Phenol:

Acute Toxicity (Oral LD50) > 340 - 650 mg/kg Rat

Acute Toxicity (Dermal LD50) ~ 525 - 714 mg/kg Rabbit

Acute Toxicity (Inhalation LC50) - 316 mg/l (vapours) Rat 4 hours

Skin Corrosion/Irritation: 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.

Serious eye damage/irritation: There is a danger of serious eye damage.

Skin 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: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Reproductive toxicity: No data available

Basic Fuchsin:

LD50 (Rat) > 2000mg/kg - body weight

Eye irritation: irritating (rabbits)

Dermal irritation: irritating (rabbits). May cause sensitisation by skin contact.

STRONG CARBOL FUCHSIN (ZN) SOLUTION

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Aquatic Toxicity

EC50 - 8 days 7.5mg/l (selenastrum capricornutum)

LC50 - 48 hrs 3.1mg/l (ceriodaphnia dubia)

LC 50 - 96 hrs 5.0mg/l (oncorhynchus mykiss)

Behaviour in Sewerage works

EC50 - 3 hrs 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 of phenol in the soil is not expected.

12.2. Persistence and degradability

Abiotic degradation:

Medium	Mechanism	Half-life
Air	Photo-oxidation	14 hours
Water (near surface)	Photolysis	176 hours
Water (1m depth)	Photolysis	19 days

Biological degradation:

Easily biologically biodegradable: 85% (14 days) 86% (20 days)

12.3. Bioaccumulative potential

Phenol is not enriched significantly in organisms.

12.4. Mobility in soil

Effect on soil organisms: LC50 - 14 days 401mg/l (eisenia fetida)

12.5. Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6. Other adverse effects

Do not discharge to the aquatic environment, drains or sewage treatment plants.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Do not puncture or incinerate even when empty.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Confirm disposal procedures with environmental engineer and local regulations. Do not allow runoff to sewer, waterway or ground. Uncleaned empty packages should be disposed of in the same manner as the contents.

Waste Class

EWC NUMBER: Allocation of a waste code number in accordance with the European Waste Catalogue, should be carried out in agreement with an EA authorised waste disposal company.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN) 2810

UN No. (IMDG) 2810

UN No. (ICAO) 2810

14.2. UN proper shipping name

Proper Shipping Name TOXIC LIQUID, ORGANIC, NOS (Dyes + Phenol solution)

14.3. Transport hazard class(es)

ADR/RID/ADN Class 6.1

STRONG CARBOL FUCHSIN (ZN) SOLUTION

ADR/RID/ADN Class	Class 6.1: Toxic liquid.
ADR Label No.	6.1
IMDG Class	6.1
ICAO Class/Division	6.1

Transport Labels



14.4. Packing group

ADR/RID/ADN Packing group	III
IMDG Packing group	III
ICAO Packing group	III

14.5. Environmental hazards

14.6. Special precautions for user

No data available

SECTION 15: REGULATORY INFORMATION

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

UK Regulatory References

Chemicals (Hazard Information & Packaging) Regulations.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

Regulation (EC) No 1272/2008 CLP. Regulation (EC) No 1907/2006 REACH.

15.2. Chemical Safety Assessment

SECTION 16: OTHER INFORMATION

General information

Only trained personnel should use this material.

Revision Comments

Amended EAC code.

Issued By Compliance Department

Revision Date 05/09/2015

Data Sheet Status Approved.

Date 05-Sept-15

Risk Phrases In Full

R23/24/25 Irritating to eyes, skin and respiratory system.

R36/37/38 Toxic by inhalation, in contact with skin and if swallowed.

R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

Hazard Statements In Full

H301 Toxic in contact with skin

H311 Toxic by inhalation

H315 Causes skin irritation

H320 Causes eye irritation

H331 Toxic by inhalation

H335 May cause respiratory irritation

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy themselves as to the suitability of such information for his own particular use.