DALYNN BIOLOGICALS

SAFETY DATA SHEET

Version 1.6 Revision Date 02/07/2024

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Gram Basic Fuchsin Stain

Catalog Number: SG55

Product Use: For laboratory use only

Manufacturer's Name: Dalynn Biologicals Inc.
Supplier's Name: Dalynn Biologicals Inc.
Address: 3253 – 34 Avenue NE
Calgary, AB, Canada

T1Y 6X2

Telephone: 1-888-404-4045 Fax: (403) 250-9010 Chemical Emergency: 1-613-996-6666

Phone Number Only

2. HAZARD IDENTIFICATION

Emergency Overview

GHS Classification

Acute toxicity, Oral (Category 5)
Carcinogenicity (Category 1B)

GHS Label Elements, Including Precautionary Statements

Pictogram



Signal word Danger

Hazard statement(s)

H341 Suspected of causing genetic defects.

H350 May cause cancer

Precautionary statement(s)

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

with water.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON

CENTER or doctor/ physician.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

3. COMPOSITION & INFORMATION ON INGREDIENTS

INGREDIENT	%	CAS-No.	EC-No.	Index-No.
Pararosaniline hydrochloride	<0.1	569-61-9	209-321-2	611-031-00-X
Phenol	<0.4	108-95-2	203-632-7	604-001-00-2
Ethanol	1.4	64-17-5	200-578-6	603-002-00-5
Water	98	7732-18-5	231-791-2	-

4. FIRST AID MEASURES

General advice

Consult a physician if feeling unwell. Show this safety data sheet to the doctor in attendance. Move affected individual out of affected area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. If feeling unwell consult a physician.

In case of skin contact

Take off contaminated clothing. Wash affected area with soap and plenty of water. If feeling unwell consult a physician.

In case of eye contact

Flush eyes with plenty of water for at least 15 minutes. If feeling unwell consult a physician.

If swallowed

Do not induce vomiting. Rinse mouth with water if patient is conscious. Take patient to hospital and consult a physician.

5. FIREFIGHTING MEASURES

Conditions of flammability

Contains mostly water therefore the flammability hazard is minimal.

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions: carbon oxides (ie. carbon dioxides, carbon monoxide), nitrogen oxides, hydrogen chloride gas

Explosion data - sensitivity to mechanical impact

Not sensitive to mechanical impact

Explosion data – sensitivity to static discharge

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Environmental precautions

None.

Methods and materials for containment and cleaning up

Wearing appropriate safety gear including chemical resistant gloves and dust mask or respirator, soak up with paper towels. Place in a sealed container and discard with regular waste.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use in area with adequate ventilation.

Conditions for safe storage

Keep container tightly closed in a well ventilated place away from direct light or sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis		
Phenol	108-95-2	TWA	5 ppm 19 mg/m3	Canada. Alberta. Occupational Health and Safety Code (table 2:OEL)		
Remarks	Substance may be readily absorbed through intact skin					
		TWA	5 ppm	Canada. British Columbia OEL		
	Contributes significantly to the overall exposure by the skin route					
		TWAEV	5 ppm 19 mg/m3	Canada. Quebec. Regulation respecting occupational health and safety, schedule 1, Part 1		
	Skin (percutaneous)					
		TWA	5 ppm	USA. ACGIH Threshold Limit Values (TLV)		
Ethanol	64-17-5	TWA	1,000 ppm 1,880 mg/m3	Canada. Alberta. Occupational Health and Safety Code (table 2:OEL)		
		TWA	1,000 ppm	Canada. British Columbia OEL		
		STEL	1,000 ppm	Canada. British Columbia OEL		
		TWAEV	1,000 ppm 1,900 mg/m3	Canada. Ontario OELs		
		TWAEV	1,000 ppm 1,880 mg/m3	Canada. Quebec. Regulation respecting occupational health and safety, schedule 1, Part 1		
		TWA	1,000 ppm	USA. ACGIH Threshold Limit Values (TLV)		
		STEL	1,000 ppm	USA. ACGIH Threshold Limit Values (TLV)		

Engineering measures

Ensure adequate ventilation especially in confined areas. If desired, use mechanical exhaust or laboratory fumehood to avoid exposure.

Personal protective equipment

Respiratory protection

Use in area with adequate ventilation. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type ABEK (EN14387) respirator cartridges as a backup to engineering controls. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands after use.

Eye protection

Face shield and/or safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166 (EU).

Skin and body protection

Wear appropriate clothing such as a lab coat that covers as much of the body as possible. Complete suit can also be worn if desired.

Hygiene measures

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

No data available

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form Liquid

Color pinkish-red with slight alcoholic odor

Safety data

pH No data available

Melting point/ No data available

freezing point

Density

Boiling point No data available

Flash point No data available

Ignition temperature No data available

Auto ignition temperature No data available

Lower explosion limit No data available

Upper explosion limit No data available

Vapor pressure No data available

Water solubility soluble

Partition coefficient/ No data available

n-octanol/water

Evaporation rate

Relative vapor density

Odour

No data available

No data available

No data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Materials to avoid

Strong oxidizing agents, strong reducing agents, strong acids, aluminum chloride, nitrobenzene, formaldehyde, nitromethane, chromic anhydride, and perchloric acid

No data available

Hazardous decomposition products

Other decomposition products – No data available Hazardous decomposition products formed under fire conditions – Carbon oxides, nitrogen oxides, hydrogen chloride gas

Hazardous polymerization

Hazardous polymerization does not occur

Hazardous reactions

None under normal processing

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50

LD50 Oral – Rat – 317 mg/kg (phenol) LD50 Oral – Rat – 340 mg/kg (phenol) LD50 Oral – Rat – 10,470 mg/kg (ethanol)

LD50 Oral – Rat – 5,000 mg/kg (pararosaniline)

Inhalation LC50

LD50 Inhalation – Rat – 4h - 316 mg/m3 (phenol) LD50 Inhalation – Rat – 4h - 30,000 mg/l (ethanol)

Dermal LD50

LD50 Dermal – Rabbit – 630 mg/kg (phenol) LD50 Dermal – Rabbit – 15,800 mg/kg (ethanol)

Other information on acute toxicity

No data available

Skin corrosion/irritation

Skin – Rabbit – Severe skin irritation – 24h (phenol)

Skin - Rabbit - No skin irritation - 24h - OECD Test Guidelines 404 (ethanol)

Serious eye damage/eye irritation

Eye - Rabbit - Corrosive - OECD Test Guidelines 405 (phenol)

Eye - Rabbit - Moderate eye irritation - OECD Test Guidelines 405 (ethanol)

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

In vitro tests showed mutagenic effects for phenol.

Carcinogenicity

This table below indicates whether each agency has listed any ingredient as a carcinogen

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Pararosaniline HCI	2465-27-2	Group 2B	Reasonably	Not listed	X	Not listed
		-	anticipated			
Phenol	108-95-2	Not listed	Not listed	Not listed	Not listed	Not listed
Ethanol	64-17-5	Group 1	Known	A3	Х	Not listed
		·				

IARC: (International Agency for Research on Cancer)

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Group 1 - Carcinogenic to Humans Group

2A - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

ACGIH: (American Conference of Governmental Industrial Hygienists)

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A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

Reproductive toxicity

NTP: (National Toxicity Program)

Experiments have shown reproductive toxicity effects on laboratory animals for phenol

Teratogenicity

No data available

Specific target organ toxicity - single exposure (GHS)

No data available

Specific target organ toxicity - repeated exposure (GHS)

No data available

Aspiration hazard

No data available

Potential Health Effects

Inhalation May be harmful if inhaled.

Skin May be harmful if absorbed through skin. Stains skin on contact and may cause

skin irritation.

Eyes May cause eye irritation.

Ingestion No serious side effects are expected as this product contains 98% water.

Pararosaniline is a potential carcinogen but makes up less than 0.1% of the

stain, at this concentration effects are considered negligible but avoid direct and

repeated contact.

Signs and Symptoms of Exposure

Pararosaniline is a potential carcinogen but makes up less than 0.1% of the stain therefore avoid direct and repeated contact. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects

No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Ethanol	EC50 (72h) = 275 mg/L (Chorella vulgaris)	Fathead minnow (Pimpehales promelas) LC50 = 14,200 mg/L/96h	Photobacterium phosphoreum: EC50 = 34,634 mg/L/30 min Photobacterium phosphoreum: EC50 = 35,470 mg/L/5 min	EC50 = 9,268 mg/L/48h EC50 = 10,800 mg/L/24h
Phenol	EC50 (96h) = 370 mg/l (Chorella vulgaris) EC50 (96h) = 46.42 mg/L (Pseudokirchneriella subcapitata)	Leuciscus idus: LC50 = 14 - 25 mg/L/48h Carassius auratus: LC50 = 36 - 69 mg/L/96h	EC50 = 21 - 36 mg/L/30 min EC50 = 23.28 mg/L/5 min EC50 = 25.61 mg/L/15 min EC50 = 28.8 mg/L/5 min EC50 = 31.6 mg/L/15 min	EC50 = 10.2 - 15.5 mg/L/48h EC50 = 4.24 - 10.7 mg/L/48h

Persistence and degradability

Biodegradability Result: Readily biodegradable. (phenol & ethanol)

Bioaccumulative potential

(For Phenol)

Bioaccumulation Danio rerio (zebra fish) – 5h

Bioconcentration factor (BCF): 17.5 Remarks: Does not bioaccumulate.

Mobility in soil

No data available

PBT and vPvB assessment

No data available

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Product

Can be washed down the sink or disposed of with regular waste.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by them.

16. OTHER INFORMATION

Further information

Copyright 2018 Dalynn Biologicals Inc. The above information is believed to be correct but does not purport to be all inclusive and shall be only used as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Dalynn Biologicals Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.