DALYNN BIOLOGICALS

SAFETY DATA SHEET

Version 1.6 Revision Date 02/07/2024

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Acridine Orange Stain

SA16 Catalog Number:

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 1-613-996-6666 Chemical Emergency:

Phone Number Only

2. HAZARD IDENTIFICATION

Emergency Overview

GHS Classification

Skin irritation (Category 2) Eye irritation (Category 2A)

GHS Label Elements, Including Precautionary Statements

Pictogram

Signal word Warning

Hazard statement(s)

H313 May be harmful in contact with skin.

H320 Causes eye irritation.

H335 May cause respiratory irritation.

Precautionary statement(s)

P233 Keep container tightly closed

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

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

P310 Immediately call a poison center or doctor. P302+P352

If on skin: Wash with plenty of water.

P305+P351+P338 If in eyes: rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do so. Continue rinsing.

3. COMPOSITION & INFORMATION ON INGREDIENTS

INGREDIENT	%	CAS-No.	EC-No.	Index-No.
Acetic acid	1.2	64-19-7	200-580-7	607-002-00-6
Acridine orange	0.1	10127-02-3	233-353-6	-
Water	>98	7732-18-5	231-791-2	-

4. FIRST AID MEASURES

General advice

Consult a physician. 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. 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 induct vomiting. Rinse mouth with water if patient is conscious. If conscious, give a glass of water to dilute stomach contents. If feeling unwell, consult a physician.

5. FIREFIGHTING MEASURES

Conditions of flammability

Low flammability as the main component is water.

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 dioxides, hydrogen chloride gas.

Explosion data - sensitivity to mechanical impact

Not sensitive to mechanical impact

Explosion data - sensitivity to static discharge

Not sensitive to static discharge

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

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

Evacuate personnel to safe areas. Avoid breathing in dust.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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 towel and place in sealed container and hold for disposal.

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

Store at room temperature away from direct light or sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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 CEN (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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form Liquid
Color Orange

Safety data

pH 2.0 to 3.0 at 20°C (68°F)

Melting point/ 0°C (32°F)

freezing point

Boiling point 100°C (212°F)

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

Density No data available

Water solubility Soluble

Partition coefficient/ No data available

n-octanol/water

Relative vapor density No data available

Odour Vinegar-like

Odour threshold No data available

Evaporation rate No data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Chemical stability

Stable if stored as recommended.

Materials to avoid

Strong oxidizing agents, strong bases, strong acids

Hazardous decomposition products

Other decomposition products - No data available

Hazardous decomposition products formed under fire conditions – Carbon oxides, hydrogen chloride gas

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50

LD50 Oral - Rat - 3,310 mg/kg (acetic acid)

Inhalation LC50

LC50 Inhalation – Rat – 5,620 ppm/1h (acetic acid)

Other information on acute toxicity

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

In-vitro tests showed mutagenic effects for acridine orange.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified

as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified

as probable, possible or confirmed human carcinogen by ACGIH.

Reproductive toxicity

No data available

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. Material is destructive to the tissue of the mucous

membranes and upper respiratory tract.

Skin May cause skin irritation.

Eyes Causes eye irritation on contact. **Ingestion** May be harmful if swallowed.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects

No data available

Additional information

RTECS: Not available

12. ECOLOGICAL INFORMATION

Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

PBT and vPvB assessment

No data available

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous good

IMDG

Not dangerous good

IATA

Not dangerous good

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.