DALYNN BIOLOGICALS

SAFETY DATA SHEET

Version 1.5 Revision Date 02/07/2024

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Picric Acid (50% Saturated Solution)

Catalog Number: SP60

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

Not a hazardous substance or mixture

GHS Label Elements, Including Precautionary Statements

Pictogram None Signal word None

Hazards not otherwise classified (HNOC) or not covered by GHS

Explosive when dry

3. COMPOSITION & INFORMATION ON INGREDIENTS

INGREDIENT	%	CAS-No.	EC-No.	Index-No.
Picric acid	≤1	88-89-1	201-865-9	609-009-00-X
Water	99	7732-18-5	231-791-2	-

4. FIRST AID MEASURES

General advice

If feeling unwell, 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

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 as a precaution. If feeling unwell, consult a physician.

In swallowed

Rinse mouth with water if patient is conscious. If feeling unwell, consult a physician.

5. FIREFIGHTING MEASURES

Conditions of flammability

Minimal fire hazard in solution, but dry material is highly flammable and explosive. Do not expose to open flame.

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, nitrogen oxides.

Explosion data – sensitivity to mechanical impact

Not available

Explosion data - sensitivity to static discharge

Not available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid breathing vapors, mist or gas.

Environmental precautions

No special environmental precautions required.

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 and place in sealed container and hold for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of aerosols. Use in area with adequate ventilation.

Conditions for safe storage

Store tightly closed at room temperature. Do not let product dry out completely; ensure that product is in solution or moist.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Picric acid	88-89-1	TWA	0.1 mg/m3	Canada. Alberta. Occupational Health and Safety Code (table 2:OEL)
		TWA	0.1 mg/m3	Canada. British Columbia OEL

		TWAEV	0.1mg/m3	Canada. Quebec. Regulation respecting occupational health and safety, schedule 1, Part 1	
Remarks	substance with specific evidence of sensitization by dermal route				
		TWA	0.1 mg/m3	USA. ACGIH Threshold Limit Values (TLV)	

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 P3 (EN143) 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.

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 Yellow

Safety data

pH No data available

Melting point/ freezing point

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

Density No data available

Water solubility No data available

Partition coefficient/

No data available

n-octanol/water

Relative vapor density

No data available

Odour No data available

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

No data available.

Conditions to avoid

Picric acid forms salts with many metals some of which are rather sensitive to heat, friction, or impact, e.g., lead, iron, zinc, nickel, copper, etc., and should be considered dangerously sensitive. The salts formed with ammonia and amines, and the molecular complexes with aromatic hydrocarbons, etc, are in general not so sensitive. Contact of picric acid with concrete floors may form the friction-sensitive calcium salt. Dry mixtures of picric acid and aluminum powder are inert, but the addition of water causes ignition after a delay dependent upon the quantity added. Storage conditions: records of purchase dates should be maintained for each container. Material older than 2 years should be disposed. Inspect and add water every six months as needed. Rotate containers to distribute water every three months.

Materials to avoid

Strong oxidizing agents.

Hazardous decomposition products

Other decomposition products – No data available

Hazardous decomposition products formed under fire conditions - Carbon oxides, nitrogen oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral

No data available

Inhalation

No data available

Dermal

No data available

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

No data available

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. May cause respiratory tract irritation.Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation. **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: No data 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

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 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.