
1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Isovitox Enrichment
Catalog Number: VI85
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

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Chemical Emergency: 1-613-996-6666
Phone Number Only

2. HAZARD IDENTIFICATION**Emergency Overview****GHS Classification**

Not a hazardous substance or mixture according to GHS.

GHS Label Elements, Including Precautionary Statements

Pictogram None

Signal word None

Hazard statement(s)
None

Precautionary statement(s)
None

3. COMPOSITION & INFORMATION ON INGREDIENTS

INGREDIENT	%	CAS-No.	EC-No.	Index-No.
Dextrose	10.0	50-99-7	200-075-1	-
L-Cysteine hydrochloride	2.6	7048-04-6	200-157-7	-
Glutamine	1.0	56-85-9	200-292-1	-
Adenine	0.1	73-24-5	200-796-1	-
L-Cystine	0.1	56-89-3	200-296-3	-
Nicotinamide adenine dinucleotide	<0.1	53-84-9	-	-
Vitamin B12	<0.01	68-19-9	200-680-0	-
Guanine	<0.1	73-40-5	200-799-8	-
Thiamine pyrophosphate	<0.1	154-87-0	205-836-1	-
Ferric nitrate nonahydrate	<0.1	7782-61-8	233-899-5	-

Thiamine hydrochloride	<0.1	67-03-8	200-641-8	-
4-Aminobenzoic acid	<0.1	150-13-0	205-753-0	-
Water	87.0	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. Consult a physician.

In case of eye contact

Flush eyes with plenty of water for at least 15 minutes. Consult a physician.

If swallowed

Rinse mouth with water if patient is conscious. Drink two classes of water to dilute stomach contents.

5. FIREFIGHTING MEASURES

Conditions of flammability

Low flammability as the main ingredient 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 oxides (ie. carbon dioxides, carbon monoxide), sodium oxides

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

Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up

Wearing gloves soak up with paper or cloth towels and throw out with regular garbage.

7. HANDLING AND STORAGE

Precautions for safe handling

Use in area with adequate ventilation.

Conditions for safe storage

Keep container tightly closed and keep frozen until used.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Ferric nitrate nonahydrate	7782-61-8	TWA	1 mg/m ³	Canada. Alberta. Occupational Health and Safety Code (table 2:OEL)
		TWA	1 mg/m ³	Canada. British Columbia OEL
		STEL	2 mg/m ³	Canada. British Columbia OEL
		TWAEV	1 mg/m ³	Canada. Quebec. Regulation respecting occupational health and safety, schedule 1, Part 1
		TWA	1 mm/m ³	USA. ACGIH Threshold Limit Values (TLV)

Personal protective equipment

Respiratory protection

Use in area with adequate ventilation. Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. 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 are optional. 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.

Hygiene measures

Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form

Liquid

Color	Light pink
Safety data	
pH	~6
Melting point/ freezing point	No data available
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	soluble
Partition coefficient/ n-octanol/water	No data available
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

Materials to avoid

Oxidizing agents, strong bases, strong acids

Hazardous decomposition products

Other decomposition products – No data available

Hazardous decomposition products formed under fire conditions – Carbon oxides, sodium oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50

LD50 Oral – Rat – 25,800 mg/kg (dextrose)

LD50 Oral – Rat – >2,000 mg/kg (L-cysteine)

LD50 Oral – Rat – 16,000 mg/kg (glutamine)
LD50 Oral – Rat – 227 mg/kg (adenine)
LD50 Oral – Rat – >25,000 mg/kg (L-cystine)
LD50 Oral – Rat – 5,000 mg/kg (4-aminobenzoic acid)
LD50 Oral – Rat – 3,710 mg/kg (thiamine pyrophosphate)
LD50 Oral – Rat – 2,000 mg/kg (ferric nitrate nonahydrate)
LD50 Oral – Mouse – 13,347 mg/kg (vitamin B12)

Inhalation LC50

No data available

Dermal LD50

LD50 Dermal – Rat – >2,000 mg/kg (L-cysteine)
LD50 Dermal – Rat – >2,000 mg/kg (L-cysteine)

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

No data available

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.

Skin May be harmful if absorbed through skin. No side effects expected.

Eyes May cause eye irritation on contact.
Ingestion May be harmful if swallowed. No serious side effects as the main two components are water and dextrose.

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

No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

Persistence is unlikely based on information 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

May be disposed of with regular waste. If desired, product may be washed down the sink diluted with running water.

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 Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

16. OTHER INFORMATION

Further information

Copyright 2019 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.