
1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Lugol Iodine
Catalog Number: SL95
Product Use: For laboratory use only

Manufacturer's Name: Dalynn Biologicals Inc.
Supplier's Name: Dalynn Biologicals Inc.
Address: 3253 – 34 Avenue NE
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Phone Number Only

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

Specific target organ toxicity – repeated exposure, Oral (Category 1), Thyroid, H372
Short-term (acute) aquatic hazard (Category 3), H402

GHS Label Elements, Including Precautionary Statements

Pictogram



Signal word Danger

Hazard statement(s)

H372 Causes damage to organs (thyroid) through prolonged or repeated
Exposure if swallowed.

H402 Harmful to aquatic life

Precautionary statement(s)

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

P264 Wash skin thoroughly after handling.

P273 Avoid release to the environment

P281 Use personal protective equipment as required.

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

3. COMPOSITION & INFORMATION ON INGREDIENTS

Synonyms Gram Iodine Solution

| INGREDIENT | % | CAS-No. | EC-No. | Index-No. |
|------------------|------|-----------|-----------|--------------|
| Iodine crystals | 5.0 | 7553-56-2 | 231-442-4 | 053-001-00-3 |
| Potassium iodide | 10.0 | 7681-11-0 | 231-659-4 | - |
| Water | 85.0 | 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. Consult a physician.

In case of skin contact

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

In case of eye contact

Flush eyes with plenty of water for at least 15 minutes. If feeling unwell, take patient to hospital and consult a physician.

If swallowed

Do not induce vomiting. Rinse mouth with water if patient is conscious. If feeling unwell, take patient to hospital and consult a physician.

5. FIREFIGHTING MEASURES

Conditions of flammability

Not flammable or combustible 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 monoxide, carbon dioxide, and other toxic vapors

Explosion data – sensitivity to mechanical impact

No

Explosion data – sensitivity to static discharge

No

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

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

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 towel and place in sealed container and hold for disposal. Wash spill site after material pickup is complete.

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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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 (EN14387) 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. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(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 | Brown |

Safety data

| | |
|---|---|
| pH | No data available |
| Melting point/ freezing point | 0°C (32°F) |
| 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 | 1.000 g/cm ³ at 3.98 °C (39.16 °F) |
| 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

No data available.

Hazardous decomposition products

Other decomposition products – No data available

Hazardous decomposition products formed under fire conditions – carbon monoxide, carbon dioxide, and other toxic vapors

11. TOXICOLOGICAL INFORMATION**Acute toxicity****Oral LD50**

Rat – 14,000 mg/kg (Iodine crystals)

Mouse – 1,000 mg/kg (Potassium iodide)

Inhalation LC50

Rat – 4.588 mg/L / 4 h (Iodine crystals)

Dermal LD50

Rat – 1,425 mg/kg (Iodine crystals)

Other information on acute toxicity

No data available

Skin corrosion/irritation

Skin - Rabbit - Irritating to skin (Potassium iodide)

Skin - Reconstructed human epidermis (RhE) Result: Moderate skin irritation (Iodine crystals)

Serious eye damage/eye irritation

Eyes - Rabbit - Irritating to eyes. - 24 h - Draize Test (Potassium iodide)

Respiratory or skin sensitization

Mouse - Result: Does not cause skin sensitisation. OECD Test Guideline 429 (Iodine crystals)

Potassium iodide may cause allergic reactions in certain sensitive individuals on prolonged or repeated exposure.

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 cause irritation to the upper respiratory tract, and cause coughing and discomfort.

Skin May cause irritation on contact. Iodine may cause sensitization in persons previously exposed.

Eyes May cause irritation with redness and pain. May be corrosive and cause permanent damage to the eye depending on duration.

Ingestion May be harmful if swallowed. Iodide salts act as expectorants and diuretics. May cause GI disturbances, nausea, and vomiting. This stain is composed of 99% water so no serious side effects are expected on exposure.

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

| Component | Freshwater Algae | Freshwater Fish | Water Flea |
|------------------|-------------------|--|--|
| Iodine crystals | No data available | (Oncorhynchus mykiss) LC50 = 1.7 mg/L – 96h | (Daphnia magna) EC50 = 0.2 mg/L – 48h |
| Potassium iodide | No data available | (Oncorhynchus mykiss) LC50 = 2,190 mg/L – 96h | (Daphnia magna) EC50 = 2.7 mg/L – 24h |

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.

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 2017 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.
