Cell Technology Inc

Material Safety Data Sheet – Fluoro Thiol

EMERGENCY # FOR NATIONAL RESPONSE CENTER (800) 424-8802

CHEMICAL IDENTIFICATION:

Product Name: Fluoro Thiol – Fluorescent Thiol Detection Kit

Catalog # FLTHIO100-2

Components:
Part# 4021: Dye: 1 vial Dried
Part# 3053: Lysis Buffer: 1 Bottle 25 mL
Part# 7015: GSH Standard: 3 vials dried

Part# 4021

Section 1 - Composition/Information on Ingredients
Chemical Name: 2,4-Dinitrobenzenesulfonyl 2',7'-Dimethylfluorescein
Molecular Weight: 590.51
CAS Number: Not Listed
TSCA Inventory: Not Listed (See Section 15)
EINECS No.: Not Listed

Section 2 - Hazards Identification
May be harmful if inhaled and ingested.
May cause eye and skin irritation.

Section 3 - First Aid Measures
General Advice: Wash off immediately with soap and plenty of water. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment
Inhalation: Move victim to fresh air. If breathing is difficult, give oxygen. If irritation persists, consult a physician.
Skin Contact: Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.
Eye Contact: Remove any contact lenses at once. Flush eyes well with a large amount of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician.
Ingestion: Rinse mouth; give plenty of water to dilute the substance. Never give anything by mouth to an unconscious person. Consult a physician.

Section 4 - Fire Fighting Measures
Fire Extinguisher Type: Any means suitable for extinguishing surrounding fire
Fire/Explosion Hazards: Thermal decomposition produces highly toxic fumes.
Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

Section 5 - Accidental Release Measures
Personal Precautions:
Remove ignition sources and ventilate the area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid raising dust and avoid contact with skin and eyes.
Environmental Precautions:
Prevent spills from entering sewers, watercourses or low areas.
Methods for Clean Up:
Do not touch spilled material without suitable protection (See section 8). After material is completely picked up, wash the spill site with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose of contaminated clothing.

Section 6 - Handling and Storage
Research use only.
Handling: Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Handle material with suitable protection.
Storage: Store away from sunlight in well-ventilated dry place at room temperature. Keep container tightly closed.
Incompatible Products: Oxidizers

Section 7 - Exposure Controls/Personal Protections
Engineering Measures: Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.
Ventilation: Local Exhaust ; Necessary, Mechanical(General) ; Recommended
Personal Protection:
Respiratory protection: Use a NIOSH/MSHA or European Standard EN149 approved respirator if the vapor concentrations exceed regulatory guidelines.
Hand protection: Chemical resistant gloves
Eye protection: Safety glasses(goggles)
Skin protection: Protective clothing
Control Parameter:
OSHA Final Limits: None established
ACGIH TLV(s): None established

Section 8 - Physical and Chemical Properties
Appearance: Yellow - yellowish brown, crystalline powder - powder
Odor: Not Available
pH: Not Available
Boiling Point: Not Available
Melting Point: Not Available
Flash Point: Not Available
Flammability (solid, gas): Not Available
Decomposition Temperature: Not Available
Explosive Limits: Not Available
Vapor Pressure: Not Available
Specific Gravity: Not Available
Solubility In: Water: Slightly Soluble**;** Acetonitrile: Soluble
Log Po/w: Not Available

Section 9 – Stability and Reactivity
Condition to Avoid: Sunlight, heat
Incompatibility (Material to Avoid): Oxidizers
Hazardous Decomposition Products: Carbon monoxide, nitrogen oxides, sulfur oxides, may be formed.
Hazardous Polymerization: Will not occur

Section 10 - Toxicology Information
Acute Toxicity Data: Not Available
Irritation Data: Not Available
Mutation Data: Not Available
Reproductive Effects Data: Not Available
Tumorigenic Data: Not Available
Additional Data:

NTP: Not Listed
IARC: Not Listed
OSHA: Not Listed
ACGIH: Not Listed

Section 11 - Ecological Information
Biodegradability: Not Available
Bioaccumulation Potential: Not Available
Aquatic Toxicity: Not Available
Other Information: Not Available

Section 12 - Disposal Consideration
Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local, state, and federal laws and regulations (contact country, local or state environmental agency for specific rules).

Section 13 – Transport Information
IATA: Not Restricted.
DOT (Dept. of Transportation): Not a Hazardous Material for DOT shipping.

Section 14 - Regulatory Information
US Regulations:

EPA: CERCLA RQ= Not listed; EPCRA TPQ= Not listed
OSHA: TQ= Not listed
TSCA: Use of this product must be restricted to research or analysis for the development of a product in accordance with the Act.

Part# 7015 and 3053

Section 1 - Chemical Identifiction:
Part# 7015: GSH Standard.
Product Name :GLUTATHIONE, REDUCED
Formula C10H17N3O6S
Molecular Weight 307.33 AMU
Synonyms Copren * Deltathione * Glutathion * Glutathione
Glutathione (reduced) * Glutathione SH ** Reduced glutathione
CAS# 70-18-8, EC no 200-725-4

Part# 3053: 1X Lysis Buffer
Product Name: 1X Lysis Buffer
Formula: Propriety. Contains: Octylphenoxypolyethoxyethanol nonionic surfactant; An alkylphenol-hydroxypolyoxyethlene; Alkylaryl polyether alcohol; TRITON® X-100
Molecular Weight: NA
Synonyms: None
CAS# None, EC no None

Section 2 - Hazards Identification
SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT
Not hazardous according to Directive 67/548/EEC.

Section 3 - First Aid Measures
AFTER INHALATION
If inhaled, remove to fresh air. If breathing becomes difficult, call a physician. Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.
AFTER SKIN CONTACT
In case of contact, immediately wash skin with soap and copious amounts of water.
AFTER EYE CONTACT
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Can cause severe eye irritation with symptoms of inflammation, tearing, blinking, redness, swelling of the conjunctiva, and chemical burns of the cornea. Call a physician.
AFTER INGESTION
If swallowed, wash out mouth with water provided person is conscious. Call a physician. Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea. Aspiration into the lungs may occur during swallowing or vomiting, resulting in lung damage.

Section 4 - Fire Fighting Measures
EXTINGUISHING MEDIA
Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.
SPECIAL RISKS
Specific Hazard(s): Emits toxic fumes under fire conditions.
SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Section 5 - Accidental Release Measures
PROCEDURE(S) OF PERSONAL PRECAUTION(S)
Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.
METHODS FOR CLEANING UP
Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.
For 1X Lysis Buffer: Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! Guard against falls as material is slippery. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities.

Section 6 - Handling and Storage
HANDLING
Directions for Safe Handling: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.
STORAGE
Conditions of Storage: Keep tightly closed. Store at 2-8°C

Section 7 - Exposure Controls / Personal Protection
ENGINEERING CONTROLS
Safety shower and eye bath. Mechanical exhaust required.
GENERAL HYGIENE MEASURES

Wash thoroughly after handling.
PERSONAL PROTECTIVE EQUIPMENT
Respiratory Protection: Wear dust mask.
Hand Protection: Protective gloves.
Eye Protection: Chemical safety goggles.

Section 8 - Physical and Chemical Properties
For: GSH Standard
Appearance Color: White
Form: Powder
Property Value At Temperature or Pressure
pH N/A
BP/BP Range N/A
MP/MP Range 192 - 195 °C
Flash Point N/A
Flammability N/A
Autoignition Temp N/A
Oxidizing Properties N/A
Explosive Properties N/A
Explosion Limits N/A
Vapor Pressure N/A
SG/Density N/A
Partition Coefficient N/A
Viscosity N/A
Vapor Density N/A
Saturated Vapor Conc. N/A
Evaporation Rate N/A
Bulk Density N/A
Decomposition Temp. N/A
Solvent Content N/A
Water Content N/A
Surface Tension N/A
Conductivity N/A
Miscellaneous Data N/A
Solubility N/A

For: 1X Lysis Buffer
Appearance:
Transparent liquid.
Odor: Mild odor.
Solubility:
Miscible in water.

Section 9 - Stability and Reactivity
STABILITY
Stable: Stable.
Materials to Avoid: Strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Sulfur oxides.
HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur.

Section 10 - Toxicological Information
For GSH Standard
RTECS NUMBER: MC0556000

ACUTE TOXICITY
LD50
Oral Mouse 5000 mg/kg
LD50 Intraperitoneal Mouse
4020 MG/KG
LD50Subcutaneous Mouse
5 GM/KG
LD50 Intravenous Mouse
2238 MG/KG
LD50
Intramuscular Mouse
4 GM/KG
LD50 Intravenous Rabbit
>2 GM/KG

For 1X Lysis Buffer
Toxicological Data:
For Triton X-100: LD50 oral rat 1800 mg/kg. For Polyethylene glycol octylphenyl ether: LD50 oral rat 4190 mg/kg; Irritation (Std Draize, eye, rabbit) 1% severe. Investigated as a mutagen. Polyethylene glycol has been investigated as a mutagen.
Carcinogenicity:
This product may contain trace amounts of ethylene oxide and dioxane.
Ethylene Oxide: NIOSH considers this substance to be a potential occupational carcinogen. Regulated by OSHA as a carcinogen.
Dioxane: NIOSH considers this substance to be a potential occupational carcinogen. EPA / IRIS classification: Group B2 - Probable human carcinogen, sufficient animal evidence.

Section 11 - Ecological Information
No data available.
13 - Disposal Considerations
SUBSTANCE DISPOSAL
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. Observe all federal, state, and local environmental regulations.
For 1X Lysis Buffer
Environmental Toxicity**:**
For Triton X-100: The LC50/96-hour values for fish are between 1 and 10 mg/l. This material is expected to be toxic to aquatic life.

Section 12 - Transport Information
RID/ADR
Non-hazardous for road transport.
IMDG
Non-hazardous for sea transport.
IATA
Non-hazardous for air transport.

Disclaimer
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