

Material Safety Data Sheet – Fluoro MPOHOCL

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

CHEMICAL IDENTIFICATION:

Product Name: Fluoro MPOHOCL – Fluorescent Peroxide / Peroxidation Detection Kit

Catalog # MPOHOCL100-3

Components:

1. Part# 3002: 10X Assay Buffer: 60 ml
2. Part# 6015: Myeloperoxidase Enzyme
3. Part# 4007: Detection reagent (ADHP): One vial for 500 tests
4. Part# 3012: 3% Hydrogen Peroxide.
5. Part# 4011: APF: 5mM solution in DMF

Part# 3002 and 6015

Section 1 - Identification

CAS No.: NA

Molecular Weight: NA

Chemical Formula: NA

Section 2 - Hazard Identification

Harmful if swallowed. May cause irritation, avoid breathing vapors or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed

Section 3 - First Aid Measures

Harmful if swallowed. May cause irritation, avoid breathing vapors or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed

FIRST AID: SKIN: Wash exposed area with soap and water. If irritation persists, seek medical attention.

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: If swallowed, induce vomiting immediately after giving two glasses of water. Never give anything by mouth to an unconscious person.

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

Absorb spill with inert material, then place in a chemical waste container. Dispose of in a manner consistent with federal, local law.

Section 6 - Handling and Storage

Store in a cool dry place. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling

Section 7 - Exposure Controls & Personal Protection

Ventilation: Local Exhaust

Use Gloves, Safety Glasses with side shield.

Other Protective Equipment: Use safe laboratory handling procedures.

Section 8 - Stability and Reactivity Information

Stability: Stable

Conditions to Avoid: Avoid contact with incompatible materials.

Materials to Avoid: Strong acids, aluminum and steel

Hazardous Decomposition Products: Thermal decomposition may produce toxic gases.

Hazardous Polymerization: Will Not Occur

Condition to Avoid: None known

Section 9 - Additional Information

Conditions aggravated/target organs: Persons with pre-existing eye and skin conditions will be more susceptible. Acute: Skin irritation, mild eye irritation, ingestion of large quantities may cause potassium poisoning. Chronic: Dermatitis, eye damage.

DOT Classification: Not Regulated

Part# 4007

Section 1

Synonyms: ADHP, 10-Acetyl-3,7-dihydroxyphenoxazine

CAS #: 119171-73-2

Chemical Formula: $C_{14}H_{11}NO_4$

Section 2 - Hazard Identification

Not known.

Section 3 - Characteristics

Red-brown powder

Boiling point °f: No data available.

Vapor pressure (mm Hg): No data available.

Vapor density: No data available.

Solubility in water: Very low.

Specific gravity: Not applicable.

% Volatile by volume: Not applicable.
Evaporation rate: No data available.
pH: Not applicable to a powder.

Section 4 - Storage, Handling, Stability

The material is air sensitive. Store dry material at 4°C.

Section 5 - Safety Control Measures

Gloves and standard laboratory protective clothing and eyewear are recommended. Safe laboratory practices should be followed.

Section 6 - Health Hazard Data

May enter the body through inhalation, ingestion, eye, and skin contact. To our knowledge the hazards of this material have not been fully tested. Handle material with caution.

RTECS Number: None known

Toxicity: We are not aware of any toxicity data for this product.

Health Hazards: We are not aware of any reported health hazards for this product. We recommend treating all chemicals with caution.

Potential Hazards: To our knowledge, the health hazards have not been thoroughly investigated.

Carcinogenicity: Not listed by NTP, IARC or OSHA.

Section 7 - First Aid Measures

Avoid prolonged or repeated exposure. Remove contaminated clothing and shoes, and wash before reuse.

Skin: Wash skin thoroughly with soap and water.

Eyes: Flush with water for at least 15 minutes.

Ingestion: Seek medical attention.

Inhalation: Remove to fresh air. Seek medical attention.

Section 8 - Fire/Explosion Hazard Data

Use any means suitable for extinguishing surrounding fire. It is not necessary to use any special firefighting procedures. Water spray, carbon dioxide, dry chemical powder or appropriate foam can all be used.

Thermal Decomposition: No decomposition if used according to specifications.

Dangerous Reactions: None identified.

Dangerous Products of Decomposition: No dangerous decomposition products identified.

Section 9 - Accidental Release Measures

For release of large amounts of material, wear safety glasses and rubber gloves. Stop source of leak and isolate spill area. Collect material in an appropriate container and dispose all waste in accordance with applicable laws. Dispose of all waste in accordance with all national, state, and local regulations.

Part# 3012**Section 1****Synonyms:** 3%; Hydrogen Peroxide**CAS No.:** 7722-84-1**Molecular Weight:** 34.01**Chemical Formula:** H₂O₂ in aqueous solution (3%)**Section 2 - Composition/Information on Ingredients**

Ingredient	CAS No	Percent	Hazardous
Hydrogen Peroxide	7722-84-1	2% - 4%	Yes
Water	7732-18-5	96 - 98%	No

Section 3 - Hazards Identification**Emergency Overview****WARNING! MAY BE HARMFUL IF SWALLOWED. CAUSES EYE IRRITATION.****SAF-T-DATA^(tm)** Ratings (Provided here for your convenience)

Health Rating: 2 - Moderate

Flammability Rating: 0 - None

Reactivity Rating: 1 - Slight

Contact Rating: 2 - Moderate

Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES

Storage Color Code: Green (General Storage)

Potential Health Effects**Inhalation:** Not expected to be a health hazard under normal conditions.**Ingestion:** Large oral doses may cause irritation and blistering to the mouth, throat, and abdomen. May also cause abdominal pain, vomiting, and diarrhea.**Skin Contact:** No adverse effects expected on intact skin. Contact on burn or open skin may cause stinging pain or irritation.**Eye Contact:** Causes irritation, redness, and pain.**Chronic Exposure:** No information found.**Aggravation of Pre-existing Conditions:** No information found.**Section 4 - First Aid Measures****Inhalation:** Not expected to require first aid measures.**Ingestion:** Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.**Skin Contact:** Not expected to require first aid measures. Wash exposed area with soap and water. Get medical advice if irritation develops.**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Section 5 - Fire Fighting Measures

Fire: Not considered to be a fire hazard. Concentrated hydrogen peroxide (30%) is a strong oxidizer, but this dilute product does not present that hazard.

Explosion: Not considered to be an explosion hazard. Drying of concentrated hydrogen peroxide on clothing or other combustible materials may cause fire or explosion.

Fire Extinguishing Media: Use any means suitable for extinguishing surrounding fire.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face-piece operated in the pressure demand or other positive pressure mode.

Section 6 - Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Contain and recover liquid when possible. 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. Small amounts of residue may be flushed to sewer with plenty of water.

Section 7 - Handling and Storage

Store in a cool, well-ventilated dark area. Protect from freezing. Isolate from incompatible substances. Protect container from physical damage. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

Section 8 - Exposure Controls/Personal Protection

Airborne Exposure Limits:

-OSHA Permissible Exposure Limit (PEL):

1 ppm (TWA).

-ACGIH Threshold Limit Value (TLV):

1 ppm (TWA), A3: Animal carcinogen.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

Not expected to require personal respirator usage. If the exposure limit is exceeded, wear a supplied air, full-facepiece respirator, airtight hood, or full-facepiece self-contained breathing apparatus. This substance has unknown warning properties.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Section 9 - Physical and Chemical Properties

Appearance: Clear, colorless solution.

Odor: Odorless.

Solubility: Infinitely soluble.

Specific Gravity: ca. 1.0

pH: No information found.

% Volatiles by volume @ 21C (70F): 100

Boiling Point: ca. 100C (ca. 212F)

Melting Point: ca. 0C (ca. 32F)

Vapor Density (Air=1): No information found.

Vapor Pressure (mm Hg): No information found.

Evaporation Rate (BuAc=1): No information found.

Section 10 - Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Decomposes to water and oxygen.

Hazardous Polymerization: Will not occur.

Incompatibilities: Heat, reducing agents, organic materials, dirt, alkalis, rust, and many metals.

Conditions to Avoid: Light, heat, incompatibles.

Section 11 - Disposal Considerations

Dilute with water and flush to sewer if local ordinances allow, otherwise, whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Section 12 - Transport Information

Not regulated.

Section 13 - Other Information

NFPA Ratings: Health: **1** Flammability: **0** Reactivity: **1**

Label Hazard Warning:

WARNING! MAY BE HARMFUL IF SWALLOWED. CAUSES EYE IRRITATION.

Label Precautions:

Avoid contact with eyes.

Keep container closed.

Wash thoroughly after handling.

Label First Aid:

In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. If swallowed, give large amounts of water to drink.

Never give anything by mouth to an unconscious person. If large amounts were swallowed, get medical advice.

Product Use:

Laboratory Reagent.

Part# 4011

Section 1 - Composition/Information on Ingredients

Ingredient A: APF (3'(*p*-aminophenyl)) fluorescein 5 mM solution in DMF

Ingredient B: *N,N*-dimethylformamide *solvent for ingredient A

Unit Size: 470 μ L

Molecular Formula: C_3H_7NO

Molecular Weight: 73.09

CAS Number/Name: 68-12-2 / *N,N*-dimethylformamide

Section 2 - Handling and Storage

Protect material from long-term exposure to light; may be exposed to light for short periods of time.

Store at $\leq 6^\circ\text{C}$; if frozen, AVOID FREEZE-THAW CYCLES.

Section 3 - Hazards Identification

Emergency Overview: Harmful by inhalation. Irritating to eyes and skin. May be harmful to the unborn child. Readily absorbed through the skin. Possible carcinogen.

Section 4 - First Aid Measures

Potentially harmful. Avoid prolonged or repeated exposure. Wash thoroughly after handling. If eye or skin contact occurs, wash affected area with water for 15 minutes and seek medical advice. If inhaled, move individual to fresh air and seek medical advice. If swallowed, seek medical advice.

Section 5 - Fire Fighting Measures

Use dry chemical powder or appropriate foam extinguisher.

Section 6 - Accidental Release Measures

Use appropriate protective equipment and methods to clean up spilled substances promptly. Absorb spill onto an appropriate material. Collect and dispose of all waste in accordance with applicable laws.

Section 7 - Handling and Storage

Desiccation recommended. Store at $\leq -20^\circ\text{C}$. Wear appropriate gloves, protective clothing and eyewear and follow safe laboratory practices. ACGIH/OSHA Permissible Exposure Limit

Data: PEL: 8 hour TWA 10 ppm (30 mg/m^3) (skin)

Section 8 - Physical and Chemical Properties

Form: Liquid

Odor: Not determined

Solubility in Water: High

Specific Gravity: 0.944

pH: Not determined

Boiling Point: 153°C

Melting Point: -98°C

Flash Point: 136°F

Section 9 - Stability and Reactivity

Thermal Decomposition: No decomposition if used according to specifications. Dangerous

Reactions: Incompatible with acid chlorides, oxidizing agents, chloroformates, reducing agents,

halogens. Dangerous Products of Decomposition: Carbon monoxide, carbon dioxide, nitrogen oxides.

Section 10 - Toxicological Information

RTECS Number: LQ2100000

Toxicity: LD₅₀: 2.8 g/kg, oral, rat; LD₅₀: 4.7g/kg, skin, rabbit; LC50: 9.4 g/m³/2H, inhalation, mouse.

Health Hazards: Irritation Data: 100 mg, rinsed Draize, eyes, rabbit, severe; Std. Draize, skin, human, mild; Mutation Data: cytogenic analysis: 100 nmol/L, lymphocytes, human; 40 µmol/kg, intraperitoneal, mouse.

Potential Hazards: Severe eye irritant, mutagen.

Carcinogenicity: IARC listed: group 2B carcinogen.

Section 11 - ECOLOGICAL INFORMATION

Do not allow product to reach ground water, water course, or sewage system.

Section 12 - DISPOSAL CONSIDERATIONS

Consult local, state or national regulations for proper disposal.

Section 13 - TRANSPORT INFORMATION

Hazard Class: Flammable

Identification Number: UN2265

Packing Group: III

Proper Shipping Name (Technical Name): N,N-Dimethylformamide, 3

Section 14 - Regulations

US Toxic Substances Control Act (TSCA): Listed

US Other: This material contains a toxic chemical subject to the notification requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986. This law requires certain manufacturers to report on annual emissions of specified chemicals and chemical categories. Please note that if you repackage, or otherwise redistribute, this/these product(s) to industrial customers, a notice similar to this one should be sent to those customers.

EEC EINECS Number: 200-679-5

EEC Risk Statements: R 20/21 Harmful by inhalation and in contact with skin. R 36 Irritating to eyes. R 61 may cause harm to the unborn child. S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S 53 Avoid exposure - obtain special instructions before use.

Other Country Regulations: None identified

Section 15 - Other Information

This material is sold for research purposes only. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. The above information is correct to the best of our knowledge. Users should make independent decisions regarding completeness of the information based on all sources available. Cell Technology shall not be held liable for any damage resulting from handling or contact with the above product.



This material is not considered hazardous, or is not present above 1%, or is not a carcinogen above 0.1% as defined in 29 CFR 1910.1200, the OSHA Hazard Communication Standard. Therefore, a Material Safety Data Sheet is not required. We recommend treating all chemicals with caution.

This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, and household, agricultural or cosmetic use. A technically qualified individual experienced in handling potentially hazardous chemicals must supervise its use. The above information is correct to the best of our knowledge. Users should make independent decisions regarding completeness of the information based on all sources available. Cell Technology shall not be held liable for any damage resulting from handling or contact with the above product.

DISCLAIMER

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