

## Material Safety Data Sheet – APF/HPF/OCL

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

### CHEMICAL IDENTIFICATION:

#### Product Name(s):

Hydroxyl radical/Peroxynitrite Detection; Catalog # **FLHPF100-2**

Hypochlorite Detection, Catalog # **FLOCL100-2**

Highly Reactive Oxygen Species, Catalog # **FLAPF100-2**

**Kit Part No: 5020** - Hydroxyl radical/Peroxynitrite Detection; **FLHPF100-2**

Components:

1. Part # 4012, HPF 5mM solution in DMF

**Kit Part No: 5021** - Hypochlorite Detection; **FLOCL100-2**

Components:

1. Part # 4011. APF: 5mM solution in DMF
2. Part # 4012. HPF: 5mM solution in DMF

**Kit Part No: 5027** - Selective Indicators for Highly Reactive Oxygen Species; **FLAPF100-2**

Components:

1. Part# 4011. APF: 5mM solution in DMF

### Composition / Information on Ingredients

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

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

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

### Part# 4011 and 4012

#### Section 1 - Chemical Identification

Product Name: ***N,N*-dimethylformamide solvent for HPF and APF**

#### Section 2 - Composition / Information on Ingredients

Ingredient: ***N,N*-dimethylformamide solvent for HPF and APF**

Unit Size: 470 µL

Molecular Formula: C<sub>3</sub>H<sub>7</sub>NO

Molecular Weight: 73.09

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

**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 3 - Potential Health Effects**

INHALATION: See Emergency Overview Above

INGESTION: See Emergency Overview Above

SKIN: See Emergency Overview Above

EYES: See Emergency Overview Above

CHRONIC EXPOSURES: See Emergency Overview Above

TARGET ORGANS: See Emergency Overview Above

**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**

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 8 - Exposure Controls / Personal Protection**

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<sup>3</sup>) (skin)

**Section 9 - 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

Vapor Pressure: Not Determined

**Section 10 - 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 11 - Toxicological Information**

RTECS Number: LQ2100000

Toxicity: LD<sub>50</sub>: 2.8 g/kg, oral, rat; LD<sub>50</sub>: 4.7 g/kg, skin, rabbit; LC50: 9.4 g/m<sup>3</sup>/2H, inhalation and 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 12 - Ecological Information**

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

**Section 13 - Disposal Considerations**

Consult local, state or national regulations for proper disposal.

**Section 14 - Transport Information**

Material (Technical Name): N,N-Dimethylformamide, 3

Hazard Class: 3

UN Number: UN2265

Packing Group: III

Label Codes: 3

Special Provisions: B1, IB3, T2, TP2

Exceptions: 150

Non Bulk: 203

Bulk: 242

Passenger Aircraft Rail: 60 L

Cargo Aircraft Only: 220 L

**Section 15 - 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 16 - 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.

**Other Information**

**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.**

**DISCLAIMER**

For R&D use only. Not for drug, household or other uses.

**WARRANTY**

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT IS NOT NECESSARILY ALL-INCLUSIVE AND SHOULD BE USED ONLY AS A GUIDE. CELL TECHNOLOGY INC SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. INDIVIDUALS RECEIVING THE INFORMATION MUST EXERCISE THEIR INDEPENDENT JUDGMENT IN DETERMINING ITS APPROPRIATENESS FOR A PARTICULAR PURPOSE.

**For Research Use Only, not for diagnostic or other purposes.**