

# **Material Safety Data Sheet – Fluoro ATP**

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

### **CHEMICAL IDENTIFICATION:**

Product Name: Fluoro Sarcosine – Fluorescent Sarcosine Detection Kit

Catalog # FLADP100-2/ FLADP100-3

# **Components:**

- 1. Part #: 6032. Enzyme Mix 25X: 1 frozen vial 220  $\mu$ L. Upon arrival store at -20 °C. Aliquot and store at -20 °C.
- 2. Part# 3065: Substrate Buffer. 1 bottle 25mL. Upon arrival store at -20 °C. Ready to use.
- 3. Part# 4028: Detection Reagent 100X: 1 dried vial. Upon arrival store -20  $^{\circ}$ C To reconstitute add 60  $\mu$ L of anhydrous DMSO. Aliquot and store at -20  $^{\circ}$ C
- 4. Part# 7027: ADP Standard 2.5mM: 1vial. Upon arrival store -20 °C After first use aliquot and store at -20 °C
- 5. **Part# 7026: NEM:** 1 vial dried. Reconstitute in 0.5mL of ETOH. Upon arrival and reconstitution store -20C<sup>0</sup>. Dilute as needed

#### A. Part# 4028

### Section 1 - Identification

Synonyms: Resazurin, sodium salt \*CAS 62758-13-8\*

CAS #: 62758-13-8

Chemical Formula: C<sub>12</sub>H<sub>6</sub>NNaO<sub>4</sub>

### Section 2 - Hazards Identification

Not a hazardous substance or mixture

- 2.1 Classification Not a hazardous substance or mixture
- 2.2 GHS label elements, including precautionary statements Not a hazardous substance or mixture
- 2.3 Hazardous not otherwise classified (HNOC) or not covered by GHS None
- 2.4 Potential health effects asdfasdf Avoid contact and inhalation. To our knowledge, the hazards of this material have not been thoroughly investigated. We recommend handling all chemicals with caution.
  - a. Inhalation: No data available (may be harmful by inahalation)
  - b. Ingestion: No data available (may be harmful if swallowed)
  - c. Skin: No data available (may cause skin irritation in susceptible persons)
  - d. Eyes: No data available (may cause eye irritation in susceptible persons)
  - e. Chronic exposures: No data available (potentially harmful)
  - f. Target organs: No data available (potentially harmful)
  - g. Carcinogenic effects: No data available (potentially harmful)
  - h. Mutagenic effect: No data available (potentially harmful) i. Reproductive toxicity: No data available (potentially harmful)



j. Sensitization: No data available (potentially harmful)

### Section 3. Composition/Information on Ingredients

Chemical Name CAS# EINECS# Resazurin, sodium salt 62758-13-8 N/A

### Section 4. First Aid and Measures

- 4.1 Skin contact Rinse with plenty of water. Call a physician to seek medical advice if symptoms arise.
- 4.2 Eye contact Wash thoroughly after handling. If eye or skin contact occurs, immediately wash affected area with soap and copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician to seek medical advice.
- 4.3 Ingestion Never give anything by mouth to an unconscious person. Call a physician to seek medical advice if symptoms arise.
- 4.4 Inhalation If swallowed, wash out mouth with water provided person is conscious and call a physician to seek medical advice. If inhaled, move individual to fresh air and call a physician to seek medical advice.
- 4.5 Notes to physician Treat symptomatically

### Section 5. Fire Fighting Measures

- 5.1 Extinguishing media Water spray, carbon dioxide, dry chemical powder or appropriate foam.
- 5.2 Special firefighting procedures Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
- 5.3 Unusual fire and explosions hazards Emits toxic fumes under fire conditions

#### Section 6. Accidental Release Measures

- 6.1 Personal precautions, protective equipment and emergency procedures Use appropriate protective equipment and methods to clean up spilled substances promptly.
- 6.2 Environmental precautions Prevent further leakage or spillage if safe to do so.
- 6.3 Methods for cleaning up Absorb spill onto an appropriate material. Collect and dispose of all waste in accordance with applicable laws

#### Section 7. Handling and Storage

- 7.1 Personal precautions, protective equipment and emergency procedures Potentially harmful. Avoid prolonged or repeated exposure. Avoid dust formation. Avoid breathing vapors, mist or gas.
- 7.2 Conditions for safe storage, including any incompatibilities Keep container tightly closed in a dry, cool and well-ventilated place. Protect material from long-term exposure to light Inhalation: Remove to fresh air. Seek medical attention.



#### **Section 8** Exposure Controls/Personal Protection

8.1 Control parameters: Contains no substances with occupational exposure limit values.

#### 8.2 Control parameters:

- a. Engineering measures: General industrial hygeine practice.
- b. Personal protective equipment: Wear appropriate gloves, protective clothing and eyewear and follow safe laboratory practices.

8.3 Environmental exposure control: Prevent products from entering drains.

#### **Section 9**. Physical and Chemical Properties

Appearance: Solid

Solubility in water: Moderate

Odor/odor threshold: No data available

Specific gravity: No data available

pH: No data available Boiling point: No data available

Melting point: No data available

Flash point: No data available

Vapor pressure: No data available
Vapor density: No data available
Relative density: No data available

Upper/lower flammability or explosive limits: No data available Partition coefficient (n-octanol/water): No data available

Auto-ignition temperature:

Decomposition temperature:

No data available

No data available

Viscosity: No data available Explosive properties: No data available

Oxidizing properties: No data available

#### **Section10**. Stability and Reactivity

Reactivity: No data available Chemical stability: Stable under recommended storage conditions

Possibility of hazardous reactions: No data available

Conditions to avoid: No data available

Incompatible materials: No data available

Hazardous decomposition products: No data available

#### **Section 11**. Toxicological Information

Acute toxicity: No data available

Skin/corrosion/irritation: No data available (may cause skin irritation in susceptible persons)
Serious eye damage/irritation: No data available (may cause eye irritation in susceptible persons)

Respiratory or skin sensitization: No data available (may be harmful by inhalation)

Germ cell mutagenicity: No data available (potentially harmful)
Carcinogenicity: Not listed by NTP, IARC, or OSHA

Reproductive toxicity:

Specific target organ toxicity:

Aspiration hazard:

RTECS:

No data available

No data available

No data available



### Section 12. Ecological Information

Ecotoxicity:

Persistence and degradability:

Bioaccumulative potential:

Mobility in soil:

Results of PBT and vPvB assessment:

No data available

No data available

No data available

### Section 13. Disposal Consideration

Do not allow product to reach ground water, water course, or sewage system. Consult local, state or national regulations for proper disposal.

### Section 14. Transport Information

DOT (US): Not dangerous goods I MDG: Not dangerous goods IATA: Not dangerous goods

### Section 15. Regulatory Information

US Toxic Substances Control Act (TSCA): Not listed SARA 302 components: Not listed SARA 313 components: Not listed SARA 311/312 components: Not listed EEC risk statements: Not listed Massachusetts-RTK: Not listed New Jersey-RTK: Not listed Pennsylvania-RTK: Not listed California Proposition 65: Not listed

### Section 16. Other Information

16.1 HMIS

Rating Health hazard 0
Flammability 0
Reactivity 0

16.2 NFPA Rating Health hazard 0Flammability 0Reactivity 0



# В.

#### **Section 1** – Identification

Part#		Cas#	EINECS#	Appearance	Water Solubility
	Enzyme Mix				
6032	25X	N/A	N/A	Frozen Liquid	High
	Substrate				
3065	Buffer	N/A	N/A	Frozen Liquid	High
	ATP				
	Standard				
7027	2.5mM	N/A	N/A	Frozen Liquid	High

#### Section 2 - Hazard Identification

- 2.1 Classification Not a hazardous substance or mixture
- 2.2 GHS label elements, including precautionary statements Not a hazardous substance or mixture
- 2.3 Hazardous not otherwise classified (HNOC) or not covered by GHS None
- 2.4 Potential health effects asdfasdf Avoid contact and inhalation. To our knowledge, the hazards of this material have not been thoroughly investigated. We recommend handling all chemicals with caution.
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  - b. Ingestion: No data available (may be harmful if swallowed)
  - c. Skin: No data available (may cause skin irritation in susceptible persons)
  - d. Eyes: No data available (may cause eye irritation in susceptible persons)
  - e. Chronic exposures: No data available (potentially harmful)
  - f. Target organs: No data available (potentially harmful)
  - g. Carcinogenic effects: No data available (potentially harmful)
  - h. Mutagenic effect: No data available (potentially harmful)
  - i. Reproductive toxicity: No data available (potentially harmful)
  - j. Sensitization: No data available (potentially harmful)

# Section 3 - Composition/Information on Ingredients

Part#		Cas#	EINECS#	Appearance	Water Solubility
	Enzyme Mix				
6032	25X	N/A	N/A	Frozen Liquid	High
	Substrate				
3065	Buffer	N/A	N/A	Frozen Liquid	High
	ADP				
	Standard				
7027	2.5mM	N/A	N/A	Frozen Liquid	High



#### Section 4. First Aid and Measures.

- 4.1 Skin contact Rinse with plenty of water. Call a physician to seek medical advice if symptoms arise.
- 4.2 Eye contact Wash thoroughly after handling. If eye or skin contact occurs, immediately wash affected area with soap and copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician to seek medical advice.
- 4.3 Ingestion Never give anything by mouth to an unconscious person. Call a physician to seek medical advice if symptoms arise.
- 4.4 Inhalation If swallowed, wash out mouth with water provided person is conscious and call a physician to seek medical advice. If inhaled, move individual to fresh air and call a physician to seek medical advice.
- 4.5 Notes to physician Treat symptomatically.

### **Section 5.** Fire Fighting Measures

- 5.1 Extinguishing media Water spray, carbon dioxide, dry chemical powder or appropriate foam.
- 5.2 Special firefighting procedures Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
- 5.3 Unusual fire and explosions hazards Emits toxic fumes under fire conditions.

### Section 6. Accidental Release Measures

- 6.1 Personal precautions, protective equipment and emergency procedures Use appropriate protective equipment and methods to clean up spilled substances promptly.
- 6.2 Environmental precautions Prevent further leakage or spillage if safe to do so.
- 6.3 Methods for cleaning up Absorb spill onto an appropriate material. Collect and dispose of all waste in accordance with applicable laws.

### Section 7. Handling and Storage

- 7.1 Personal precautions, protective equipment and emergency procedures Potentially harmful. Avoid prolonged or repeated exposure. Avoid dust formation. Avoid breathing vapors, mist or gas.
- 7.2 Conditions for safe storage, including any incompatibilities Keep container tightly closed in a dry, cool and well-ventilated place. Protect material from long-term exposure to light



#### **Section 8.** Exposure Controls/Personal Protection

8.1 Control parameters Contains no substances with occupational exposure limit values.

#### 8.2 Control parameters

- a. Engineering measures: General industrial hygeine practice.
- b. Personal protective equipment: Wear appropriate gloves, protective clothing and eyewear and follow safe laboratory practices.
- 8.3 Environmental exposure control Prevent products from entering drains

### Section 9. Physical and Chemical Properties

Odor/odor threshold: No data available Specific gravity: No data available

pH: 7.2-7.4 Boiling point: NA

Melting point: No data available Flash point: No data available Vapor pressure: No data available Vapor density: No data available Relative density: No data available

Upper/lower flammability or explosive limits: No data available Partition coefficient (n-octanol/water): No data available

Auto-ignition temperature: No data available Decomposition temperature: No data available

Viscosity: No data available

Explosive properties: No data available Oxidizing properties: No data available

### Section 10. Stability and Reactivity

Reactivity: No data available

Chemical stability: Stable under recommended storage conditions

Possibility of hazardous reactions: No data available

Conditions to avoid: No data available Incompatible materials: No data available

Hazardous decomposition products: No data available

# Section 11. Toxicological Information

Acute toxicity: No data available

Skin/corrosion/irritation: No data available (may cause skin irritation in susceptible persons)
Serious eye damage/irritation: No data available (may cause eye irritation in susceptible persons)

Respiratory or skin sensitization: No data available (may be harmful by inhalation)

Germ cell mutagenicity: No data available (potentially harmful)

Carcinogenicity: Not listed by NTP, IARC, or OSHA

Reproductive toxicity: No data available

Specific target organ toxicity: No data available

Aspiration hazard: No data available

RTECS: No data available



#### Section 12. Ecological Information

Ecotoxicity: No data available

Persistence and degradability: No data available Bioaccumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: No data available

### Section 13. Disposal Consideration

Do not allow product to reach ground water, water course, or sewage system. Consult local, state or national regulations for proper disposal.

### Section 14. Transport Information

DOT (US): Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

#### **Section 15.** Regulatory Information

US Toxic Substances Control Act (TSCA): Not listed

SARA 302 components: Not listed SARA 313 components: Not listed SARA 311/312 components: Not listed

EEC risk statements: Not listed Massachusetts-RTK: Not listed New Jersey-RTK: Not listed Pennsylvania-RTK: Not listed California Proposition 65: Not listed

## Section 16. Other Information

16.1 HMIS Rating Health hazard 0 Flammability 0 Reactivity 0

16.2 NFPA
Rating Health hazard 0
Flammability 0
Reactivity 0



### C.

Section 1 - Identification

Part # 7026

Product name: N-Ethylmaleimide, NEM.

CSA# 128-53-0 MW= 125.13

#### Section 2 - Hazard Identification

GHS - Classification

Signal Word DANGER

Health hazards Acute oral toxicity:

Acute dermal toxicity:

Skin corrosion/irritation:

Serious eye damage/eye irritation:

Category 1

Skin sensitization:

Category 1

Category 1

### **Physical hazards:** Not Hazardous

#### **Hazard Statements**

- Fatal if swallowed
- Toxic in contact with skin
- Causes severe skin burns and eye damage
- May cause an allergic skin reaction
- Causes serious eye damage

### **Precautionary Statements**

- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- IF ON SKIN: Wash with plenty of soap and water
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- Rinse mouth
- Call a POISON CENTER or doctor/physician if you feel unwell

### <u>Principle Routes of Exposure</u>

### Potential Health Effects

Eyes Corrosive to the eyes and may cause severe damage including blindness.

Skin Causes burns.

Inhalation Harmful by inhalation.

Ingestion May be harmful if swallowed.

### Specific effects

Carcinogenic effects None.

Mutagenic effects None.

Reproductive toxicity None.

Sensitization May cause an allergic skin reaction.

Target Organ Effects None under normal use conditions.



HMIS: Hazardous Health 4 Flammability 0 Reactivity 0

### Section 3 - Composition/Information on Ingredients

Component N-Ethylmaleimide CAS# 128-53-0. EINECS-No: 204-892-4

#### Section 4. First Aid and Measures.

- 4.1 Skin contact Rinse with plenty of water. Call a physician to seek medical advice if symptoms arise.
- 4.2 Eye contact Wash thoroughly after handling. If eye or skin contact occurs, immediately wash affected area with soap and copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician to seek medical advice.
- 4.3 Ingestion Never give anything by mouth to an unconscious person. Call a physician to seek medical advice if symptoms arise.
- 4.4 Inhalation If swallowed, wash out mouth with water provided person is conscious and call a physician to seek medical advice. If inhaled, move individual to fresh air and call a physician to seek medical advice.
- 4.5 Notes to physician Treat symptomatically.

#### Most important symptoms and effects, both acute and delayed

H300 - Fatal if swallowed,

H311 - Toxic in contact with skin,

H314 - Causes severe skin burns and eye damage,

H317 - May cause an allergic skin reaction,

H318 - Causes serious eye damage

### **Section 5.** Fire Fighting Measures

- 5.1 Extinguishing media Water spray, carbon dioxide, dry chemical powder or appropriate foam.
- 5.2 Special firefighting procedures Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
- 5.3 Unusual fire and explosions hazards Emits toxic fumes under fire conditions.



#### Section 6. Accidental Release Measures

- 6.1 Personal precautions, protective equipment and emergency procedures Use appropriate protective equipment and methods to clean up spilled substances promptly.
- 6.2 Environmental precautions Prevent further leakage or spillage if safe to do so.
- 6.3 Methods for cleaning up Absorb spill onto an appropriate material. Collect and dispose of all waste in accordance with applicable laws.

#### **Section 7.** Handling and Storage

- 7.1 Personal precautions, protective equipment and emergency procedures Potentially harmful. Avoid prolonged or repeated exposure. Avoid dust formation. Avoid breathing vapors, mist or gas.
- 7.2 Conditions for safe storage, including any incompatibilities Keep container tightly closed in a dry, cool and well-ventilated place. Protect material from long-term exposure to light

#### **Section 8.** Exposure Controls/Personal Protection

### **Engineering measures**

Ensure adequate ventilation, especially in confined areas.

#### Personal Protective Equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection Impervious gloves.

Eye protection Wear safety glasses with side shields (or goggles).

Skin and Body Protection Lightweight protective clothing.

<u>Hygiene measures</u> Handle in accordance with good industrial hygiene and safety practice.

<u>Environmental exposure controls</u> No special environmental precautions required.

#### **Section 9**. Physical and Chemical Properties

Form white solid
Appearance white solid
Odor Mixture has not been tested
Odor Threshold Mixture has not been tested
Evaporation rate No data available



Flammability (solid, gas) No data available
Oxidizing properties Mixture has not been tested
Water solubility No data available
Upper explosion limit No data available Lower explosion limit No data available
Partition coefficient: n-octanol/water No data available
Vapor Pressure No data available vapor density No data available
Viscosity Mixture has not been tested
pH value No data available

#### Section 10. Stability and Reactivity

Stability Stable under normal conditions.

Materials to avoid No information available.

Possibility of hazardous reactions Hazardous reaction has not been reported

Hazardous decomposition products No information available.

Polymerization Hazardous polymerization does not occur.

Conditions to avoid None under normal processing.

### Section 11. Toxicological Information

### **Acute toxicity:**

Principle Routes of Exposure Potential Health Effects

Eyes Corrosive to the eyes and may cause severe damage including blindness.

Skin Causes burns.

Inhalation Harmful by inhalation.

Ingestion May be harmful if swallowed.

Carcinogenic effects None.

Mutagenic effects None.

Reproductive toxicity None.

Sensitization May cause an allergic skin reaction.

Target Organ Effects None under normal use conditions

# Section 12. Ecological Information

Ecotoxicity: No data available

Persistence and degradability: No data available Bioaccumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: No data available



### Section 13. Disposal Consideration

Do not allow product to reach ground water, water course, or sewage system. Consult local, state or national regulations for proper disposal.

#### **Section 14.** Transport Information

IATA Proper Shipping Name Toxic solids, corrosive,organic, n.o.s. (Nethylmaleimide)
Hazard Class 6.1
Subsidiary class 8
Packing group II
UN-No UN2928
Environmental hazards None

# Section 15. Regulatory Information

### **US Federal Regulations**

SARA 313 This product is not regulated by SARA.
Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contains HAPs.
US State Regulations
California Proposition 65 This product does not contain any Proposition 65 chemicals.
WHMIS Hazard Class
D1A - Very toxic materials
D2B - Toxic materials
E - Corrosive material

### Section 16. Other Information

#### **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.

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