

Material Safety Data Sheet – Fluoro ADP

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 #: 6031. Enzyme Mix 25X:** 1 frozen vial 220 µL. Upon arrival store at -20 °C. Aliquot and store at -20 °C.
- 2. Part# 3064: 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 °C To reconstitute add 60 µL of anhydrous DMSO. Aliquot and store at -20 °C
- 4. Part# 7025: 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 -20C⁰. Dilute as needed

A. Part# 4028

Section 1 - Identification

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

CAS #: 62758-13-8

Chemical Formula: C₁₂H₆NNaO₄

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 asdfasfd Avoid contact and inhalation. To our knowledge, the hazards of this material have not been thoroughly investigated. We recommend handling all chemicals with caution.

- Inhalation: No data available (may be harmful by inhalation)
- Ingestion: No data available (may be harmful if swallowed)
- Skin: No data available (may cause skin irritation in susceptible persons)
- Eyes: No data available (may cause eye irritation in susceptible persons)
- Chronic exposures: No data available (potentially harmful)
- Target organs: No data available (potentially harmful)
- Carcinogenic effects: No data available (potentially harmful)
- 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 hygiene 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:	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 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	
Flammability	0
Reactivity	0

B.

Section 1 – Identification

Part#			Cas#	EINECS#	Appearance	Water Solubility
6031	Enzyme Mix 25X		N/A	N/A	Frozen Liquid	High
3064	Substrate Buffer		N/A	N/A	Frozen Liquid	High
7025	ADP Standard 2.5mM		N/A	N/A	Frozen Liquid	High

Section 2 - Hazard Identification

2.1 Classification Not a hazardous substance or mixture

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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 inhalation)
- 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
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3064	Substrate Buffer		N/A	N/A	Frozen Liquid	High
7025	ADP Standard 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 hygiene 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: Category 2

Acute dermal toxicity: Category 3

Skin corrosion/irritation: Category 1

Serious eye damage/eye irritation: Category 1

Skin sensitization: Category 1

Physical hazards: Not HazardousHazard 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

Principle Routes of ExposurePotential 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.

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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.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls 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 contain 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

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