

Product Name: Bucculite™ iFluor® 488 Protein Synthesis Assay Kit *Green Fluorescence*

Catalog Number: 22351

<i>Chemical Name</i>	<i>CAS#</i>	<i>EINECS#</i>	<i>Appearance</i>	<i>Water Solubility</i>
Component A: Bucculite™ AHA	N/A	N/A	Liquid	Moderate
Component B: Bucculite™ iFluor® 488 dye	N/A	N/A	Solid	Moderate
Component C: DMSO	67-68-5	N/A	Liquid	High

Safety Data Sheet

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name: Bucculite™ iFluor® 488 Protein Synthesis Assay Kit *Green Fluorescence*

Product number: 22351

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: For research use only. Not intended for diagnostic or therapeutic use.

1.3 Details of the supplier of the safety data sheet

Company: AAT Bioquest, Inc.

Address: 5775 W Las Positas Blvd, Pleasanton, CA 94588

Telephone: (408)-733-1055

Fax: (408)-733-1304

Email: info@aatbio.com

1.4 Emergency telephone number

Chemtrec (Within USA): 1-(800)-424-9300

Chemtrec (Outside USA): 1-(703)-527-3887

Section 2: Hazard identifications

2.1 Classification of the substance or mixture

Not evaluated; GHS hazards have not been determined.

2.2 Label elements

Signal word: Not available

Hazard statements: Not available

Symbols/Pictograms: Not available

Precautionary statements - prevention: Not available

Precautionary statements - response: Not available

Precautionary statements - storage: Not available

Precautionary statements - disposal: Not available

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Hazards not otherwise classified (HNOC): Not available

2.4 Other information

Other hazards: Not available

Section 3: Composition/information on ingredients

3.1 Substances

Chemical name:	Bucculite™ iFluor® 488 Protein Synthesis Assay Kit *Green Fluorescence*
CAS number:	Not available
Molecular weight:	Not applicable
Formula:	Not available

Section 4: First aid measures

4.1 First-aid measures

General advice:	If symptoms occur, seek medical advice/attention.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Skin contact:	Rinse cautiously with water for several minutes. Consult a physician if necessary.
Inhalation:	Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
Ingestion:	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. Consult a physician if necessary.
Self-protection of the first aider:	Use personal protective equipment.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:	No information available.
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4.3 Indication of any immediate medical attention and special treatment needed

Note to physicians:	Treat symptomatically.
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Section 5: Firefighting measures

5.1 Suitable extinguishing media

Suitable extinguishing media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media:	No information available.

5.2 Specific hazards arising from the chemical

Specific hazards arising from the chemical:	No information available.
Hazardous combustion products:	No information available.

5.3 Explosion data

Sensitivity to mechanical impact:	No information available.
Sensitivity to static discharge:	No information available.

5.4 Protective equipment and precautions for firefighters

Protective equipment and precautions for firefighters:	Standard procedure for chemical fires.
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Section 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures

Personal precautions:	Use appropriate personal protective equipment. Ensure adequate ventilation.
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6.2 Environmental precautions

Environmental precautions:	Avoid discharge into drains and waterways whenever possible.
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6.3 Methods and material for containment and cleaning up

Methods for containment:	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up:	Take up mechanically, placing in appropriate containers for disposal.

Section 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:	Use personal protective equipment as required. No special handling advices are necessary.
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7.2 Conditions for safe storage, including any incompatibilities

Storage conditions:	Keep in a properly-labeled container. Keep the container tightly closed in a cool, dry and well-ventilated place.
Incompatible materials:	No information available.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Exposure guidelines:	No information available.
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8.2 Appropriate engineering controls

Engineering controls:	Ensure adequate ventilation, especially in confined areas.
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8.3 Individual protection measures, such as personal protective equipment

Eye/face protection:	Tight sealing safety goggles.
Skin and body protection:	Wear protective gloves and clothing.
Respiratory protection:	In case of insufficient ventilation wear suitable respiratory equipment.
General hygiene considerations:	When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Keep away from food, drink, and animal feeding stuffs.

Section 9: Physical and chemical properties

Physical state:	Liquid
Solubility in water:	Moderate
Appearance:	No information available.
Odor/odor threshold:	No information available.
pH:	No information available.
Melting point/freezing point:	No information available.
Boiling point:	No information available.
Flashpoint:	No information available.
Liquid density:	No information available.
Evaporation rate:	No information available.
Upper flammability limit:	No information available.
Lower flammability limit:	No information available.

Vapor pressure:	No information available.
Vapor density:	No information available.
Specific gravity:	No information available.
Water solubility:	No information available.
Solubility in other solvents:	No information available.
Partition coefficient:	No information available.
Autoignition temperature:	No information available.
Decomposition temperature:	No information available.
Viscosity:	No information available.
Explosive properties:	No information available.
Oxidizing properties:	No information available.

Section 10: Stability and reactivity

Reactivity:	None known.
Chemical stability:	Stable under normal conditions.
Possibility of hazardous reactions:	Hazardous reaction has not been reported.
Hazardous polymerization:	No information available.
Conditions to avoid:	No information available.
Incompatible materials:	No dangerous reaction known under conditions of normal use.
Hazardous decomposition products:	No information available.

Section 11: Toxicological information

11.1 Information on likely routes of exposure

Inhalation:	No information available.
Eye contact:	No information available.
Skin contact:	No information available.
Ingestion:	No information available.

11.2 Information on toxicological effects

Symptoms:	No information available.
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11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic toxicity:	No information available.
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11.4 Numerical measures of toxicity - product information

Unknown acute toxicity:	No information available.
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Section 12: Ecological information

Ecotoxicity:	No information available.
Persistence and degradability:	No information available.
Bioaccumulation:	No information available.
Mobility:	No information available.

Section 13: Disposal consideration

Disposal of wastes:	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging:	Do not reuse container.
Other information:	None

Section 14: Transport information

DOT:	Not regulated
IMDG:	Not regulated
IATA:	Not regulated

Section 15: Regulatory information

15.1 International Inventories

US Toxic Substances Control Act (TSCA):	Not listed
Canada (DSL/NDSL):	Not listed
Europe (EINECS/ELINCS/NLP):	Not listed
Australia (AICS):	Not listed
South Korea (KECL):	Not listed
China (IECSC):	Not listed
Japan (ENCS):	Not listed
Phillipines (PICCS):	Not listed

15.2 US Federal Regulations

SARA 313:	Not listed
SARA 311/312 components:	Not listed
CWA (Clean Water Act):	No information available.

15.3 US State Regulations

California Proposition 65:	Not listed
Massachusetts-RTK:	Not listed
New Jersey-RTK:	Not listed
Pennsylvania-RTK:	Not listed
U.S. State Right-To-Know Regulations:	No information available.

Section 16: Other information

16.1 HMIS

Health hazards:	Not determined
Flammability:	Not determined
Reactivity:	Not determined
Personal protection:	Not determined

16.2 NFPA

Health hazards:	Not determined
Flammability:	Not determined
Stability:	Not determined

16.3 Further information

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, 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 believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Users should make independent decisions regarding the completeness of the information based on all sources available. AAT Bioquest shall not be held liable for any damage resulting from handling or from contact with the above product.

Safety Data Sheet

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name: DMSO
Product number: 22351

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: For research use only. Not intended for diagnostic or therapeutic use.

1.3 Details of the supplier of the safety data sheet

Company: AAT Bioquest, Inc.
Address: 5775 W Las Positas Blvd, Pleasanton, CA 94588
Telephone: (408)-733-1055
Fax: (408)-733-1304
Email: info@aatbio.com

1.4 Emergency telephone number

Chemtrec (Within USA): 1-(800)-424-9300
Chemtrec (Outside USA): 1-(703)-527-3887

Section 2: Hazard identifications

2.1 Classification of the substance or mixture

Flammable liquids	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A

2.2 Label elements

Signal word: Warning
Hazard statements: H227 - Combustible liquid
H315 - Causes skin irritation
H319 - Causes serious eye irritation

Symbols/Pictograms:



Precautionary statements - prevention:	Keep away from heat, hot surface, sparks, open flames and other ignition sources. No smoking. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. Wash hands... thoroughly after handling. Wash hands... thoroughly after handling. Do not touch eyes.
Precautionary statements - response:	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. IF ON SKIN: wash with plenty of water. Specific treatment (see on this label). If skin irritation occurs: Get medical help. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. If eye irritation persists: Get medical help.
Precautionary statements - storage:	Store in a well-ventilated place.
Precautionary statements - disposal:	Dispose of contents/container in accordance with local/regional/national/international regulation.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Hazards not otherwise classified (HNOC):	Not available
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2.4 Other information

Other hazards:	Not available
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Section 3: Composition/information on ingredients

3.1 Substances

Chemical name:	DMSO
CAS number:	67-68-5
Molecular weight:	Not applicable
Formula:	C ₂ H ₆ OS

Section 4: First aid measures

4.1 First-aid measures

General advice:	If symptoms occur, seek medical advice/attention.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Skin contact:	Rinse cautiously with water for several minutes. Consult a physician if necessary.
Inhalation:	Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
Ingestion:	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. Consult a physician if necessary.
Self-protection of the first aider:	Use personal protective equipment.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:	No information available.
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4.3 Indication of any immediate medical attention and special treatment needed

Note to physicians:

Treat symptomatically.

Section 5: Firefighting measures

5.1 Suitable extinguishing media

Suitable extinguishing media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media:

No information available.

5.2 Specific hazards arising from the chemical

Specific hazards arising from the chemical:

No information available.

Hazardous combustion products:

No information available.

5.3 Explosion data

Sensitivity to mechanical impact:

No information available.

Sensitivity to static discharge:

No information available.

5.4 Protective equipment and precautions for firefighters

Protective equipment and precautions for firefighters:

Standard procedure for chemical fires.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures

Personal precautions:

Use appropriate personal protective equipment. Ensure adequate ventilation.

6.2 Environmental precautions

Environmental precautions:

Avoid discharge into drains and waterways whenever possible.

6.3 Methods and material for containment and cleaning up

Methods for containment:

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up:

Take up mechanically, placing in appropriate containers for disposal.

Section 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:

Use personal protective equipment as required. No special handling advices are necessary.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions:

Keep the container tightly closed in a dry and well-ventilated place.
Keep out of the reach of children. Keep in properly labeled containers.
May form explosive peroxides. Store under inert gas. Hygroscopic.
Recommended storage temperature is < -15 °C.

Incompatible materials:

No information available.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Exposure guidelines:

No information available.

8.2 Appropriate engineering controls

Engineering controls: Ensure adequate ventilation, especially in confined areas.

8.3 Individual protection measures, such as personal protective equipment

Eye/face protection: Tight sealing safety goggles.

Skin and body protection: Wear protective gloves and clothing.

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

General hygiene considerations: When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Keep away from food, drink, and animal feeding stuffs.

Section 9: Physical and chemical properties

Physical state:	Liquid
Solubility in water:	High
Appearance:	No information available.
Odor/odor threshold:	Odorless
pH:	8.5 (50/50 in water)
Melting point/freezing point:	18 °C (64 °F)
Boiling point:	189 °C (372 °F)
Flashpoint:	89 °C (192 °F) Closed Cup, 95 °C (203 °F) Open Cup
Liquid density:	1.1 g/mL
Evaporation rate:	No information available.
Upper flammability limit:	28.5% (V)
Lower flammability limit:	3.0% - 3.5% (V)
Vapor pressure:	0.55 mbar (0.46 mmHg) at 20 °C (68 °F)
Vapor density:	2.70 - (Air = 1.0)
Specific gravity:	1.1 at 20 °C (68 °F) (water = 1)
Water solubility:	Completely miscible
Solubility in other solvents:	No information available.
Partition coefficient:	-2.03 (log Pow)
Autoignition temperature:	300 - 302 °C (572 - 576 °F) at 1,013 hPa
Decomposition temperature:	>190 °C (>374 °F)
Viscosity:	2.0 mPas or cP at 25 °C (77 °F)
Explosive properties:	Product does not present an explosion hazard.
Oxidizing properties:	The substance or mixture is not classified as oxidizing.

Section 10: Stability and reactivity

Reactivity:	Hazardous Polymerization will not occur.
Chemical stability:	The product is chemically stable under standard ambient conditions (room temperature) .
Possibility of hazardous reactions:	Hazardous reaction has not been reported.
Hazardous polymerization:	No information available.
Conditions to avoid:	Avoid heat, flames, and sparks. Prolonged heating above 150°C (302°F) can cause rapid, exothermic decomposition.

Incompatible materials:	Organic and inorganic acid chlorides, strong oxidizing agents, alkali metals, hydrobromic acid, acidic solutions of alkali bromides.
Hazardous decomposition products:	Sulfur dioxide, formaldehyde, methyl mercaptan, dimethyl sulfide, dimethyl disulfide, and bis (methylthio) methane.

Section 11: Toxicological information

11.1 Information on likely routes of exposure

Inhalation:	No information available.
Eye contact:	No information available.
Skin contact:	Acute dermal toxicity (LD50): 40000 mg/kg [Rat].
Ingestion:	Acute oral toxicity (LD50): 7920 mg/kg [Mouse].

11.2 Information on toxicological effects

Symptoms:	No information available.
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11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic toxicity:	No information available.
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11.4 Numerical measures of toxicity - product information

Unknown acute toxicity:	No information available.
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Section 12: Ecological information

Ecotoxicity:	Toxicity to fish LC50 – Pimephales promelas (Fathead minnow) – 34,000 mg/L-96h
Persistence and degradability:	Result: 31 % - According to the results of tests of biodegradability this product is not readily biodegradable. (OECD Test Guideline 301D)
Bioaccumulation:	No information available.
Mobility:	No information available.

Section 13: Disposal consideration

Disposal of wastes:	Disposal should be in accordance with applicable regional, national and local laws and regulations. Do not allow product to reach ground water, water course, or sewage system.
Contaminated packaging:	Do not reuse container.
Other information:	None

Section 14: Transport information

DOT:	Not a DOT controlled material.
IMDG:	Not regulated
IATA:	Not regulated

Section 15: Regulatory information

15.1 International Inventories

US Toxic Substances Control Act (TSCA):	Listed
Canada (DSL/NDL):	Not listed
Europe (EINECS/ELINCS/NLP):	Not listed
Australia (AICS):	Not listed

South Korea (KECL):	Not listed
China (IECSC):	Not listed
Japan (ENCS):	Not listed
Phillipines (PICCS):	Not listed

15.2 US Federal Regulations

SARA 313:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 components:	Fire Hazard, Chronic Health Hazard
CWA (Clean Water Act):	No information available.

15.3 US State Regulations

California Proposition 65:	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
Massachusetts-RTK:	No components are subject to the Massachusetts Right to Know Act.
New Jersey-RTK:	Dimethyl sulfoxide
Pennsylvania-RTK:	Dimethyl sulfoxide
U.S. State Right-To-Know Regulations:	No information available.

Section 16: Other information

16.1 HMIS

Health hazards:	Not determined
Flammability:	2
Reactivity:	Not determined
Personal protection:	Not determined

16.2 NFPA

Health hazards:	Not determined
Flammability:	2
Stability:	Not determined
Physical and chemical properties:	Not determined

16.3 Further information

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, 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 believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Users should make independent decisions regarding the completeness of the information based on all sources available. AAT Bioquest shall not be held liable for any damage resulting from handling or from contact with the above product.