AAT Bioquest, Inc.
520 Mercury Drive, Sunnyvale, CA 94085
Tel: 408-733-1055; Fax: 408-733-1304
www.aatbio.com; email: info@aatbio.com

Safety Data Sheet (SDS)

Product Name: Amplite™ Fluorimetric Peroxidase (HRP) Assay Kit *Red Fluorescence*
Catalog Number: 11552

Chemical Name	*CAS#*	*EINECS#*	*Appearance*	*Water Solubility*
Component A: Amplite™ Red Peroxidase Substrate	N/A	N/A	Lyophilized powder	Moderate
Component B: H2O2	N/A	N/A	Liquid	High
Component C: Assay Buffer	N/A	N/A	Liquid	High
Component D: Horseradish Peroxidase	N/A	N/A	Lyophilized powder	High
Component E: DMSO	67-68-5	N/A	Liquid	High

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Safety Data Sheet (SDS)

1. Product and Company Identification

1.1 Product identifiers

a. Product name:	Amplite™ Fluorimetric Peroxidase (HRP) Assay Kit *Red Fluorescence*
b. Product number:	11552
c. CAS number:	N/A

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

Identified uses:	Laboratory chemicals ***For Research Use Only***

1.3 Details of the supplier of the data sheet

a. Company:	AAT Bioquest, Inc. 520 Mercury Drive, Sunnyvale, CA 94085
b. Telephone:	408-733-1055
c. Fax:	408-733-1304
d. E-Mail:	info@aatbio.com

1.4 Emergency telephone number

Emergency telephone number:	408-489-6491

2. Hazards 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

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)

3. Composition/Information on Ingredients

Chemical Name	*CAS#*	*EINECS#*	*Appearance*	*Water Solubility*
Component A: Amplite™ Red Peroxidase Substrate	N/A	N/A	Lyophilized powder	Moderate
Component B: H2O2	N/A	N/A	Liquid	High
Component C: Assay Buffer	N/A	N/A	Liquid	High
Component D: Horseradish Peroxidase	N/A	N/A	Lyophilized powder	High

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.

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.

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.

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.

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.

9. Physical and Chemical Properties

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

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

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

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

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.

14. Transport Information

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

15. Regulatory Information

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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

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

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 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.

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Safety Data Sheet (SDS)

1. Product and Company Identification

1.1 Product identifiers

a. Product name:	DMSO
b. Product number:	N/A
c. CAS number:	67-68-5

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

Identified uses:	Laboratory chemicals ***For Research Use Only***

1.3 Details of the supplier of the data sheet

a. Company:	AAT Bioquest, Inc. 520 Mercury Drive, Sunnyvale, CA 94085
b. Telephone:	408-733-1055
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1.4 Emergency telephone number

Emergency telephone number:	408-489-6491

2. Hazards Identification

2.1 Classification

H227 Combustible liquid, H315 Causes Skin irritation, H319 Causes serious eye irritation

2.2 GHS label elements, including precautionary statements

H227 Combustible liquid, H315 Causes Skin irritation, H319 Causes serious eye irritation

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

None

2.4 Potential health effects

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:	High vapor concentrations may cause headache, dizziness, and sedation
b. Ingestion:	No data available (may be harmful if swallowed)
c. Skin:	Causes irritation to the skin.
d. Eyes:	Causes irritation to the eyes.
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:	Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. May cause damage to the following organs: blood, kidneys, liver, mucous membranes, skin, eyes
i. Reproductive toxicity:	No data available (potentially harmful)
j. Sensitization:	No data available (potentially harmful)

3. Composition/Information on Ingredients

Chemical Name	*CAS#*	*EINECS#*
Component E: DMSO	67-68-5	N/A

4. First Aid and Measures

4.1 Skin contact

Remove contaminated clothing. 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.

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.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

In case of mist formation use a respirator or self-contained breathing apparatus (SCBA). 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.

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. Keep away from ignition sources.

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.

9. Physical and Chemical Properties

Appearance:	Liquid
Solubility in water:	High
Odor/odor threshold:	Odorless
Specific gravity:	1.1 @ 20°C (68°F) (water=1)
pH:	8.5 (50/50 in water)
Boiling point:	189°C (372.2°F)
Melting point:	18°C (64°F)
Flash point:	89°C (192°F) Closed Cup, 95°C (203°F) Open Cup
Vapor pressure:	0.55 mbar (0.46 mmHg) @ 20°C (68°F)
Vapor density:	2.7
Relative density:	No data available
Upper/lower flammability or explosive limits:	Lower Explosive Limit: 3.0-3.5% by volume
Partition coefficient (n-octanol/water):	-2.03 (log Pow)
Auto-ignition temperature:	300-302°C (572-575°F)
Decomposition temperature:	> 190 °C (> 374 °F)
Viscosity:	2.0 mPas or cP (@ 25°C/77°F)
Explosive properties:	Product does not present an explosion hazard.
Oxidizing properties:	The substance or mixture is not classified as oxidizing.

10. Stability and Reactivity

Reactivity:	Hazardous Polymerization will not occur.
Chemical stability:	Stable under recommended storage conditions
Possibility of hazardous reactions:	No data 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.

11. Toxicological Information

Acute toxicity:	Acute oral toxicity (LD50): 7920 mg/kg [Mouse]. Acute dermal toxicity (LD50): 40000 mg/kg [Rat].
Skin/corrosion/irritation:	2
Serious eye damage/irritation:	2
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:	Affects fertility, mortality, and development of fetuses in rats.
Specific target organ toxicity:	No data available
Aspiration hazard:	No data available
RTECS:	PV6210000

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)
Bioaccumulative potential:	No data available
Mobility in soil:	No data available
Results of PBT and vPvB assessment:	This product contains no PBT/vPvB chemicals.

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.

14. Transport Information

DOT (US):	Not a DOT controlled material.
IMDG:	Not dangerous goods
IATA:	Not dangerous goods

15. Regulatory Information

US Toxic Substances Control Act (TSCA):	Not listed
SARA 302 components:	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA 313 components:	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
EEC risk statements:	Not listed
Massachusetts-RTK:	No components are subject to the Massachusetts Right to Know Act.
New Jersey-RTK:	Dimethyl sulfoxide
Pennsylvania-RTK:	Dimethyl sulfoxide
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.

16. Other Information

16.1 HMIS Rating

Health hazard	0
Flammability	2
Reactivity	0

16.2 NFPA Rating

Health hazard	0
Flammability	2
Reactivity	0

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 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.