

Product Name: Amplite® Colorimetric Phosphofructokinase (PFK) Activity Assay Kit

Catalog Number: 11329

Chemical Name	CAS#	EINECS#	Appearance	Water Solubility
Component A: PFK Probe	N/A	N/A	Liquid	N/A
Component B: PFK Assay Buffer	N/A	N/A	Liquid	N/A
Component C: PFK Enzyme Mix	N/A	N/A	Solid	N/A
Component D: PFK Developer	N/A	N/A	Solid	N/A
Component E: ATP	N/A	N/A	solid	moderate
Component F: NADH Standard	N/A	N/A	solid	high
Component G: PFK Positive Control	N/A	N/A	Solid	N/A



Safety Data Sheet

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

1.1	Product identifiers	
	Product name:	Amplite® Colorimetric Phosphofructokinase (PFK) Activity Assay Kit
	Product number:	11329
1.2	Relevant identified uses of the substance of	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 datasheet	
	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
Sec	tion 2: Hazard identifications	

2.1 Classification of the substance or mixture

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

2.2 Label elements

Signal word:	Not applicable
Hazard statements:	None
Symbols/Pictograms:	None
Precautionary statements - prevention:	Wash hands thoroughly after handling
Precautionary statements - response:	IF exposed concerned: Get medical advice/attention
Precautionary statements - storage:	None
Precautionary statements - disposal:	None

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

Hazards not otherwise classified (HNOC): None

2.4 Other information

Other hazards:

None

Section 3: Composition/information on ingredients

3.1 Substances

Chemical name:

CAS No.:

Molecular weight:

Formula:

Section 4: First aid measures

Amplite® Colorimetric Phosphofructokinase (PFK) Activity Assay Kit

4.1	First-aid measures	
	General advice:	If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on the skin, or on clothing.
	Eye contact:	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
	Skin contact:	Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water. Immediate medical attention is not required.
	Inhalation:	Remove to fresh air If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use a barrier to give mouth-to-mouth resuscitation. Artificial respiration and/or oxygen may be necessary. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.
	Ingestion:	Do NOT induce vomiting. Rinse/clean mouth with water and drink plenty of water afterward. Never give anything by mouth to an unconscious person. Consult a physician.
	Self-protection of the first aider:	Use personal protective equipment.
12	Most important symptoms and effects bot	h acute and delayed

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:	No information available.

4.3 Indication of any immediate medical attention and special treatment needed

	Note to physicians:	Treat symptomatically.
See	ction 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:	In the event of a fire and/or explosion, do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can lead to the release of irritating and toxic gases and vapors.

	Hazardous combustion products:	Carbon oxides, sulfur oxides
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:	As in any fire, wear self-contained breathing apparatus pressure- demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
See	tion 6: Accidental release measures	
6.1	Personal precautions, protective equipme	nt, and emergency procedures
	Personal precautions:	Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.
6.2	Environmental precautions	
	Environmental precautions:	Prevent further leakage or spillage if safe to do so. Prevent product

6.3 Methods and material for containment and cleaning up

Methods for containment:	Prevent further leakage or spillage if safe to do so. Cover powder spill with a plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.
Methods for cleaning up:	Use personal protective equipment as required. Cover powder spill with a plastic sheet or tarp to minimize spreading and keep the powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surfaces thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

from entering drains. Do not flush into surface water or sanitary sewer

system. See Section 12 for additional Ecological Information.

Section 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:	Avoid contact with skin, eyes, or clothing. Use personal protective
	equipment as required. Wash contaminated clothing before reuse. Do
	not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or
	smoke when using this product. Use with local exhaust ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions:	Keep the container tightly closed in a dry and well-ventilated place.
	Recommended storage temperature is <-15°C. Minimize light exposure.
Incompatible materials:	None known based on information supplied.

Section 8: Experimental controls/personal protection

8.1 Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

8.2 Appropriate engineering controls

Engineering controls:

Showers, eyewash stations, ventilation systems

8.3 Individual protection measures, such as personal protective equipment

Eye/face protection: Skin and body protection:	Tight sealing safety goggles. Face protection shield. Wear protective gloves and protective clothing.
Respiratory protection:	If exposure limits are exceeded, or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive- pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General hygiene considerations:	When using, do not eat, drink or smoke. Regular cleaning of equipment, work area, and clothing is recommended. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling. Keep away from food, drink, and animal feeding stuff.

Section 9: Physical and chemical properties

Physical state:	solid
Solubility in water:	high
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:	No data available
Chemical stability:	May form explosive peroxides
Possibility of hazardous reactions:	None under normal processing
Hazardous polymerization:	No information available
Conditions to avoid:	Extremes of temperatures and direct sunlight
Incompatible materials:	Strong oxidizing agents
Hazardous decomposition products:	Carbon oxides

Section 11: Toxicological information

11.1 Information on likely routes of exp	oosure
Inhalation:	No data available
Eye contact:	No data available
Skin contact:	No data available
Ingestion:	No data available
11.2 Information on toxicological effect	ts
Symptoms:	No information available
11.3 Delayed and immediate effects as	well as chronic effects from short and long-term exposure
Chronic toxicity:	Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.
11.4 Numerical measures of toxicity - p	roduct information
Unknown acute toxicity:	No information available
Section 12: Ecological information	1
Ecotoxicity:	May cause long-lasting harmful effects to aquatic life.
Persistence and degradability:	No information available
Bioaccumulation:	No information available
Mobility:	No information available
Section 13: Disposal consideration	n
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:	Waste codes should be assigned by the user based on the application for which the product was used.
Section 14: Transport information	ı
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):	This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR122.21 and 40CFR 122.42).
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:	This product does not contain any substances regulated by state right- to-know regulations.
Se	ction 16: Other information	

Section 16: Other information

16.1 HMIS

Health hazards:	-
Flammability:	-
Reactivity:	-
Personal protection:	-
16.2 NFPA	
Health hazards:	-
Flammability:	-
Stability:	-
Physical and chemical properties:	-

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:	PFK Probe
	Product number:	11329
1.2	Relevant identified uses of the substance of	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 datasheet	
	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
Sec	tion 2: Hazard identifications	

2.1 Classification of the substance or mixture

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

2.2 Label elements

Signal word:	Not applicable
Hazard statements:	None
Symbols/Pictograms:	None
Precautionary statements - prevention:	Wash hands thoroughly after handling
Precautionary statements - response:	IF exposed concerned: Get medical advice/attention
Precautionary statements - storage:	None
Precautionary statements - disposal:	None

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

Hazards not otherwise classified (HNOC): None

2.4 Other information

Other hazards:

None

Section 3: Composition/information on ingredients

3.1 Substances

Chemical name: CAS No.: Molecular weight:

Formula:

Section 4: First aid measures

4.1 First-aid measures General advice: If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on the skin, or on clothing. Immediately flush with plenty of water. After initial flushing, remove any Eye contact: contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician. Skin contact: Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water. Immediate medical attention is not required. Inhalation: Remove to fresh air If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use a barrier to give mouth-to-mouth resuscitation. Artificial respiration and/or oxygen may be necessary. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician. Ingestion: Do NOT induce vomiting. Rinse/clean mouth with water and drink plenty

of water afterward. Never give anything by mouth to an unconscious

lead to the release of irritating and toxic gases and vapors.

Self-protection of the first aider:

4.2 Most important symptoms and effects, both acute and delayed

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Symptoms:	No information available.

4.3 Indication of any immediate medical attention and special treatment needed

	Note to physicians:	Treat symptomatically.
Sec	ction 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:	In the event of a fire and/or explosion, do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can

person. Consult a physician.

Use personal protective equipment.

PFK Probe

	Hazardous combustion products:	Carbon oxides, sulfur oxides
5.3	Explosion data	
	Sensitivity to mechanical impact:	No information available.
	Sensitivity to static discharge:	No information available.
5.4	Protective equipment and precautions fo	r firefighters
	Protective equipment and precautions for firefighters:	As in any fire, wear self-contained breathing apparatus pressure- demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
Sec	tion 6: Accidental release measures	
6.1	.1 Personal precautions, protective equipment, and emergency procedures	
	Personal precautions:	Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.
6.2	Environmental precautions	

Environmental precautions:Prevent further leakage or spillage if safe to do so. Prevent product
from entering drains. Do not flush into surface water or sanitary sewer
system. See Section 12 for additional Ecological Information.

6.3 Methods and material for containment and cleaning up

Methods for containment:	Prevent further leakage or spillage if safe to do so. Cover powder spill with a plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.
Methods for cleaning up:	Use personal protective equipment as required. Cover powder spill with a plastic sheet or tarp to minimize spreading and keep the powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surfaces thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

Section 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:	Avoid contact with skin, eyes, or clothing. Use personal protective
	equipment as required. Wash contaminated clothing before reuse. Do
	not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or
	smoke when using this product. Use with local exhaust ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions:	Keep the container tightly closed in a dry and well-ventilated place.
	Recommended storage temperature is <-15°C. Minimize light exposure.
Incompatible materials:	None known based on information supplied.

Section 8: Experimental controls/personal protection

8.1 Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

8.2 Appropriate engineering controls

Engineering controls:

Showers, eyewash stations, ventilation systems

8.3 Individual protection measures, such as personal protective equipment

Eye/face protection: Skin and body protection:	Tight sealing safety goggles. Face protection shield. Wear protective gloves and protective clothing.
Respiratory protection:	If exposure limits are exceeded, or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive- pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General hygiene considerations:	When using, do not eat, drink or smoke. Regular cleaning of equipment, work area, and clothing is recommended. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling. Keep away from food, drink, and animal feeding stuff.

Section 9: Physical and chemical properties

Physical state:	Liquid
Solubility in water:	No information available
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:	No data available
Chemical stability:	May form explosive peroxides
Possibility of hazardous reactions:	None under normal processing
Hazardous polymerization:	No information available
Conditions to avoid:	Extremes of temperatures and direct sunlight
Incompatible materials:	Strong oxidizing agents
Hazardous decomposition products:	Carbon oxides

Section 11: Toxicological information

11.1 Information on likely routes of exp	osure
Inhalation:	No data available
Eye contact:	No data available
Skin contact:	No data available
Ingestion:	No data available
11.2 Information on toxicological effect	ts
Symptoms:	No information available
11.3 Delayed and immediate effects as	well as chronic effects from short and long-term exposure
Chronic toxicity:	Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.
11.4 Numerical measures of toxicity - p	roduct information
Unknown acute toxicity:	No information available
Section 12: Ecological information	
Ecotoxicity:	May cause long-lasting harmful effects to aquatic life.
Persistence and degradability:	No information available
Bioaccumulation:	No information available
Mobility:	No information available
Section 13: Disposal consideratior	1
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:	Waste codes should be assigned by the user based on the application for which the product was used.
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):	This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR122.21 and 40CFR 122.42).
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:	This product does not contain any substances regulated by state right- to-know regulations.
Se	ction 16: Other information	

Section 16: Other information

16.1 HMIS

Health hazards:	-
Flammability:	-
Reactivity:	-
Personal protection:	-
16.2 NFPA	
Health hazards:	-
Flammability:	-
Stability:	-
Physical and chemical properties:	-

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:	PFK Assay Buffer
	Product number:	11329
1.2	Relevant identified uses of the substance of	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 datasheet	
	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
Sec	tion 2: Hazard identifications	

2.1 Classification of the substance or mixture

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

2.2 Label elements

Signal word:	Not applicable
Hazard statements:	None
Symbols/Pictograms:	None
Precautionary statements - prevention:	Wash hands thoroughly after handling
Precautionary statements - response:	IF exposed concerned: Get medical advice/attention
Precautionary statements - storage:	None
Precautionary statements - disposal:	None

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

Hazards not otherwise classified (HNOC): None

2.4 Other information

Other hazards:

None

Section 3: Composition/information on ingredients

3.1 Substances

Chemical name: CAS No.:

Molecular weight:

Formula:

Section 4: First aid measures

4.1 First-aid measures General advice: If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on the skin, or on clothing. Immediately flush with plenty of water. After initial flushing, remove any Eye contact: contact lenses and continue flushing for at least 15 minutes. Keep eye

Skin contact:

Inhalation:

Ingestion:

Self-protection of the first aider:

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:	No information available.

4.3 Indication of any immediate medical attention and special treatment needed

	Note to physicians:	Treat symptomatically.
Sec	ction 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:	In the event of a fire and/or explosion, do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can

PFK Assay Buffer

attention is not required.

person. Consult a physician.

Use personal protective equipment.

call a physician.

wide open while rinsing. If symptoms persist, call a physician.

Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water. Immediate medical

Remove to fresh air If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use a barrier to give mouth-to-mouth resuscitation. Artificial respiration and/or oxygen may be necessary. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist,

Do NOT induce vomiting. Rinse/clean mouth with water and drink plenty of water afterward. Never give anything by mouth to an unconscious

lead to the release of irritating and toxic gases and vapors.

	Hazardous combustion products:	Carbon oxides, sulfur oxides
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:	As in any fire, wear self-contained breathing apparatus pressure- demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
See	tion 6: Accidental release measures	
6.1	Personal precautions, protective equipme	nt, and emergency procedures
	Personal precautions:	Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.
6.2	Environmental precautions	
	Environmental precautions:	Prevent further leakage or spillage if safe to do so. Prevent product

6.3 Methods and material for containment and cleaning up

Methods for containment:	Prevent further leakage or spillage if safe to do so. Cover powder spill with a plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.
Methods for cleaning up:	Use personal protective equipment as required. Cover powder spill with a plastic sheet or tarp to minimize spreading and keep the powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surfaces thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

from entering drains. Do not flush into surface water or sanitary sewer

system. See Section 12 for additional Ecological Information.

Section 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:	Avoid contact with skin, eyes, or clothing. Use personal protective
	equipment as required. Wash contaminated clothing before reuse. Do
	not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or
	smoke when using this product. Use with local exhaust ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions:	Keep the container tightly closed in a dry and well-ventilated place.
	Recommended storage temperature is <-15°C. Minimize light exposure.
Incompatible materials:	None known based on information supplied.

Section 8: Experimental controls/personal protection

8.1 Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

8.2 Appropriate engineering controls

Engineering controls:

Showers, eyewash stations, ventilation systems

8.3 Individual protection measures, such as personal protective equipment

Eye/face protection: Skin and body protection:	Tight sealing safety goggles. Face protection shield. Wear protective gloves and protective clothing.
Respiratory protection:	If exposure limits are exceeded, or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive- pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General hygiene considerations:	When using, do not eat, drink or smoke. Regular cleaning of equipment, work area, and clothing is recommended. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling. Keep away from food, drink, and animal feeding stuff.

Section 9: Physical and chemical properties

Physical state:	Liquid
Solubility in water:	No information available
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:	No data available
Chemical stability:	May form explosive peroxides
Possibility of hazardous reactions:	None under normal processing
Hazardous polymerization:	No information available
Conditions to avoid:	Extremes of temperatures and direct sunlight
Incompatible materials:	Strong oxidizing agents
Hazardous decomposition products:	Carbon oxides

Section 11: Toxicological information

11.1 Information on likely routes of expo	osure
Inhalation:	No data available
Eye contact:	No data available
Skin contact:	No data available
Ingestion:	No data available
11.2 Information on toxicological effects	s
Symptoms:	No information available
11.3 Delayed and immediate effects as w	ell as chronic effects from short and long-term exposure
Chronic toxicity:	Repeated contact may cause allergic reactions in very susceptible
	persons. Avoid repeated exposure.
11.4 Numerical measures of toxicity - pro	oduct information
Unknown acute toxicity:	No information available
Section 12: Ecological information	
Ecotoxicity:	May cause long-lasting harmful effects to aquatic life.
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:	Waste codes should be assigned by the user based on the application for which the product was used.
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):	This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR122.21 and 40CFR 122.42).
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:	This product does not contain any substances regulated by state right- to-know regulations.
Sec	ction 16: Other information	

Section 16: Other information

16.1 HMIS

Health hazards:	-
Flammability:	-
Reactivity:	-
Personal protection:	-
16.2 NFPA	
Health hazards:	-
Flammability:	-
Stability:	-
Physical and chemical properties:	-

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:	PFK Enzyme Mix	
	Product number:	11329	
1.2	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	I.3 Details of the supplier of the datasheet		
	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	.4 Emergency telephone number		
	Chemtrec (Within USA):	1-(800)-424-9300	
	Chemtrec (Outside USA):	1-(703)-527-3887	
Sec	tion 2: Hazard identifications		

2.1 Classification of the substance or mixture

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

2.2 Label elements

Signal word:	Not applicable
Hazard statements:	None
Symbols/Pictograms:	None
Precautionary statements - prevention:	Wash hands thoroughly after handling
Precautionary statements - response:	IF exposed concerned: Get medical advice/attention
Precautionary statements - storage:	None
Precautionary statements - disposal:	None

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

Hazards not otherwise classified (HNOC): None

2.4 Other information

Other hazards:

None

Section 3: Composition/information on ingredients

3.1 Substances

Chemical name: CAS No.:

Molecular weight:

Formula:

Eye contact:

Ingestion:

Section 4: First aid measures

4.1 First-aid measures General advice: If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on the skin, or on clothing.

contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician. Skin contact: Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water. Immediate medical attention is not required. Inhalation: Remove to fresh air If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use a barrier to give mouth-to-mouth resuscitation. Artificial respiration and/or oxygen may

be necessary. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

Immediately flush with plenty of water. After initial flushing, remove any

Do NOT induce vomiting. Rinse/clean mouth with water and drink plenty of water afterward. Never give anything by mouth to an unconscious person. Consult a physician.

lead to the release of irritating and toxic gases and vapors.

Use personal protective equipment. Self-protection of the first aider:

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:	No information available.

4.3 Indication of any immediate medical attention and special treatment needed

	Note to physicians:	Treat symptomatically.	
See	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:	In the event of a fire and/or explosion, do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can	

Revision date: 6/4/2024

PFK Enzyme Mix

	Hazardous combustion products:	Carbon oxides, sulfur oxides
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:	As in any fire, wear self-contained breathing apparatus pressure- demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
See	ction 6: Accidental release measures	
6.1	Personal precautions, protective equipme	nt, and emergency procedures
	Personal precautions:	Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.
6.2	Environmental precautions	
	Environmental precautions:	Prevent further leakage or spillage if safe to do so. Prevent product

6.3 Methods and material for containment and cleaning up

	- ·
Methods for containment:	Prevent further leakage or spillage if safe to do so. Cover powder spill with a plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.
Methods for cleaning up:	Use personal protective equipment as required. Cover powder spill with a plastic sheet or tarp to minimize spreading and keep the powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surfaces thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

from entering drains. Do not flush into surface water or sanitary sewer

system. See Section 12 for additional Ecological Information.

Section 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:	Avoid contact with skin, eyes, or clothing. Use personal protective
	equipment as required. Wash contaminated clothing before reuse. Do
	not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or
	smoke when using this product. Use with local exhaust ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions:	Keep the container tightly closed in a dry and well-ventilated place.
	Recommended storage temperature is <-15°C. Minimize light exposure.
Incompatible materials:	None known based on information supplied.

Section 8: Experimental controls/personal protection

8.1 Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

8.2 Appropriate engineering controls

Engineering controls:

Showers, eyewash stations, ventilation systems

8.3 Individual protection measures, such as personal protective equipment

Eye/face protection: Skin and body protection:	Tight sealing safety goggles. Face protection shield. Wear protective gloves and protective clothing.
Respiratory protection:	If exposure limits are exceeded, or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive- pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General hygiene considerations:	When using, do not eat, drink or smoke. Regular cleaning of equipment, work area, and clothing is recommended. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling. Keep away from food, drink, and animal feeding stuff.

Section 9: Physical and chemical properties

Physical state:	Solid
Solubility in water:	No information available
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:	No data available
Chemical stability:	May form explosive peroxides
Possibility of hazardous reactions:	None under normal processing
Hazardous polymerization:	No information available
Conditions to avoid:	Extremes of temperatures and direct sunlight
Incompatible materials:	Strong oxidizing agents
Hazardous decomposition products:	Carbon oxides

Section 11: Toxicological information

11.1 Information on likely routes of ex	posure
Inhalation:	No data available
Eye contact:	No data available
Skin contact:	No data available
Ingestion:	No data available
11.2 Information on toxicological effec	cts
Symptoms:	No information available
11.3 Delayed and immediate effects as	s well as chronic effects from short and long-term exposure
Chronic toxicity:	Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.
11.4 Numerical measures of toxicity - J	product information
Unknown acute toxicity:	No information available
Section 12: Ecological informatio	n
Ecotoxicity:	May cause long-lasting harmful effects to aquatic life.
Persistence and degradability:	No information available
Bioaccumulation:	No information available
Mobility:	No information available
Section 13: Disposal consideratio	on and a second s
Disposal of wastes:	Disposal should be in accordance with applicable regional, national an local laws and regulations.
Contaminated packaging:	Do not reuse container
Other information:	Waste codes should be assigned by the user based on the application for which the product was used.
Section 14: Transport informatio	n
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):	This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR122.21 and 40CFR 122.42).
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:	This product does not contain any substances regulated by state right- to-know regulations.
Se	ction 16: Other information	

Section 16: Other information

16.1 HMIS

Health hazards:	-
Flammability:	-
Reactivity:	-
Personal protection:	-
16.2 NFPA	
Health hazards:	-
Flammability:	-
Stability:	-
Physical and chemical properties:	-

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:	PFK Developer
	Product number:	11329
1.2	Relevant identified uses of the substance of	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 datasheet	
	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
Sec	tion 2: Hazard identifications	

2.1 Classification of the substance or mixture

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

2.2 Label elements

Signal word:	Not applicable
Hazard statements:	None
Symbols/Pictograms:	None
Precautionary statements - prevention:	Wash hands thoroughly after handling
Precautionary statements - response:	IF exposed concerned: Get medical advice/attention
Precautionary statements - storage:	None
Precautionary statements - disposal:	None

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

Hazards not otherwise classified (HNOC): None

2.4 Other information

Other hazards:

None

Section 3: Composition/information on ingredients

3.1 Substances

Chemical name: CAS No.:

Molecular weight:

Formula:

Section 4: First aid measures

4.1 First-aid measures General advice: If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on the skin, or on clothing. Immediately flush with plenty of water. After initial flushing, remove any Eye contact: contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician. Skin contact: Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water. Immediate medical attention is not required. Inhalation: Remove to fresh air If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use a barrier to give mouth-to-mouth resuscitation. Artificial respiration and/or oxygen may be necessary. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician. Ingestion: Do NOT induce vomiting. Rinse/clean mouth with water and drink plenty of water afterward. Never give anything by mouth to an unconscious person. Consult a physician.

Self-protection of the first aider:

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:	No information available.

4.3 Indication of any immediate medical attention and special treatment needed

	Note to physicians:	Treat symptomatically.
Sec	ction 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:	In the event of a fire and/or explosion, do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can

Use personal protective equipment.

lead to the release of irritating and toxic gases and vapors.

	Hazardous combustion products:	Carbon oxides, sulfur oxides	
5.3	Explosion data		
	Sensitivity to mechanical impact:	No information available.	
	Sensitivity to static discharge:	No information available.	
5.4	5.4 Protective equipment and precautions for firefighters		
	Protective equipment and precautions for firefighters:	As in any fire, wear self-contained breathing apparatus pressure- demand, MSHA/NIOSH (approved or equivalent), and full protective gear.	
See	tion 6: Accidental release measures		
6.1	Personal precautions, protective equipme	nt, and emergency procedures	
	Personal precautions:	Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.	
6.2	Environmental precautions		
	Environmental precautions:	Prevent further leakage or spillage if safe to do so. Prevent product	

6.3 Methods and material for containment and cleaning up

	0 1
Methods for containment:	Prevent further leakage or spillage if safe to do so. Cover powder spill with a plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.
Methods for cleaning up:	Use personal protective equipment as required. Cover powder spill with a plastic sheet or tarp to minimize spreading and keep the powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surfaces thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

from entering drains. Do not flush into surface water or sanitary sewer

system. See Section 12 for additional Ecological Information.

Section 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:	Avoid contact with skin, eyes, or clothing. Use personal protective
	equipment as required. Wash contaminated clothing before reuse. Do
	not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or
	smoke when using this product. Use with local exhaust ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions:	Keep the container tightly closed in a dry and well-ventilated place.
	Recommended storage temperature is <-15°C. Minimize light exposure.
Incompatible materials:	None known based on information supplied.

Section 8: Experimental controls/personal protection

8.1 Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

8.2 Appropriate engineering controls

Engineering controls:

Showers, eyewash stations, ventilation systems

8.3 Individual protection measures, such as personal protective equipment

Eye/face protection:	Tight sealing safety goggles. Face protection shield.
Skin and body protection:	Wear protective gloves and protective clothing.
Respiratory protection:	If exposure limits are exceeded, or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive- pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General hygiene considerations:	When using, do not eat, drink or smoke. Regular cleaning of equipment, work area, and clothing is recommended. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling. Keep away from food, drink, and animal feeding stuff.

Section 9: Physical and chemical properties

Physical state:	Solid
Solubility in water:	No information available
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:	No data available
Chemical stability:	May form explosive peroxides
Possibility of hazardous reactions:	None under normal processing
Hazardous polymerization:	No information available
Conditions to avoid:	Extremes of temperatures and direct sunlight
Incompatible materials:	Strong oxidizing agents
Hazardous decomposition products:	Carbon oxides

Section 11: Toxicological information

1.1 Information on likely routes of expo	sure
Inhalation:	No data available
Eye contact:	No data available
Skin contact:	No data available
Ingestion:	No data available
1.2 Information on toxicological effects	
Symptoms:	No information available
1.3 Delayed and immediate effects as w	ell as chronic effects from short and long-term exposure
Chronic toxicity:	Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.
1.4 Numerical measures of toxicity - pro	oduct information
Unknown acute toxicity:	No information available
ection 12: Ecological information	
Ecotoxicity:	May cause long-lasting harmful effects to aquatic life.
Persistence and degradability:	No information available
Bioaccumulation:	No information available
Mobility:	No information available
ection 13: Disposal consideration	
Disposal of wastes:	Disposal should be in accordance with applicable regional, national an local laws and regulations.
Contaminated packaging:	Do not reuse container
Other information:	Waste codes should be assigned by the user based on the application for which the product was used.
Other information: ection 14: Transport information	
ection 14: Transport information	for which the product was used.

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):	This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR122.21 and 40CFR 122.42).	
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:	This product does not contain any substances regulated by state right- to-know regulations.	
Se	ction 16: Other information		

Section 16: Other information

16.1 HMIS

Health hazards:	-
Flammability:	-
Reactivity:	-
Personal protection:	-
16.2 NFPA	
Health hazards:	-
Flammability:	-
Stability:	-
Physical and chemical properties:	-

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:	ATP Standard
	Product number:	11329
1.2	Relevant identified uses of the substance o	r 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 datasheet	
	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
Sec	tion 2: Hazard identifications	

2.1 Classification of the substance or mixture

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

2.2 Label elements

Signal word:	Not applicable
Hazard statements:	None
Symbols/Pictograms:	None
Precautionary statements - prevention:	Wash hands thoroughly after handling
Precautionary statements - response:	IF exposed concerned: Get medical advice/attention
Precautionary statements - storage:	None
Precautionary statements - disposal:	None

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

Hazards not otherwise classified (HNOC): None

2.4 Other information

Other hazards:

None

Section 3: Composition/information on ingredients

3.1 Substances

Chemical name: CAS No.:

Molecular weight:

Formula:

Eye contact:

Section 4: First aid measures

4.1 First-aid measures General advice: If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on the skin, or on clothing.

contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician. Skin contact: Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water. Immediate medical attention is not required. Inhalation: Remove to fresh air If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use a barrier to give mouth-to-mouth resuscitation. Artificial respiration and/or oxygen may be necessary. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

Immediately flush with plenty of water. After initial flushing, remove any

Ingestion: Do NOT induce vomiting. Rinse/clean mouth with water and drink plenty of water afterward. Never give anything by mouth to an unconscious person. Consult a physician. 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.

4.3 Indication of any immediate medical attention and special treatment needed

	Note to physicians:	Treat symptomatically.
Sec	tion 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:	In the event of a fire and/or explosion, do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can

ATP Standard

lead to the release of irritating and toxic gases and vapors.

	Hazardous combustion products:	Carbon oxides, sulfur oxides
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:	As in any fire, wear self-contained breathing apparatus pressure- demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
See	tion 6: Accidental release measures	
6.1	Personal precautions, protective equipme	nt, and emergency procedures
	Personal precautions:	Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.
6.2	Environmental precautions	
	Environmental precautions:	Prevent further leakage or spillage if safe to do so. Prevent product

6.3 Methods and material for containment and cleaning up

Methods for containment:	Prevent further leakage or spillage if safe to do so. Cover powder spill with a plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.
Methods for cleaning up:	Use personal protective equipment as required. Cover powder spill with a plastic sheet or tarp to minimize spreading and keep the powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surfaces thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

from entering drains. Do not flush into surface water or sanitary sewer

system. See Section 12 for additional Ecological Information.

Section 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:	Avoid contact with skin, eyes, or clothing. Use personal protective
	equipment as required. Wash contaminated clothing before reuse. Do
	not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or
	smoke when using this product. Use with local exhaust ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions:	Keep the container tightly closed in a dry and well-ventilated place.
	Recommended storage temperature is <-15°C. Minimize light exposure.
Incompatible materials:	None known based on information supplied.

Section 8: Experimental controls/personal protection

8.1 Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

8.2 Appropriate engineering controls

Engineering controls:

Showers, eyewash stations, ventilation systems

8.3 Individual protection measures, such as personal protective equipment

Eye/face protection: Skin and body protection:	Tight sealing safety goggles. Face protection shield. Wear protective gloves and protective clothing.
Respiratory protection:	If exposure limits are exceeded, or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive- pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General hygiene considerations:	When using, do not eat, drink or smoke. Regular cleaning of equipment, work area, and clothing is recommended. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling. Keep away from food, drink, and animal feeding stuff.

Section 9: Physical and chemical properties

Physical state:	solid
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:	No data available
Chemical stability:	May form explosive peroxides
Possibility of hazardous reactions:	None under normal processing
Hazardous polymerization:	No information available
Conditions to avoid:	Extremes of temperatures and direct sunlight
Incompatible materials:	Strong oxidizing agents
Hazardous decomposition products:	Carbon oxides

Section 11: Toxicological information

11.1 Information on likely routes of exp	posure
Inhalation:	No data available
Eye contact:	No data available
Skin contact:	No data available
Ingestion:	No data available
11.2 Information on toxicological effec	ts
Symptoms:	No information available
11.3 Delayed and immediate effects as	well as chronic effects from short and long-term exposure
Chronic toxicity:	Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.
11.4 Numerical measures of toxicity - p	roduct information
Unknown acute toxicity:	No information available
Section 12: Ecological informatior	1
Ecotoxicity:	May cause long-lasting harmful effects to aquatic life.
Persistence and degradability:	No information available
Bioaccumulation:	No information available
Mobility:	No information available
Section 13: Disposal consideration	n
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:	Waste codes should be assigned by the user based on the application for which the product was used.
Section 14: Transport information	า
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):	This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR122.21 and 40CFR 122.42).	
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:	This product does not contain any substances regulated by state right- to-know regulations.	
Se	ction 16: Other information		

Section 16: Other information

16.1 HMIS

Health hazards:	-
Flammability:	-
Reactivity:	-
Personal protection:	-
16.2 NFPA	
Health hazards:	-
Flammability:	-
Stability:	-
Physical and chemical properties:	-

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:	NADH Standard	
	Product number:	11329	
1.2	Relevant identified uses of the substance of	or mixture and uses advised against	
	Identified uses:	For research use only. Not intended for diagnostic or therapeutic use.	
1.3	.3 Details of the supplier of the datasheet		
	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	
Sec	tion 2: Hazard identifications		

2.1 Classification of the substance or mixture

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

2.2 Label elements

Signal word:	Not applicable
Hazard statements:	None
Symbols/Pictograms:	None
Precautionary statements - prevention:	Wash hands thoroughly after handling
Precautionary statements - response:	IF exposed concerned: Get medical advice/attention
Precautionary statements - storage:	None
Precautionary statements - disposal:	None

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

Hazards not otherwise classified (HNOC): None

2.4 Other information

Other hazards:

None

Section 3: Composition/information on ingredients

3.1 Substances

Chemical name: CAS No.:

Molecular weight:

Formula:

Section 4: First aid measures

4.1 First-aid measures General advice: If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on the skin, or on clothing. Immediately flush with plenty of water. After initial flushing, remove any Eye contact: contact lenses and continue flushing for at least 15 minutes. Keep eye

wide open while rinsing. If symptoms persist, call a physician. Skin contact: Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water. Immediate medical attention is not required.

Inhalation: Remove to fresh air If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use a barrier to give mouth-to-mouth resuscitation. Artificial respiration and/or oxygen may be necessary. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician. Ingestion: Do NOT induce vomiting. Rinse/clean mouth with water and drink plenty of water afterward. Never give anything by mouth to an unconscious

person. Consult a physician.

Use personal protective equipment.

lead to the release of irritating and toxic gases and vapors.

Self-protection of the first aider:

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:	No information available.

4.3 Indication of any immediate medical attention and special treatment needed

	Note to physicians:	Treat symptomatically.	
See	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	5.2 Specific hazards arising from the chemical		
	Specific hazards arising from the chemical:	In the event of a fire and/or explosion, do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can	

NADH Standard

	Hazardous combustion products:	Carbon oxides, sulfur oxides	
5.3	Explosion data		
	Sensitivity to mechanical impact:	No information available.	
	Sensitivity to static discharge:	No information available.	
5.4	5.4 Protective equipment and precautions for firefighters		
	Protective equipment and precautions for firefighters:	As in any fire, wear self-contained breathing apparatus pressure- demand, MSHA/NIOSH (approved or equivalent), and full protective gear.	
Section 6: Accidental release measures			
6.1	5.1 Personal precautions, protective equipment, and emergency procedures		
	Personal precautions:	Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.	
6.2	Environmental precautions		
	Environmental precautions:	Prevent further leakage or spillage if safe to do so. Prevent product	

6.3 Methods and material for containment and cleaning up

Methods for containment:	Prevent further leakage or spillage if safe to do so. Cover powder spill with a plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.
Methods for cleaning up:	Use personal protective equipment as required. Cover powder spill with a plastic sheet or tarp to minimize spreading and keep the powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surfaces thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

from entering drains. Do not flush into surface water or sanitary sewer

system. See Section 12 for additional Ecological Information.

Section 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:	Avoid contact with skin, eyes, or clothing. Use personal protective
	equipment as required. Wash contaminated clothing before reuse. Do
	not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or
	smoke when using this product. Use with local exhaust ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions:	Keep the container tightly closed in a dry and well-ventilated place.
	Recommended storage temperature is <-15°C. Minimize light exposure.
Incompatible materials:	None known based on information supplied.

Section 8: Experimental controls/personal protection

8.1 Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

8.2 Appropriate engineering controls

Engineering controls:

Showers, eyewash stations, ventilation systems

8.3 Individual protection measures, such as personal protective equipment

Eye/face protection: Skin and body protection:	Tight sealing safety goggles. Face protection shield. Wear protective gloves and protective clothing.
Respiratory protection:	If exposure limits are exceeded, or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive- pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General hygiene considerations:	When using, do not eat, drink or smoke. Regular cleaning of equipment, work area, and clothing is recommended. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling. Keep away from food, drink, and animal feeding stuff.

Section 9: Physical and chemical properties

Physical state:	solid
Solubility in water:	high
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:	No data available
Chemical stability:	May form explosive peroxides
Possibility of hazardous reactions:	None under normal processing
Hazardous polymerization:	No information available
Conditions to avoid:	Extremes of temperatures and direct sunlight
Incompatible materials:	Strong oxidizing agents
Hazardous decomposition products:	Carbon oxides

Section 11: Toxicological information

11.1 Information on likely routes of exp	posure
Inhalation:	No data available
Eye contact:	No data available
Skin contact:	No data available
Ingestion:	No data available
11.2 Information on toxicological effect	ts
Symptoms:	No information available
11.3 Delayed and immediate effects as	well as chronic effects from short and long-term exposure
Chronic toxicity:	Repeated contact may cause allergic reactions in very susceptible
	persons. Avoid repeated exposure.
11.4 Numerical measures of toxicity - p	roduct information
Unknown acute toxicity:	No information available
Section 12: Ecological information	1
Ecotoxicity:	May cause long-lasting harmful effects to aquatic life.
Persistence and degradability:	No information available
Bioaccumulation:	No information available
Mobility:	No information available
Section 13: Disposal consideration	<u>ו</u>
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:	Waste codes should be assigned by the user based on the application for which the product was used.
Section 14: Transport informatior	ı
DOT:	Not regulated
IMDG:	Not regulated
IATA:	Not regulated
Section 15: Regulatory informatio	n

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):	This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR122.21 and 40CFR 122.42).
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:	This product does not contain any substances regulated by state right- to-know regulations.
Se	ction 16: Other information	

Section 16: Other information

16.1 HMIS

Health hazards:	-
Flammability:	-
Reactivity:	-
Personal protection:	-
16.2 NFPA	
Health hazards:	-
Flammability:	-
Stability:	-
Physical and chemical properties:	-

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:	PFK Positive Control
	Product number:	11329
1.2	Relevant identified uses of the substance o	r 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 datasheet	
	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
Sec	tion 2: Hazard identifications	

2.1 Classification of the substance or mixture

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

2.2 Label elements

Signal word:	Not applicable
Hazard statements:	None
Symbols/Pictograms:	None
Precautionary statements - prevention:	Wash hands thoroughly after handling
Precautionary statements - response:	IF exposed concerned: Get medical advice/attention
Precautionary statements - storage:	None
Precautionary statements - disposal:	None

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

Hazards not otherwise classified (HNOC): None

2.4 Other information

Other hazards:

None

Section 3: Composition/information on ingredients

3.1 Substances

Chemical name: CAS No.:

Molecular weight:

Formula:

Skin contact:

Section 4: First aid measures

4.1 First-aid measures General advice: If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on the skin, or on clothing. Eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water. Immediate medical attention is not required.

Inhalation:Remove to fresh air If breathing is irregular or stopped, administer
artificial respiration. Avoid direct contact with skin. Use a barrier to give
mouth-to-mouth resuscitation. Artificial respiration and/or oxygen may
be necessary. Immediate medical attention is not required. Move to
fresh air in case of accidental inhalation of vapors. If symptoms persist,
call a physician.Ingestion:Do NOT induce vomiting. Rinse/clean mouth with water and drink plenty
of water afterward. Never give anything by mouth to an unconscious

person. Consult a physician.

Use personal protective equipment.

lead to the release of irritating and toxic gases and vapors.

Self-protection of the first aider:

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:	No information available.

4.3 Indication of any immediate medical attention and special treatment needed

	Note to physicians:	Treat symptomatically.
Sec	ction 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:	In the event of a fire and/or explosion, do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can

PFK Positive Control

	Hazardous combustion products:	Carbon oxides, sulfur oxides
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:	As in any fire, wear self-contained breathing apparatus pressure- demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
See	tion 6: Accidental release measures	
6.1	Personal precautions, protective equipme	nt, and emergency procedures
	Personal precautions:	Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.
6.2	Environmental precautions	
	Environmental precautions:	Prevent further leakage or spillage if safe to do so. Prevent product

6.3 Methods and material for containment and cleaning up

Methods for containment:	Prevent further leakage or spillage if safe to do so. Cover powder spill with a plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.
Methods for cleaning up:	Use personal protective equipment as required. Cover powder spill with a plastic sheet or tarp to minimize spreading and keep the powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surfaces thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

from entering drains. Do not flush into surface water or sanitary sewer

system. See Section 12 for additional Ecological Information.

Section 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:	Avoid contact with skin, eyes, or clothing. Use personal protective
	equipment as required. Wash contaminated clothing before reuse. Do
	not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or
	smoke when using this product. Use with local exhaust ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions:	Keep the container tightly closed in a dry and well-ventilated place.
	Recommended storage temperature is <-15°C. Minimize light exposure.
Incompatible materials:	None known based on information supplied.

Section 8: Experimental controls/personal protection

8.1 Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

8.2 Appropriate engineering controls

Engineering controls:

Showers, eyewash stations, ventilation systems

8.3 Individual protection measures, such as personal protective equipment

Eye/face protection: Skin and body protection:	Tight sealing safety goggles. Face protection shield. Wear protective gloves and protective clothing.
Respiratory protection:	If exposure limits are exceeded, or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive- pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General hygiene considerations:	When using, do not eat, drink or smoke. Regular cleaning of equipment, work area, and clothing is recommended. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling. Keep away from food, drink, and animal feeding stuff.

Section 9: Physical and chemical properties

Solubility in water:No information availableAppearance:No information availableOdor/odor threshold:No information availablePH:No information availableBoiling point:No information availableBoiling point:No information availableIquid density:No information availableEvaporation rate:No information availableUpper flammability limit:No information availableVapor pressure:No information availableVapor density:No information availableVapor density:No information availableSpecific gravity:No information availableVapor density:No information availableSolubility in other solvents:No information availablePartition ceefficient:No information availableAutoignition temperature:No information availableVacorsity:No information availablePartition ceefficient:No information availableNo information availableNo information availablePartition temperature:No information availableNo information availableNo information availableNo information availableNo information available <td< th=""><th>Physical state:</th><th>Solid</th></td<>	Physical state:	Solid
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Viscosity:No information availableExplosive properties:No information available	Autoignition temperature:	No information available
Explosive properties: No information available	Decomposition temperature:	No information available
	Viscosity:	No information available
Oxidizing properties: No information available	Explosive properties:	No information available
	Oxidizing properties:	No information available

Section 10: Stability and reactivity

Reactivity:	No data available
Chemical stability:	May form explosive peroxides
Possibility of hazardous reactions:	None under normal processing
Hazardous polymerization:	No information available
Conditions to avoid:	Extremes of temperatures and direct sunlight
Incompatible materials:	Strong oxidizing agents
Hazardous decomposition products:	Carbon oxides

Section 11: Toxicological information

1.1 Information on likely routes of exp	posure
Inhalation:	No data available
Eye contact:	No data available
Skin contact:	No data available
Ingestion:	No data available
1.2 Information on toxicological effect	ts
Symptoms:	No information available
1.3 Delayed and immediate effects as	well as chronic effects from short and long-term exposure
Chronic toxicity:	Repeated contact may cause allergic reactions in very susceptible
	persons. Avoid repeated exposure.
1.4 Numerical measures of toxicity - p	roduct information
Unknown acute toxicity:	No information available
Section 12: Ecological information	1
Ecotoxicity:	May cause long-lasting harmful effects to aquatic life.
Persistence and degradability:	No information available
Bioaccumulation:	No information available
Mobility:	No information available
Section 13: Disposal consideration	n
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:	Waste codes should be assigned by the user based on the application for which the product was used.
Section 14: Transport informatior	ı
DOT:	Not regulated
IMDG:	Not regulated
IATA:	Not regulated
Section 15: Regulatory informatio	n

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):	This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR122.21 and 40CFR 122.42).
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:	This product does not contain any substances regulated by state right- to-know regulations.
Se	ction 16: Other information	

Section 16: Other information

16.1 HMIS

Health hazards:	-
Flammability:	-
Reactivity:	-
Personal protection:	-
16.2 NFPA	
Health hazards:	-
Flammability:	-
Stability:	-
Physical and chemical properties:	-

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.