AAT Bioquest, Inc.
5775 W Las Positas Blvd, Pleasanton, CA 94588
Tel: 408-733-1055; Fax: 408-733-1304
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Safety Data Sheet

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

1.1 Product identifiers

Product name:	RatioWorks™ PH165, NHS ester
Product number:	21214

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

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

1.3 Details of the supplier of the 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

Section 2: Hazard identifications

2.1 Classification of the substance or mixture

Serious eye damage/eye irritation:	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:	RatioWorks™ PH165, NHS ester
CAS No.:	
Molecular weight:	581.51
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.
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.

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.

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 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.

Section 6: Accidental release measures

6.1 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. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. May form explosive peroxides.
Incompatible materials:	None known based on information supplied.

Section 8: Experimental controls/personal protection

8.1 Control parameters

Exposure guidelines:	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:	Low
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 exposure

Inhalation:	No data available
Eye contact:	No data available
Skin contact:	No data available
Ingestion:	No data available

11.2 Information on toxicological effects

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 - product 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.

Section 16: Other information

16.1 HMIS

Health hazards:	-
Flammability:	-
Reactivity:	-
Personal protection:	-

16.2 NFPA

Health hazards:	-
Flammability:	-
Stability:	-
Physical and chemical properties:	-