Section 1. Product and Company Identification

Product Identification: CWW-N-A MSDS Number: CWW-N-A Recommended Use: For Laboratory Use. Company Identification: High-Purity Standards P.O. Box 41727 Charleston, SC 29423 Telephone: (843) 767-7900 FAX: (843) 767-7906 In case of emergency call INFOTRAC: 800-535-5053

in case of emergency can not official objection

Section 2. Hazard Identification

Classification: None Labeling: Symbol: None Signal Word: None Hazard Statement: None Precautionary Statement: None

Section 3. Composition				
Component	CAS/EINECS Registry #	Percent Concentration		
Ammonium Chloride (NH ₄ Cl)	12125-02-9/235-186-4	0.01 (as N)		
Sodium Nitrate (NaNO ₃)	7631-99-4/231-554-3	0.005 (as N)		
Sodium Nitrite (NaNO ₂)	7632-00-0/231-555-9	0.005 (as N)		
Disodium Hydrogen Phosphate (Na ₂ HPO ₄)	7558-79-4/231-448-7	0.01 (as P)		
Water, deionized	7732-18-5/231-791-2	Balance		

Section 4. First Aid Measures

Emergency Overview: May cause irritation. Wash areas of contact with water.

Skin/eye Contact: May cause slight irritation. Remove contaminated shoes and clothing. Flush contaminated area with plenty of water for at least 15 minutes. Call a physician if irritation develops. Inhalation: Not likely to be hazardous by inhalation.

Ingestion: May cause irritation to stomach if ingested in large quantities. Rinse mouth with water. Dilute with water or milk.

Section 5. Fire Fighting Measures

Fire & Explosion hazards: Not considered to be a fire or explosion hazard. Extinguishing Media: Use any means suitable for extinguishing surrounding fire. Specific Methods: Firefighters should wear proper protective equipment and breathing apparatus for surrounding fire.

Safety Data Sheet No. CWW-N-A	Date: April 28, 2014	
CWW-N-A	Revision: new	Page 2 of 3

Section 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Dilute with water and mop up or absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal. Always dispose of in accordance with local regulations.

Section 7. Handling and Storage

Store in a cool, dry, ventilated storage area. Keep away from incompatible materials. Keep container tightly sealed. Refer to Section 8 for personal handling instructions.

Section 8. Exposure Controls and Personal Protection

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate. Personal Protection: Wear proper gloves, safety glasses with side shields, lab coat/apron.

Exposure Limits:

Component	ACGIH TLV
Ammonium Chloride	10 mg/m ³
Sodium Nitrate	Not Available
Sodium Nitrite	Not Available
Disodium Hydrogen	Not Available
Phosphate	

Section 9. Physical and Chemical Properties

Physical State: Liquid Color: Clear, colorless liquid Odor: Odorless Odor threshold: None pH: 5-8 Melting point: N/A Freezing Point: N/A Boiling Point: Approximately 100°C Flash point: N/A Evaporation rate: N/A Flammability: N/A Explosion limits: N/A Vapor Pressure (mm): N/A Vapor Density (air+1): N/A Relative density: $(H_2O = 1)$: Approximately 1.0 Solubility in H₂O: Complete Auto ignition temperature: N/A Decomposition temperature: N/A Molecular Weight: N/A

Section 10. Stability and Reactivity

Stability Indicator: YES Conditions to Avoid: None Incompatibles: Acids, Powdered metals, Ammonia, Cyanides, Amines, Activated carbon Hazardous Decomposition Products: Oxides of nitrogen and sodium

Safety Data Sheet No. CWW-N-A	Date: April 28, 2014	
CWW-N-A	Revision: new	Page 3 of 3

Hazardous Polymerization: Will not occur.

Section 11. Toxicological Information Toxicity Data: Sodium Nitrite is investigated as a possible/suspected carcinogen (IARC: Group 2A: Probably carcinogenic to humans) RTECS# Na₂HPO₄- WC4500000 NaNO₂ - RA1225000 NaNO₃ - WC5600000

LD₅₀ Oral, Rat: (NH₄Cl) 1650 mg/kg; LD₅₀ Oral, Rat: (Na₂HPO₄) 17 g/kg; LD₅₀ Oral, Rat: (NaNO₃) 1267 mg/kg; LD₅₀ Oral, Rat: (NaNO₂) 180 mg/kg.

Section 12. Ecological Information

Ecotoxicological information. Toxic to aquatic life. 96 Hr LC50 rainbow trout (juvenile):0.19 mg/L (flow-through)

Section 13. Disposal Considerations

General: Follow Federal, state and local regulations for waste.

Section 14. Transport Information

D.O.T. Classification: Not hazardous by DOT regulations

Section 15. Regulations (Not meant to be all inclusive-selected regulation listed)

OSHA Status: These items meet the OSHA Hazard Communication Standard (29 CFR 1910.1200) definition of a hazardous material.

TSCA Status: The components of this solution are listed on the TSCA Inventory.

RCRA Status: No.

SARA: Subject to the reporting requirements of Section 313.

CERCLA Hazardous Substances and corresponding RQs CAS# 7632-00-0:

100 lb final RQ; 45.4 kg final RQ

Risk Phrases: R22 Harmful if swallowed.

Safety Phrases: S36/37/39, S61 Wear suitable protective clothing, gloves and eye/face protection. Avoid release to the environment. Refer to special instructions/safety data sheet.

WHMIS Information (Canada): Not applicable at this concentration.

Section 16. Other Information

HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel only. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The MSDS was prepared carefully and represents the best data currently available to us; however, HPS does not certify the data on the MSDS. Certified values for this material are given only on the Certificate of Analysis.

Theodore C. Rains, Ph.D.