

SAFETY DATA SHEET

MANUFACTURED BY:

EnP Investments, LLC
Box 618 2001 W Main Street
Mendota, IL 61342
(800) 255-4906
FAX (815) 538-6981

1. Product and Company identification

1.1 Product identifier

Product name	Farmhand Form 14-0-0
Trade name and synonyms	Fertilizer Supplement

1.2 Relevant uses of the substance and uses advised against

Identified uses	Fertilizer and in blending applications
Uses advised against	No available data

1.3 Details of the supplier of the SDS

Company name	EnP Investments LLC
Address	Box 618 2001 W Main Street Mendota, IL 61342-0618
Telephone	1-800-255-4906
Fax	1-815-538-6981
Email address	order@foliarpak.com

1.4 Emergency telephone number 1-815-539-7471 (business hours)

2. Hazards Identification

2.1 OSHA/HCS status

This material is considered non-hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

2.2 Classification of substance or mixture

Classified as nonhazardous in accordance with current laws.

2.3 GHS Label elements

Not available

2.4 Signal word (GHS-US)

Not available

2.5 Hazard statements (GHS-US)

May cause mild eye and skin irritation

2.6 Other hazards

Not available

2.7 Precautionary Statements

(a.)Prevention: Use appropriate personal protective equipment (PPE) i.e. gloves and safety goggles.

(b.)Response: IF IN EYES: Rinse cautiously with water for several minutes. If eye irritation persists, seek medical attention. IF ON SKIN: Wash with plenty of soap and water.

(c.)Storage: Store in original container out of reach of children.

(d.)Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

(e.)Hazards not otherwise classified: None known.

SAFETY DATA SHEET

3. Composition/information on ingredients

Chemical Name	Common Name	CAS number	Exposure Limits
Ammoniated Calcium Nitrate		15245-12-2	Proprietary formulation as allowed by 29cfr 1910. 1200 (d) 1
Magnesium Nitrate		10377-60-3	No limits established

4. First Aid Measures

4.1 Description of necessary first aid measures

Inhalation	No known significant effects or critical hazards.
Skin contact	Wash with water, if itching and redness persist. Seek medical attention.
Eye contact	Flush eyes with water; continue flushing for at least 15 minutes.
Ingestion	Rinse mouth with water. For heavy ingestion of material, consult health care professionals if diarrhea, or stomach cramps persist.

5. Fire Fighting Measures

5.1 Extinguishing media

(a.) Suitable Extinguishing media:

Extinguish with water, fog, foam, and/or carbon dioxide.

(b.) Unsuitable Extinguishing media:

Avoid direct stream of water to extinguish.

5.2 Special Protective Equipment for firefighters

Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face piece operating in positive pressure mode.

5.3 General fire hazards

This product is not flammable.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency procedures

Use appropriate personal protective equipment (PPE) i.e. gloves and safety goggles.

6.2 Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not allow to enter drains, sewers, or watercourses.

6.3 Methods and materials for containment and cleaning up

No specialized clothing or material required. Contain spill. May be cleaned up and disposed of in accordance with State and Federal regulations.

7. Handling and Storage

7.1 Precautions for safe handling

No personal protection is required. Standard safe handling procedures should be used. Protective gloves and safety glasses are recommended.

7.2 Conditions for safe storage, including any incompatibilities

Store in dry place and protect from freezing. Keep container closed when not in use.

SAFETY DATA SHEET

8. Exposure Controls / Personal Protection

8.1 Occupational exposure limits

Not available

8.2 Individual protection measures

Respiratory Protection

Not required

Ventilation

No special requirements

Protective Gloves

Chemical resistant rubber gloves

Eye Protection

Chemical goggles

Other Equipment

Eye wash and safety shower
in work area.

Work / Hygienic Practices

Avoid contact with eyes, skin, and
garments. Wash thoroughly after

9. Physical and chemical properties

Appearance White Colored Granular

Physical State Granular Solid

Form Solid

Color White

Odor Light odor

Odor threshold Not available

pH N/A

Salt-Out / Crystallization Temp Not available

Melting Point / Freezing Point Not available

Initial boiling point and boiling point range Not available

Flash point Not available

Evaporation rate Not available

Flammability (solid, gas) N/A

Upper/lower flammability or explosive limits Not available

Flammability limit-lower (%) Not available

Flammability limit-upper (%) Not available

Explosive limit-lower (%) Not available

Explosive limit-upper (%) Not available

Vapor pressure Not available

Vapor density Not available

Relative density Not available

Specific Gravity N/A

Pounds per Gallon N/A

Solubility(ies) 100%

Partition coefficient (n-octanol/water) Not available

Auto-ignition temperature Not available

Decomposition temperature Not available

Viscosity Not available

Other information.

Bulk density N/A

pH in aqueous solution Not available

10. Stability and Reactivity

Reactivity This product is stable and non-reactive under normal conditions of use, storage, and transport.

Chemical stability This product is stable under normal conditions.

Possibility of hazardous reactions Not available

Conditions to avoid Temperatures below freezing (<32°F/0°C)

Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SAFETY DATA SHEET

11. Toxicological information

11.1 Information on likely routes of exposure

Inhalation No known significant effects or critical hazards.
Skin contact Prolonged skin contact may cause slight irritation.
Eye contact Exposure may cause slight irritation.
Ingestion May cause discomfort if swallowed.

11.2 Further Information

If exposure causes irritation, refer to first aid measures in section 4.

12. Ecological information

12.1 Toxicity

Not available

12.2 Persistence – degradability

Not available

12.3 Potential for bioaccumulation

Not available

12.4 Mobility in soil

This product is water soluble and may disperse in soil.

12.5 Other adverse effects

Not available

13. Disposal considerations

13.1 Disposal methods

Dispose in accordance with current local, state, and federal regulations.

13.2 Contaminated packaging

Single use containers may retain product residue. Empty containers should be rinsed prior to disposal in accordance with current local, state, and federal regulations.

14. Transportation information

This product is not subject to transportation regulations.

15. Regulatory information

This product is not subject to regulations.

16. Other information, including date of preparation and/or revision

16.1 Other information

16.2 Date of Preparation and/or revision

Effective Date	3/26/2021
Revision Date	N/A

This information contained herein is based on the present state of our knowledge. It characterizes this product with regard to the appropriate safety precautions. Product specifications contained in this SDS represent typical results of normal production.

SAFETY DATA SHEET

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EnP Investments, LLC
Box 618 2001 W Main Street
Mendota, IL 61342
(800) 255-4906
FAX (815) 538-6981

1. Product and Company identification

1.1 Product identifier

Product name	Farmhand Grow 12-2-39
Trade name and synonyms	Fertilizer Supplement

1.2 Relevant uses of the substance and uses advised against

Identified uses	Fertilizer and in blending applications
Uses advised against	No available data

1.3 Details of the supplier of the SDS

Company name	EnP Investments LLC
Address	Box 618 2001 W Main Street Mendota, IL 61342-0618
Telephone	1-800-255-4906
Fax	1-815-538-6981
Email address	order@foliarpak.com

1.4 Emergency telephone number

1-815-539-7471 (business hours)

2. Hazards Identification

2.1 OSHA/HCS status

This material is considered non-hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200).

2.2 Classification of substance or mixture

Classified as nonharzardous in accordance with current laws.

2.3 GHS Label elements

Not available

2.4 Signal word (GHS-US)

Not available

2.5 Hazard statements (GHS-US)

May cause mild eye and skin irritation

2.6 Other hazards

Not available

2.7 Precautionary Statements

(a.)Prevention: Use appropriate personal protective equipment (PPE) i.e. gloves and safety goggles.

(b.)Response: IF IN EYES: Rinse cautiously with water for several minutes. If eye irritation persists, seek medical attention. IF ON SKIN: Wash with plenty of soap and water.

(c.)Storage: Store in original container out of reach of children.

(d.)Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

(e.)Hazards not otherwise classified: None known.

SAFETY DATA SHEET

3. Composition/information on ingredients

Chemical Name	Common Name	CAS number	Exposure Limits
Potassium Nitrate Ammonium Sulfate Monopotassium Phosphate Boric Acid	MKP	7757-79-1 7783-20-2 7778-77-0 10043-35-3	Proprietary formulation as allowed by 29cfr 1910.1200(d) 1
Iron DTPA Copper EDTA Manganese EDTA Sodium Molybdate Zinc EDTA	Iron Chelate Copper Chelate Manganese Chelate Zinc Chelate	12389-75-2 14025-15-1 15375-84-5 10102-40-6 15954-98-0	No limits established

4. First Aid Measures

4.1 Description of necessary first aid measures

Inhalation	No known significant effects or critical hazards.
Skin contact	Wash with water, if itching and redness persist. Seek medical attention.
Eye contact	Flush eyes with water; continue flushing for at least 15 minutes.
Ingestion	Rinse mouth with water. For heavy ingestion of material, consult health care professionals if diarrhea, or stomach cramps persist.

5. Fire Fighting Measures

5.1 Extinguishing media

(a.) Suitable Extinguishing media:

Extinguish with water, fog, foam, and/or carbon dioxide.

(b.) Unsuitable Extinguishing media:

Avoid direct stream of water to extinguish.

5.2 Special Protective Equipment for firefighters

Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face piece operating in positive pressure mode.

5.3 General fire hazards

This product is not flammable.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency procedures

Use appropriate personal protective equipment (PPE) i.e. gloves and safety goggles.

6.2 Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not allow to enter drains, sewers, or watercourses.

6.3 Methods and materials for containment and cleaning up

No specialized clothing or material required. Contain spill. May be cleaned up and disposed of in accordance with State and Federal regulations.

7. Handling and Storage

7.1 Precautions for safe handling

No personal protection is required. Standard safe handling procedures should be used. Protective gloves and safety glasses are recommended.

7.2 Conditions for safe storage, including any incompatibilities

Store in dry place and protect from freezing. Keep container closed when not in use.

SAFETY DATA SHEET

8. Exposure Controls / Personal Protection

8.1 Occupational exposure limits

Not available

8.2 Individual protection measures

Respiratory Protection

Not required

Ventilation

No special requirements

Protective Gloves

Chemical resistant rubber gloves

Eye Protection

Chemical goggles

Other Equipment

Eye wash and safety shower
in work area.

Work / Hygienic Practices

Avoid contact with eyes, skin, and
garments. Wash thoroughly after

9. Physical and chemical properties

Appearance Tan Colored Granular

Physical State Granular Solid

Form Solid

Color Tan

Odor Light odor

Odor threshold Not available

pH N/A

Salt-Out / Crystallization Temp Not available

Melting Point / Freezing Point Not available

Initial boiling point and boiling point range Not available

Flash point Not available

Evaporation rate Not available

Flammability (solid, gas) N/A

Upper/lower flammability or explosive limits Not available

Flammability limit-lower (%) Not available

Flammability limit-upper (%) Not available

Explosive limit-lower (%) Not available

Explosive limit-upper (%) Not available

Vapor pressure Not available

Vapor density Not available

Relative density Not available

Specific Gravity N/A

Pounds per Gallon N/A

Solubility(ies) 100%

Partition coefficient (n-octanol/water) Not available

Auto-ignition temperature Not available

Decomposition temperature Not available

Viscosity Not available

Other information.

Bulk density N/A

pH in aqueous solution Not available

10. Stability and Reactivity

Reactivity This product is stable and non-reactive under normal conditions of use, storage, and transport.

Chemical stability This product is stable under normal conditions.

Possibility of hazardous reactions Not available

Conditions to avoid Temperatures below freezing (<32°F/0°C)

Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SAFETY DATA SHEET

11. Toxicological information

11.1 Information on likely routes of exposure

Inhalation No known significant effects or critical hazards.
Skin contact Prolonged skin contact may cause slight irritation.
Eye contact Exposure may cause slight irritation.
Ingestion May cause discomfort if swallowed.

11.2 Further Information

If exposure causes irritation, refer to first aid measures in section 4.

12. Ecological information

12.1 Toxicity

Not available

12.2 Persistence – degradability

Not available

12.3 Potential for bioaccumulation

Not available

12.4 Mobility in soil

This product is water soluble and may disperse in soil.

12.5 Other adverse effects

Not available

13. Disposal considerations

13.1 Disposal methods

Dispose in accordance with current local, state, and federal regulations.

13.2 Contaminated packaging

Single use containers may retain product residue. Empty containers should be rinsed prior to disposal in accordance with current local, state, and federal regulations.

14. Transportation information

This product is not subject to transportation regulations.

15. Regulatory information

This product is not subject to regulations.

16. Other information, including date of preparation and/or revision

16.1 Other information

16.2 Date of Preparation and/or revision

Effective Date	8/24/2022
Revision Date	N/A

This information contained herein is based on the present state of our knowledge. It characterizes this product with regard to the appropriate safety precautions. Product specifications contained in this SDS represent typical results of normal production.

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EnP Investments, LLC
Box 618 2001 W Main Street
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(800) 255-4906
FAX (815) 538-6981

1. Product and Company identification

1.1 Product identifier

Product name	Farmhand Boost 14-0-39
Trade name and synonyms	Fertilizer Supplement

1.2 Relevant uses of the substance and uses advised against

Identified uses	Fertilizer and in blending applications
Uses advised against	No available data

1.3 Details of the supplier of the SDS

Company name	EnP Investments LLC
Address	Box 618 2001 W Main Street Mendota, IL 61342-0618
Telephone	1-800-255-4906
Fax	1-815-538-6981
Email address	order@foliarpak.com

1.4 Emergency telephone number

1-815-539-7471 (business hours)

2. Hazards Identification

2.1 OSHA/HCS status

This material is considered non-hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200).

2.2 Classification of substance or mixture

Classified as nonharzardous in accordance with current laws.

2.3 GHS Label elements

Not available

2.4 Signal word (GHS-US)

Not available

2.5 Hazard statements (GHS-US)

May cause mild eye and skin irritation

2.6 Other hazards

Not available

2.7 Precautionary Statements

(a.)Prevention: Use appropriate personal protective equipment (PPE) i.e. gloves and safety goggles.

(b.)Response: IF IN EYES: Rinse cautiously with water for several minutes. If eye irritation persists, seek medical attention. IF ON SKIN: Wash with plenty of soap and water.

(c.)Storage: Store in original container out of reach of children.

(d.)Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

(e.)Hazards not otherwise classified: None known.

SAFETY DATA SHEET

3. Composition/information on ingredients

Chemical Name	Common Name	CAS number	Exposure Limits
Potassium Nitrate Ammonium Sulfate		7757-79-1 7783-20-2	Proprietary formulation as allowed by 29cfr 1910.1200(d) 1 No limits established

4. First Aid Measures

4.1 Description of necessary first aid measures

Inhalation	No known significant effects or critical hazards.
Skin contact	Wash with water, if itching and redness persist. Seek medical attention.
Eye contact	Flush eyes with water; continue flushing for at least 15 minutes.
Ingestion	Rinse mouth with water. For heavy ingestion of material, consult health care professionals if diarrhea, or stomach cramps persist.

5. Fire Fighting Measures

5.1 Extinguishing media

(a.) Suitable Extinguishing media:

Extinguish with water, fog, foam, and/or carbon dioxide.

(b.) Unsuitable Extinguishing media:

Avoid direct stream of water to extinguish.

5.2 Special Protective Equipment for firefighters

Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face piece operating in positive pressure mode.

5.3 General fire hazards

This product is not flammable.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency procedures

Use appropriate personal protective equipment (PPE) i.e. gloves and safety goggles.

6.2 Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not allow to enter drains, sewers, or watercourses.

6.3 Methods and materials for containment and cleaning up

No specialized clothing or material required. Contain spill. May be cleaned up and disposed of in accordance with State and Federal regulations.

7. Handling and Storage

7.1 Precautions for safe handling

No personal protection is required. Standard safe handling procedures should be used. Protective gloves and safety glasses are recommended.

7.2 Conditions for safe storage, including any incompatibilities

Store in dry place and protect from freezing. Keep container closed when not in use.

SAFETY DATA SHEET

8. Exposure Controls / Personal Protection

8.1 Occupational exposure limits

Not available

8.2 Individual protection measures

Respiratory Protection

Not required

Ventilation

No special requirements

Protective Gloves

Chemical resistant rubber gloves

Eye Protection

Chemical goggles

Other Equipment

Eye wash and safety shower
in work area.

Work / Hygienic Practices

Avoid contact with eyes, skin, and
garments. Wash thoroughly after

9. Physical and chemical properties

Appearance White Colored Granular

Physical State Granular Solid

Form Solid

Color White

Odor Strong ammonia odor

Odor threshold Not available

pH N/A

Salt-Out / Crystallization Temp Not available

Melting Point / Freezing Point Not available

Initial boiling point and boiling point range Not available

Flash point Not available

Evaporation rate Not available

Flammability (solid, gas) N/A

Upper/lower flammability or explosive limits Not available

Flammability limit-lower (%) Not available

Flammability limit-upper (%) Not available

Explosive limit-lower (%) Not available

Explosive limit-upper (%) Not available

Vapor pressure Not available

Vapor density Not available

Relative density Not available

Specific Gravity N/A

Pounds per Gallon N/A

Solubility(ies) 100%

Partition coefficient (n-octanol/water) Not available

Auto-ignition temperature Not available

Decomposition temperature Not available

Viscosity Not available

Other information.

Bulk density N/A

pH in aqueous solution Not available

10. Stability and Reactivity

Reactivity This product is stable and non-reactive under normal conditions of use, storage, and transport.

Chemical stability This product is stable under normal conditions.

Possibility of hazardous reactions Not available

Conditions to avoid Temperatures below freezing (<32°F/0°C)

Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SAFETY DATA SHEET

11. Toxicological information

11.1 Information on likely routes of exposure

Inhalation No known significant effects or critical hazards.
Skin contact Prolonged skin contact may cause slight irritation.
Eye contact Exposure may cause slight irritation.
Ingestion May cause discomfort if swallowed.

11.2 Further Information

If exposure causes irritation, refer to first aid measures in section 4.

12. Ecological information

- 12.1 Toxicity**
Not available
- 12.2 Persistence – degradability**
Not available
- 12.3 Potential for bioaccumulation**
Not available
- 12.4 Mobility in soil**
This product is water soluble and may disperse in soil.
- 12.5 Other adverse effects**
Not available

13. Disposal considerations

- 13.1 Disposal methods**
Dispose in accordance with current local, state, and federal regulations.
- 13.2 Contaminated packaging**
Single use containers may retain product residue. Empty containers should be rinsed prior to disposal in accordance with current local, state, and federal regulations.

14. Transportation information

This product is not subject to transportation regulations.

15. Regulatory information

This product is not subject to regulations.

16. Other information, including date of preparation and/or revision

- 16.1 Other information**
- 16.2 Date of Preparation and/or revision**

Effective Date	8/24/2022
Revision Date	N/A

This information contained herein is based on the present state of our knowledge. It characterizes this product with regard to the appropriate safety precautions. Product specifications contained in this SDS represent typical results of normal production.

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: Conductivity Standard Solution 1413 $\mu\text{S}/\text{cm}$
Application: Conductivity Standard Solution for calibrating EC probes, $\pm 0.3\%$ @25°C
Supplier Name: Apera Instruments, LLC
977 Old Henderson Rd. Tel: 1(614) 285-3080
Columbus, Ohio, 43220 www.aperainst.com

SECTION 2: HAZARD IDENTIFICATION

Non-hazardous product as specified in **Directives 67/548/EEC** and **1999/45/EC**

Non-hazardous product as specified in **OSHA regulation 29 CFR 1910.1200**

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Aqueous standard solution

SECTION 4: FIRST AID MEASURES

If Inhaled: Remove person to fresh air. Call a physician if breathing becomes difficult.
In Case of Skin Contact: Wash affected area with water and soap.
In Case of Eye Contact: Flush out with plenty of water for at least 15 minutes. If pain persists, seek medical attention.
In Case of Swallowing: Wash out mouth with plenty of water, provided the person is conscious. Seek medical attention if feeling unwell.

SECTION 5: FIRE-FIGHTING MEASURES**Suitable Extinguishing Media:**

Water Spray, Foam, Dry Powder, Carbon Dioxide

Special Risks:

Non-combustible. Development of hazardous combustion gases or vapors possible in the event of fire.

Special Protective Equipment:

Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: None **Environmental Precautions:** None
Additional Notes: None

SECTION 7: HANDLING AND STORAGE

Handling: Avoid contact with eyes

Storage: Keep container closed and protected from direct sunlight. Store at room temperature (15°C to 25°C)

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering:	Maintain general industrial hygiene practice.
Personal Protective Equipment:	As appropriate to quantity handled.
Respiratory Protection:	Required when vapors/aerosols are generated.
Protective Gloves:	Rubber or plastic
Eye Protection:	Goggles or face mask
Industrial Hygiene:	Change contaminated clothing. Wash hands after working with substance.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Physical State: Liquid	Appearance: Colorless
Odor: Odorless	Melting Point: NA
Boiling point: >100°C	Solubility: Soluble
Cond.@25°C: 1413 $\mu\text{S}/\text{cm}$	Explosion Limit: NA
Flash Point: NA	Thermal Decomp.: NA

SECTION 10: STABILITY AND REACTIVITY

Conditions to be avoided:	Heating
Hazardous Decomposition Products:	See section 5.
Hazardous Polymerization:	Will not occur
Substances to be avoided:	The generally known reaction partners of water
Further Information:	Not available

SECTION 11: TOXICOLOGICAL INFORMATION**Product Toxicity**

Quantitative data on the toxicity of this product is not available

Potential Health Effects:

Further Data: Hazardous properties can't be excluded, but are relatively because of the low concentration of the dissolved substances, when the product is handled appropriately. The product should be handled with the usual care when dealing with chemicals.

Component Toxicity

Acute Toxicity: Not Available **Chronic Toxicity:** Not Available **Additional Data:** Not Available

SECTION 12: ECOLOGICAL INFORMATION

Quantitative data on the ecological effect of the product is not available.

Further Data: No ecological problems are to be expected when the product is handled and used with due care and attention.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Can be safely disposed of as ordinary refuse.



Apera Instruments, LLC

Safety Data Sheet

According to the rules for safety data sheet of the Global Harmonized System (GHS)
Revision Date: 6/01/2016

SECTION 14: TRANSPORTATION INFORMATION

Land: Not subject to transport regulations

Air: Not subject to transport regulations

Sea: Not subject to transport regulations

SECTION 15: REGULATORY INFORMATION

Labeling according to the rules for the safety data sheet of the Global Harmonized System (GHS)

Non-hazardous according to **EC Directives 67/548/EEC** and **1999/45/EC**

SECTION 16: OTHER INFORMATION

Revision Date: 2016-06-01

Supersedes edition of: MSDS Sheet

THE INFORMATION CONTAINED HERENIN IS BASED ON THE PRESENT STATE OF OUR KNOWLEDGE. IT CHARACTERIZES THE PRODUCT WITH REGARD TO THE APPROPRIATE SAFETY PRECAUTIONS. IT DOES NOT REPRESENT A GUARANTEE OF THE PROPERTIES OF THE PRODUCT.

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: pH 4.00 buffer Solution
Application: pH Buffer Solution for calibrating pH probes, $\pm 0.01@25^{\circ}\text{C}$
Supplier Name: Apera Instruments, LLC
977 Old Henderson Rd. Tel: 1(614) 285-3080
Columbus, Ohio, 43220 www.aperainst.com

SECTION 2: HAZARD IDENTIFICATION

Non-hazardous product as specified in **Directives 67/548/EEC** and **1999/45/EC**

Non-hazardous product as specified in **OSHA regulation 29 CFR 1910.1200**

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Aqueous buffer solution

SECTION 4: FIRST AID MEASURES

If Inhaled: Remove person to fresh air. Call a physician if breathing becomes difficult.
In Case of Skin Contact: Wash affected area with water and soap
In Case of Eye Contact: Flush out with plenty of water for at least 15 minutes. If pain persists, seek medical attention.
In Case of Swallowing: Wash out mouth with plenty of water, provided the person is conscious. Seek medical attention if feeling unwell.

SECTION 5: FIRE-FIGHTING MEASURES**Suitable Extinguishing Media:**

Water Spray, Foam, Dry Powder, Carbon Dioxide

Special Risks:

Non-combustible. Development of hazardous combustion gases or vapors possible in the event of fire.

Special Protective Equipment:

Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: None **Environmental Precautions:** None
Additional Notes: None

SECTION 7: HANDLING AND STORAGE

Handling: Avoid contact with eyes
Storage: Keep container closed and protected from direct sunlight. Store at room temperature (15°C to 25°C)

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering:	Maintain general industrial hygiene practice.
Personal Protective Equipment:	As appropriate to quantity handled.
Respiratory Protection:	Required when vapors/aerosols are generated.
Protective Gloves:	Rubber or plastic
Eye Protection:	Goggles or face mask
Industrial Hygiene:	Change contaminated clothing. Wash hands after working with substance.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Physical State: Liquid	Appearance: Light red liquid
Odor: Odorless	Melting Point: NA
Boiling point: >100°C	Solubility: Soluble
pH@25°C: 4.00	Explosion Limit: NA
Flash Point: NA	Thermal Decomp.: NA

SECTION 10: STABILITY AND REACTIVITY

Conditions to be avoided:	Heating
Hazardous Decomposition Products:	See section 5.
Hazardous Polymerization:	Will not occur
Substances to be avoided:	The generally known reaction partners of water
Further Information:	Not available

SECTION 11: TOXICOLOGICAL INFORMATION**Product Toxicity**

Quantitative data on the toxicity of this product is not available

Potential Health Effects:

Further Data: Hazardous properties can't be excluded, but are relatively because of the low concentration of the dissolved substances, when the product is handled appropriately. The product should be handled with the usual care when dealing with chemicals.

Component Toxicity

Acute Toxicity: Not Available **Chronic Toxicity:** Not Available **Additional Data:** Not Available

SECTION 12: ECOLOGICAL INFORMATION

Quantitative data on the ecological effect of the product is not available.

Further Data: No ecological problems are to be expected when the product is handled and used with due care and attention.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Can be safely disposed of as ordinary refuse.



Apera Instruments, LLC

Safety Data Sheet

According to the rules for safety data sheet of the Global Harmonized System (GHS)
Revision Date: 6/01/2016

SECTION 14: TRANSPORTATION INFORMATION

Land: Not subject to transport regulations

Air: Not subject to transport regulations

Sea: Not subject to transport regulations

SECTION 15: REGULATORY INFORMATION

Labeling according to the rules for the safety data sheet of the Global Harmonized System (GHS)

Non-hazardous according to **EC Directives 67/548/EEC** and **1999/45/EC**

SECTION 16: OTHER INFORMATION

Revision Date: 2016-06-01

Supersedes edition of: MSDS Sheet

THE INFORMATION CONTAINED HERENIN IS BASED ON THE PRESENT STATE OF OUR KNOWLEDGE. IT CHARACTERIZES THE PRODUCT WITH REGARD TO THE APPROPRIATE SAFETY PRECAUTIONS. IT DOES NOT REPRESENT A GUARANTEE OF THE PROPERTIES OF THE PRODUCT.

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: pH 7.00 buffer Solution
Application: pH Buffer Solution for calibrating pH probes, $\pm 0.01@25^{\circ}\text{C}$
Supplier Name: Apera Instruments, LLC
977 Old Henderson Rd. Tel: 1(614) 285-3080
Columbus, Ohio, 43220 www.aperainst.com

SECTION 2: HAZARD IDENTIFICATION

Non-hazardous product as specified in **Directives 67/548/EEC** and **1999/45/EC**
Non-hazardous product as specified in **OSHA regulation 29 CFR 1910.1200**

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Aqueous buffer solution

SECTION 4: FIRST AID MEASURES

If Inhaled: Remove person to fresh air. Call a physician if breathing becomes difficult.
In Case of Skin Contact: Wash affected area with water and soap
In Case of Eye Contact: Flush out with plenty of water for at least 15 minutes. If pain persists, seek medical attention.
In Case of Swallowing: Wash out mouth with plenty of water, provided the person is conscious. Seek medical attention if feeling unwell.

SECTION 5: FIRE-FIGHTING MEASURES**Suitable Extinguishing Media:**

Water Spray, Foam, Dry Powder, Carbon Dioxide

Special Risks:

Non-combustible. Development of hazardous combustion gases or vapors possible in the event of fire.

Special Protective Equipment:

Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: None **Environmental Precautions:** None
Additional Notes: None

SECTION 7: HANDLING AND STORAGE

Handling: Avoid contact with eyes
Storage: Keep container closed and protected from direct sunlight. Store at room temperature (15°C to 25°C)

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering:	Maintain general industrial hygiene practice.
Personal Protective Equipment:	As appropriate to quantity handled.
Respiratory Protection:	Required when vapors/aerosols are generated.
Protective Gloves:	Rubber or plastic
Eye Protection:	Goggles or face mask
Industrial Hygiene:	Change contaminated clothing. Wash hands after working with substance.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Physical State: Liquid	Appearance: Light green liquid
Odor: Odorless	Melting Point: NA
Boiling point: >100°C	Solubility: Soluble
pH@25°C: 7.00	Explosion Limit: NA
Flash Point: NA	Thermal Decomp.: NA

SECTION 10: STABILITY AND REACTIVITY

Conditions to be avoided:	Heating
Hazardous Decomposition Products:	See section 5.
Hazardous Polymerization:	Will not occur
Substances to be avoided:	The generally known reaction partners of water
Further Information:	Not available

SECTION 11: TOXICOLOGICAL INFORMATION**Product Toxicity**

Quantitative data on the toxicity of this product is not available

Potential Health Effects:

Further Data: Hazardous properties can't be excluded, but are relatively because of the low concentration of the dissolved substances, when the product is handled appropriately. The product should be handled with the usual care when dealing with chemicals.

Component Toxicity

Acute Toxicity: Not Available **Chronic Toxicity:** Not Available **Additional Data:** Not Available

SECTION 12: ECOLOGICAL INFORMATION

Quantitative data on the ecological effect of the product is not available.

Further Data: No ecological problems are to be expected when the product is handled and used with due care and attention.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Can be safely disposed of as ordinary refuse.

SECTION 14: TRANSPORTATION INFORMATION

Land: Not subject to transport regulations

Air: Not subject to transport regulations

Sea: Not subject to transport regulations

SECTION 15: REGULATORY INFORMATION

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