according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 01.23.2016

Plant Fertilizer, 30g

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: Plant Fertilizer, 30g

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: EM5022-E

Recommended uses of the product and restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific 9 Barnhart Drive, Hanover, PA 17331 (717) 632-1291

Supplier Details:

AquaPhoenix Scientific, Inc 9 Barnhart Drive, Hanover, PA 17331 (717) 632-1291

Emergency telephone number:

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture:

Signal word: None

Hazard statements: None

Precautionary statements: None

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

CAS / EINECS #	Ingredient Name	Wt. %	
57-13-6	Urea	40-70	
7447-40-7	Potassium chloride	15-30	
15708-41-5	Iron EDTA	1-3	

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Maintain an unobstructed airway. Loosen clothing as necessary and position individual in a comfortable position.

After skin contact:

Rinse affected area with soap and water. If symptoms develop or persist, seek medical attention.

After eye contact:

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 01.23.2016

Plant Fertilizer, 30g

If symptoms develop or persist, seek medical attention. Rinse/flush exposed eye(s) gently using water for 15-20 minutes.

After swallowing:

Rinse mouth thoroughly. Seek medical attention if irritation, discomfort, or vomiting persists.

Most important symptoms and effects, both acute and delayed: None

Indication of any immediate medical attention and special treatment needed: None

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment:

Wear protective eye wear, gloves and clothing. Refer to Section 8.

Additional information (precautions):

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols. Avoid contact with skin, eyes and clothing,

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure air handling systems are operational.

Environmental precautions:

Should not be released into the environment. Prevent from reaching drains, sewer or waterway.

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Avoid breathing mist or vapor. Do not eat, drink, smoke or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection





Control parameters: 57-13-6, Urea, WEEL TWA 10.0 mg/m3.

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in

the immediate vicinity of use or handling.

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 01.23.2016

Plant Fertilizer, 30g

Respiratory protection: When necessary, use NIOSH-approved breathing equipment.

Protection of skin: Select glove material impermeable and resistant to the substance.

Eye protection: Safety goggles or glasses, or appropriate eye protection.

General hygienic measures: Wash hands before breaks and at the end of work. Avoid contact with

skin, eyes and clothing.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Small light blue solid	Explosion limit lower: Explosion limit upper:	Not determined Not determined
Odor:	Slight ammonia odor	Vapor pressure at 20°C:	Not determined
Odor threshold:	Not determined	Vapor density:	Not determined
pH-value:	Not determined	Relative density:	Not determined
Melting/Freezing point:	Not determined	Solubilities:	None
Boiling point/Boiling range:	Not determined	Partition coefficient (noctanol/water):	Not determined
Flash point (closed cup):	Not determined	Auto/Self-ignition temperature:	Not determined
Evaporation rate:	Not determined	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Not determined	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		•

SECTION 10: Stability and reactivity

Reactivity: None

Chemical stability: None

Possible hazardous reactions: None

Conditions to avoid: None Incompatible materials: None

Hazardous decomposition products: None

SECTION 11: Toxicological information

Acute Toxicity:

Oral:

Urea: LD50: Rat - 8,471 mg/kg.

Chronic Toxicity: No additional information.

Skin corrosion/irritation: No additional information.

Serious eye damage/irritation: No additional information.

Respiratory or skin sensitization: No additional information.

Carcinogenicity: No additional information.

Germ cell mutagenicity: No additional information. **Reproductive Toxicity**: No additional information.

STOT-single and repeated exposure: No additional information. **Additional toxicological information**: No additional information.

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 01.23.2016

Plant Fertilizer, 30g

SECTION 12: Ecological information

Ecotoxicity:

Urea: Aquatic invertebrates, Daphinia magna (Water Flea) - 3,910 mg/l - 48 h.

Urea: Fish, Poecilia reticulata (guppy) - 17,500 mg/l - 96 h.

Persistence and degradability: No additional information. Bioaccumulative potential: No additional information.

Mobility in soil: No additional information.

Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities. (US 40CFR262.11).

SECTION 14: Transport information

US DOT

UN Number:

ADR, ADN, DOT, IMDG, IATA Not regulated

Limited Quantity Exception: None

Bulk: Non Bulk:

RQ (if applicable): None RQ (if applicable): None

Proper shipping Name: Not regulated. Proper shipping Name: Not regulated.

Hazard Class: None Hazard Class: None

Packing Group: Not regulated. Packing Group: Not regulated.

Marine Pollutant (if applicable): No Marine Pollutant (if applicable): No

Comments: None Comments: None

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)

None of the ingredients are listed.

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 01.23.2016

Plant Fertilizer, 30g

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

SECTION 16: Other information

The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The responsibility to provide a safe workplace remains with the user. This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

NFPA: 1-1-0 **HMIS**: 1-1-0

GHS Full Text Phrases: None

Abbreviations and Acronyms: None

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 10.24.2014

Vinegar

SECTION 1: Identification of the substance/mixture and of the supplier

Product name:

Vinegar

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number:

KEMVN1005-C

Recommended uses of the product and restrictions on use: Laboratory

Manufacturer Details:

AquaPhoenix Scientific 9 Barnhart Drive, Hanover, PA 17331 (717) 632-1291

Supplier Details:

AquaPhoenix Scientific Inc. 9 Barnhart Drive, Hanover PA 17331 (717) 632-1291

Emergency telephone number:

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture: Not classified for physical and health hazards under GHS.

Signal word: None

Hazard statements: None

Precautionary statements:

If medical advice is needed have product container or label at hand. Read label before use.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:			
CAS 64-19-7	Acetic Acid	5 %	
CAS 7732-18-5	Deionized Water	95 %	
	*	Percentages are by weight	

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. Give artificial respiration if necessary. If

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 10.24.2014

Vinegar

breathing persists give oxygen.

After skin contact:

Wash affected area with soap and water. Rinse thoroughly. Seek medical attention if irritation, discomfort or vomiting persists. Flush with water for 15 minutes.

After eye contact:

Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Immediately get medical assistance if irritation persists or if concerned.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Irritation, Nausea, Headache, Shortness of breath.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician. Notes to Physician: Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors.

Advice for firefighters:

Protective equipment: None

Additional information (precautions):

Move product containers away from fire or keep cool with water spray as a protective measure, where feasible.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Avoid contact with eyes, skin, and clothing. Remove from all sources of ignition. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. Stop the spill, if possible. Contain spilled material by diking or using inert absorbent. Transfer to a disposal or recovery container.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13.

Methods and material for containment and cleaning up:

If in a laboratory setting, follow Chemical Hygiene Plan procedures. Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor. Remove from all sources of ignition. Soak with inert material. Use spark-proof tools and explosion-proof equipment. Always obey local regulations.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Prevent formation of aerosols. Follow good hygiene procedures when handling chemical materials. Do not eat,

Effective date: 10.24,2014

Vinegar

drink, smoke, or use personal products when handling chemical substances. If in a laboratory setting, follow Chemical Hygiene Plan. Use only in well ventilated areas. Avoid splashes or spray in enclosed areas. Wash hands after handling. Avoid contact with eyes, skin, and clothing.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well sealed containers. Keep container tightly closed. Protect from freezing.

SECTION 8: Exposure controls/personal protection





Control parameters: 64-19-7, Acetic Acid, ACGIH TLV: 25mg/m3, OSHA PEL: 25mg/m3.

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in

the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (Occupational

Exposure Limits-OELs) indicated above.

Respiratory protection: Not required under normal conditions of use. Use suitable respiratory

protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills,

respiratory protection may be advisable.

Protection of skin: The glove material has to be impermeable and resistant to the product/

the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and

the degradation.

Eye protection: Safety glasses with side shields or goggles.

General hygienic measures: The usual precautionary measures are to be adhered to when handling

chemicals. Keep away from food, beverages and feed sources.

Immediately remove all soiled and contaminated clothing. Wash hands

before breaks and at the end of work. Do not inhale

gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and

skin

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Clear, colorless liquid	Explosion limit lower: Explosion limit upper:	0 Vol % 0 Vol %
Odor:	Vinegar-like	Vapor pressure at 20°C:	2.3 kPa (@ 20°C) or 23 hPa (17 mm Hg) at 20 °C (68 °F)
Odor threshold:	Not determined	Vapor density:	0.62 (Air = 1)
pH-value:	Not determined	Relative density:	1 (Water = 1)
Melting/Freezing point:	0 °C (32 °F)	Solubilities:	Soluble in Water
Boiling point/Boiling range:	100°C (212°F)	Partition coefficient (noctanol/water):	Not determined
Flash point (closed cup):	Not applicable	Auto/Self-ignition temperature:	Not determined

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 10.24.2014

Vinegar	
, mega,	

Evaporation rate:	Not determined	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Not applicable	Viscosity:	a. Kinematic: Not determined b. Dynamic: 0.952 mPas at 20 °C (68 °F)
Density at 20°C:	1 g/cm³ (8.345 lbs/gal) at 20 °C (68 °F)		

SECTION 10: Stability and reactivity

Reactivity: None Chemical stability:

No decomposition if used and stored according to specifications.

Possible hazardous reactions: None

Conditions to avoid:

Store away from oxidizing agents, strong acids or bases.

Incompatible materials:

Strong acids. Strong bases. Oxidizers. Metals.

Hazardous decomposition products:

Carbon oxides (CO, CO2). Irritating fumes.

SECTION 11: Toxicological information

Acute Toxicity:

Dermal:

LC50 inhalation-rat: 5620 ppm/1hr. (Acetic Acid).

Chronic Toxicity: No additional information.

Skin corrosion/irritation:

Classified as a skin irritant. Section 2.

Serious eye damage/irritation:

Classified as an eye irritant. Section 2.

Respiratory or skin sensitization: No additional information.

Carcinogenicity: No additional information.

Germ cell mutagenicity: No additional information. **Reproductive Toxicity**: No additional information.

STOT-single and repeated exposure: No additional information. **Additional toxicological information**: No additional information.

SECTION 12: Ecological information

Ecotoxicity:

Ecotoxicity, Acetic Acid has high biochemical oxygen demand, and a potential to cause oxygen depletion in aquatic systems.

Persistence and degradability:

Readily degradable in the environment.

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 10.24.2014

Vinegar

Bioaccumulative potential: No additional information.

Mobility in soil:

Aqueous solution has high mobility in soil. **Other adverse effects**: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product. Classify as a hazardous waste.

SECTION 14: Transport information

US DOT

UN Number:

ADR, ADN, DOT, IMDG, IATA Not Regulated

Limited Quantity Exception: None

Bulk: Non Bulk:

RQ (if applicable): None RQ (if applicable): None

Proper shipping Name: Not Regulated. Proper shipping Name: Not Regulated.

Hazard Class: None Hazard Class: None

Packing Group: Not Regulated.

Marine Pollutant (if applicable): No

Marine Pollutant (if applicable): No

additional information. additional information.

Comments: None Comments: None

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

64-19-7 Acetic Acid 5000 lb.

Effective date: 10.24.2014

Vinegar

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL)

All ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no quarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 1-0-0 **HMIS**: 1-0-0

GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.

IATA International Air Transport Association.

GHS Globally Harmonized System of Classification and Labelling of Chemicals.

ACGIH American Conference of Governmental Industrial Hygienists.

CAS Chemical Abstracts Service (division of the American Chemical Society).

NFPA National Fire Protection Association (USA).

HMIS Hazardous Materials Identification System (USA).

WHMIS Workplace Hazardous Materials Information System (Canada).

DNEL Derived No-Effect Level (REACH).

PNEC. Predicted No-Effect Concentration (REACH).

CFR Code of Federal Regulations (USA).

SARA Superfund Amendments and Reauthorization Act (USA).

RCRA. Resource Conservation and Recovery Act (USA).

TSCA. Toxic Substances Control Act (USA).

NPRI National Pollutant Release Inventory (Canada).

DOT US Department of Transportation.

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 10.24,2014

Methylene Blue Indicator, 1% w/v

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: Methylene Blue Indicator, 1% w/v

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: MB5200-B

Recommended uses of the product and restrictions on use: Laboratory

Manufacturer Details:

AquaPhoenix Scientific 9 Barnhart Drive, Hanover, PA 17331 (717) 632-1291

Supplier Details:

AquaPhoenix Scientific, Inc 9 Barnhart Drive, Hanover, PA 17331 (717) 632-1291

Emergency telephone number:

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture: Not classified for physical or health hazards under GHS.

Signal word: None

Hazard statements: None

Precautionary statements:

If medical advice is needed have product container or label at hand.

Keep out of reach of children.

Read label before use.

Do not eat, drink or smoke when using this product.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:			
CAS 7732-18-5	Deionized Water	99 %	
CAS 7220-79-3	Methylene Blue	1 %	
		Percentages are by weight	

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 10.24.2014

Methylene Blue Indicator, 1% w/v

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists.

After skin contact:

Wash affected area with soap and water. Rinse thoroughly. Seek medical attention if irritation, discomfort or vomiting persists.

After eye contact:

Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors.

Advice for firefighters:

Protective equipment: None

Additional information (precautions):

Move product containers away from fire or keep cool with water spray as a protective measure, where feasible.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. Stop the spill, if possible. Contain spilled material by diking or using inert absorbent. Transfer to a disposal or recovery container.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13.

Methods and material for containment and cleaning up:

If in a laboratory setting, follow Chemical Hygiene Plan procedures. Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Prevent formation of aerosols. Follow good hygiene procedures when handling chemical materials. Do not eat,

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 10.24.2014

Methylene Blue Indicator, 1% w/v

drink, smoke, or use personal products when handling chemical substances. If in a laboratory setting, follow Chemical Hygiene Plan. Use only in well ventilated areas. Avoid splashes or spray in enclosed areas.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well sealed containers. Keep container tightly closed.

SECTION 8: Exposure controls/personal protection





Control parameters: No applicable occupational exposure limits.

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in

the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (Occupational

Exposure Limits-OELs) indicated above.

Respiratory protection: Not required under normal conditions of use. Use suitable respiratory

protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills,

respiratory protection may be advisable.

Protection of skin: The glove material has to be impermeable and resistant to the product/

the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and

the degradation.

Eye protection: Safety glasses with side shields or goggles.

General hygienic measures: The usual precautionary measures are to be adhered to when handling

chemicals. Keep away from food, beverages and feed sources.

Immediately remove all soiled and contaminated clothing. Wash hands

before breaks and at the end of work. Do not inhale

gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and

skin.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Deep blue colored liquid	Explosion limit lower: Explosion limit upper:	Not determined Not determined
Odor	Odorless	Vapor pressure at 20°C:	14mm Hg
Odor threshold:	Not determined	Vapor density:	Not determined
pH-value:	Not determined	Relative density:	Not determined
Melting/Freezing point:	ос	Solubilities:	Infinite solubility.
Boiling point/Boiling range:	100C	Partition coefficient (n-octanol/water):	Not determined
Flash point (closed cup):	Not determined	Auto/Self-ignition temperature:	Not determined
Evaporation rate:	Not determined	Decomposition temperature:	Not determined

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 10.24.2014

Methylene Blue Indicator, 1% w/v

Flammability (solid, gaseous):	Not applicable	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		

SECTION 10: Stability and reactivity

Reactivity:

Nonreactive under normal conditions.

Chemical stability:

No decomposition if used and stored according to specifications.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Store away from oxidizing agents, strong acids or bases. Incompatible Materials.

Incompatible materials:

Strong acids. Strong bases. Ethylene Oxides. sodium oxide. nitromethane.

Hazardous decomposition products:

Carbon oxides (CO, CO2). Toxic chloride fumes.

SECTION 11: Toxicological information

Acute Toxicity: No additional information. **Chronic Toxicity**: No additional information.

Skin corrosion/irritation: No additional information.

Serious eye damage/irritation: No additional information.

Respiratory or skin sensitization: No additional information.

Carcinogenicity: No additional information.

Germ cell mutagenicity: No additional information. **Reproductive Toxicity**: No additional information.

STOT-single and repeated exposure: No additional information. **Additional toxicological information**: No additional information.

SECTION 12: Ecological information

Ecotoxicity: No additional information.

Persistence and degradability:

Readily degradable in the environment.

Bioaccumulative potential: No additional information

Mobility in soil:

Aqueous solution has high mobility in soil.

Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 10.24.2014

Methylene Blue Indicator, 1% w/v

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

SECTION 14: Transport information

US DOT

UN Number:

ADR, ADN, DOT, IMDG, IATA Not Regulated.

Limited Quantity Exception: None

Bulk: Non Bulk:

RQ (if applicable): None RQ (if applicable): None

Proper shipping Name: Not Regulated. Proper shipping Name: Not Regulated.

Hazard Class: None Hazard Class: None

Packing Group: Not Regulated.

Marine Pollutant (if applicable): No

Marine Pollutant (if applicable): No

additional information. additional information. **Comments:** None **Comments:** None

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 10.24.2014

Methylene Blue Indicator, 1% w/v

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 1-0-0 **HMIS**: 1-0-0

GHS Full Text Phrases: None

Abbreviations and Acronyms

IMDG International Maritime Code for Dangerous Goods.

IATA International Air Transport Association.

GHS Globally Harmonized System of Classification and Labelling of Chemicals.

ACGIH American Conference of Governmental Industrial Hygienists.

CAS Chemical Abstracts Service (division of the American Chemical Society).

NFPA National Fire Protection Association (USA).

HMIS Hazardous Materials Identification System (USA).

WHMIS Workplace Hazardous Materials Information System (Canada).

DNEL Derived No-Effect Level (REACH).

PNEC. Predicted No-Effect Concentration (REACH).

CFR Code of Federal Regulations (USA).

SARA Superfund Amendments and Reauthorization Act (USA).

RCRA. Resource Conservation and Recovery Act (USA).

TSCA. Toxic Substances Control Act (USA).

NPRI National Pollutant Release Inventory (Canada).

DOT US Department of Transportation.

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 02.08.2015

Sand, Fine

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: Sand, Fine

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: KEMEM-5002-1CUP

Recommended uses of the product and restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific, Inc. 9 Barnhart Drive Hanover, PA 17331 1-717-632-1291

Supplier Details:

AquaPhoenix Scientific Inc. 9 Barnhart Drive, Hanover PA 17331 (717) 632-1291

Emergency telephone number:

ChemTel: (24-hour) (US and Canada)

1-(800)-255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture:



Health hazard

Carcinogenicity, category 2



Irritant

Specific target organ toxicity following repeated exposure, category 2

Carcin. 1A. STOT RE. 2.

Signal word: Warning

Hazard statements:

May cause damage to organs through prolonged or repeated exposure. Suspected of causing cancer.

Precautionary statements:

If medical advice is needed have product container or label at hand.

Keep out of reach of children.

Read label before use.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

Do not breathe dust/fume/gas/mist/vapours/spray.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

Dispose of contents and container as instructed in Section 13.

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 02.08.2015

Sand, Fine	

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:			
CAS 14808-60-7	Silicon dioxide	100 %	
Percentages are by weight			

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Loosen clothing and place exposed in a comfortable position. Seek medical assistance if cough or other symptoms appear.

After skin contact:

Wash hands and exposed skin with soap and plenty of water. Seek medical attention if irritation persists or if concerned.

After eye contact:

Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes. Remove contact lenses, if present and easy to do, and continue rinsing. Seek medical attention if irritation persists or concerned.

After swallowing:

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention if irritation, discomfort, or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Irritation. Shortness of breath. Headache. Nausea. Dizziness. Lung cancer; Pulmonary fibrosis; Suspected human carcinogen. Inhalation - May cause damage to organs through prolonged or repeated exposure. Liver - Irregularities - Based on Human Evidence.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Combustible dusts formation is a risk. Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment:

Wear protective eyeware, gloves, and clothing. Refer to Section 8.

Additional information (precautions):

Avoid dust generation. Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin,

Effective date: 02.08.2015

Sand, Fine

eyes, and clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that air-handling systems are operational.

Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

Methods and material for containment and cleaning up:

Sweep up and shovel. Wear protective eyeware, gloves, and clothing. Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Containerize for disposal. Refer to Section 13. Keep in suitable closed containers for disposal. Pick up and arrange disposal without creating dust. Refer to Section 8.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Avoid dust generation. Combustible dusts formation is a risk. Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Do not eat, drink, smoke, or use personal products when handling chemical substances. Refer to Section 13.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed. Store away from incompatible materials.

SECTION 8: Exposure controls/personal protection





Control parameters: 14808-60-7 , Quartz , TWA 0.025000 mg/m3 USA. ACGIH.

14808-60-7, Quartz, TWA 30.000000mg/m 3 / %SiO2+2 USA. OSHA.

14808-60-7, Quartz, TWA 0.050000 mg/m3 USA. NIOSH.

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in

the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational

Exposure Limits-OELs) indicated above.

Respiratory protection: Not required under normal conditions of use. Where risk assessment

shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved

breathing equipment.

Protection of skin: Select glove material impermeable and resistant to the substance. Select

glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear

protective clothing.

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 02.08.2015

Sand, Fine

Eye protection: Wear equipment for eye protection tested and approved under

appropriate government standards such as NIOSH (US) or EN 166(EU).

Safety glasses or goggles are appropriate eye protection.

General hygienic measures: Perform routine housekeeping. Wash hands before breaks and

immediately after handling the product. Avoid contact with skin, eyes,

and clothing. Before re-wearing wash contaminated clothing.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Light beige to gray powder	Explosion limit lower: Explosion limit upper:	Not determined Not determined
Odor:	Odorless	Vapor pressure at 20°C:	Not determined
Odor threshold:	Not determined	Vapor density:	Not determined
pH-value:	5 - 8 at 400 g/l at 20 °C	Relative density:	2.6 g/cm3 at 25 °C
Melting/Freezing point:	1,610 °C	Solubilities:	Insoluble in water; Molecular Weight: 60.08
Boiling point/Boiling range:	2230 °C	Partition coefficient (noctanol/water):	Not determined
Flash point (closed cup):	Not determined	Auto/Self-ignition temperature:	Not determined
Evaporation rate:	Not determined	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Not determined	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		

SECTION 10: Stability and reactivity

Reactivity:

Nonreactive under normal conditions.

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Incompatible materials.

Incompatible materials:

Hydrogen fluoride.

Hazardous decomposition products:

silicon oxides.

SECTION 11: Toxicological information

Acute Toxicity: None

Chronic Toxicity: No additional information.

Skin corrosion/irritation: No additional information.
Serious eye damage/irritation: No additional information.
Respiratory or skin sensitization: No additional information.

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 02.08.2015

Sand, Fine

Carcinogenicity:

14808-60-7: 1 - Group 1: Carcinogenic to humans (Quartz)

Germ cell mutagenicity: No additional information. **Reproductive Toxicity**: No additional information.

STOT-single and repeated exposure:

Inhalation - May cause damage to organs through prolonged or repeated exposure.

Additional toxicological information: No additional information.

SECTION 12: Ecological information

Ecotoxicity: No additional information.

Persistence and degradability: No additional information. **Bioaccumulative potential**: No additional information.

Mobility in soil: No additional information.

Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. Product or containers must not be disposed together with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14: Transport information

US DOT

UN Number:

ADR, ADN, DOT, IMDG, IATA

Not Regulated

Limited Quantity Exception:

Bulk:

RQ (if applicable): None

Proper shipping Name: Not Regulated.

Hazard Class: None

Packing Group: Not Regulated.

Marine Pollutant (if applicable): No

additional information. **Comments:** None

None

Non Bulk:

RQ (if applicable): None

Proper shipping Name: Not Regulated.

Hazard Class: None

Packing Group: Not Regulated.

Marine Pollutant (if applicable): No

additional information. **Comments:** None

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 02.08.2015

Sand, Fine

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Chronic

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL)

All ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 0-0-0 **HMIS**: 0-0-0

GHS Full Text Phrases: None

Abbreviations and Acronyms: None

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 10.20.2015 **Revision**: 10.21.2015

Soil

SECTION 1: Identification of the substance/mixture and of the supplier

Soil

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number:

KEMEM-5003-6CUP

Recommended uses of the product and restrictions on use

Manufacturer Details:

AquaPhoenix Scientific 9 Barnhart Drive, Hanover, PA 17331 (717) 632-1291

Supplier Details:

Product name:

AquaPhoenix Scientific Inc. 9 Barnhart Drive, Hanover PA 17331 (717) 632-1291

Emergency telephone number:

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture:

Signal word: None

Hazard statements: None

Precautionary statements: None

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:

Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Loosen clothing and place exposed in a comfortable position. Seek medical assistance if cough or other symptoms appear.

After skin contact:

Wash hands and exposed skin with soap and plenty of water. Seek medical attention if irritation persists or if concerned.

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 10.20.2015 **Revision**: 10.21.2015

Soil

After eye contact:

Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes. Remove contact lenses, if present and easy to do, and continue rinsing. Seek medical attention if irritation persists or concerned.

After swallowing:

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention if irritation, discomfort, or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Irritation. Shortness of breath. Headache. Nausea. Dizziness. Lung cancer; Pulmonary fibrosis; Suspected human carcinogen. Inhalation - May cause damage to organs through prolonged or repeated exposure. Liver - Irregularities - Based on Human Evidence.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing agents:

None identified.

Special hazards arising from the substance or mixture:

Combustible dusts formation is a risk. Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment:

Wear protective eyeware, gloves, and clothing. Refer to Section 8.

Additional information (precautions):

Avoid dust generation. Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.

Environmental precautions: None

Methods and material for containment and cleaning up:

Sweep up and shovel. Keep in suitable closed containers for disposal.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Avoid dust generation. Avoid contact with skin, eyes, and clothing.

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed. Protect from freezing and physical damage.

SECTION 8: Exposure controls/personal protection

according to 29CFR1910/1200 and GHS Rev. 3

Soil





Control parameters: No applicable occupational exposure limits.

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in

the immediate vicinity of use or handling.

Respiratory protection:

Not required under normal conditions of use.

Protection of skin:

Select glove material impermeable and resistant to the substance.

Eye protection:

Safety glasses or goggles are appropriate eye protection.

General hygienic measures:

None

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Brown powder	Explosion limit lower: Explosion limit upper:	Not determined Not determined
Odor:	Not determined	Vapor pressure at 20°C:	Not determined
Odor threshold:	Not determined	Vapor density:	Not determined
pH-value:	Not determined	Relative density:	Not determined
Melting/Freezing point:	Not determined	Solubilities:	Not determined
Boiling point/Boiling range:	Not determined	Partition coefficient (noctanol/water):	Not determined
Flash point (closed cup):	Not determined	Auto/Self-ignition temperature:	Not determined
Evaporation rate:	Not determined	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Not determined	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		

SECTION 10: Stability and reactivity

Reactivity:

Nonreactive under normal conditions.

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Incompatible materials. Dust formation.

Incompatible materials: None

Hazardous decomposition products: None

SECTION 11: Toxicological information

Acute Toxicity: None

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 10.20.2015 **Revision**: 10.21.2015

Soil

Chronic Toxicity: No additional information.

Skin corrosion/irritation: No additional information.

Serious eye damage/irritation: No additional information.

Respiratory or skin sensitization: No additional information.

Carcinogenicity: No additional information.

Germ cell mutagenicity: No additional information. **Reproductive Toxicity**: No additional information.

STOT-single and repeated exposure: No additional information. **Additional toxicological information**: No additional information.

SECTION 12: Ecological information

Ecotoxicity: No additional information.

Persistence and degradability: No additional information. **Bioaccumulative potential**: No additional information.

Mobility in soil: No additional information.

Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11).

SECTION 14: Transport information

US DOT

UN Number:

ADR, ADN, DOT, IMDG, IATA Not Regulated

Limited Quantity Exception: None

Bulk: Non Bulk:

RQ (if applicable): None RQ (if applicable): None

Hazard Class: None Hazard Class: None

Packing Group: Not Regulated.

Marine Pollutant (if applicable): No

Marine Pollutant (if applicable): No

additional information. additional information.

Comments: None Comments: None

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Effective date: 10.20.2015 **Revision**: 10.21.2015

Soil

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: HMIS:

GHS Full Text Phrases: None

Abbreviations and Acronyms: None

Effective date: 12.05.2015

Sugar, Table

SECTION 1: Identification of the substance/mixture and of the supplier

Product name:

Sugar, Table

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number:

SP-5120-R

Recommended uses of the product and restrictions on use: Laboratory chemicals

Manufacturer Details:

AquaPhoenix Scientific, Inc. 9 Barnhart Drive Hanover, PA 17331 1-717-632-1291

Emergency telephone number:

ChemTel: (24-hour)

+1(800)255-3924

+1(813)248-0585 (International)

SECTION 2: Hazards identification

Classification of the substance or mixture: Not classified for physical or health hazards under GHS.

Signal word: None

Hazard statements: None

Precautionary statements:

Read label before use.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:			
CAS 57-50-1	Sucrose	>90 %	
	·	Percentages are by weight	

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing difficult, give oxygen.

After skin contact:

Wash affected area with soap and water. Seek medical attention if irritation persists or if concerned.

After eye contact:

Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Seek medical

Effective date: 12.05.2015

Sugar, Table

assistance if discomfort or irritation persists.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort, or vomiting persists.

Most important symptoms and effects, both acute and delayed: None Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Water fog. Mist. Carbon dioxide. Dry chemical powder. Alcohol foam. Polymer foam. If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture: None Advice for firefighters:

Protective equipment:

Use NIOSH-approved respiratory protection/breathing apparatus.

Additional information (precautions):

Move product containers away from fire or keep cool with water spray as a protective measure, where feasible.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Precautions. Avoid contact with eyes, skin, and clothing. Use proper personal protective equipment.

Environmental precautions:

Prevent from reaching drains, sewer or waterway.

Methods and material for containment and cleaning up:

If necessary use trained response staff or contractor. Wear protective eyeware, gloves, and clothing. Absorb with suitable absorbent material such as sand or earth and containerize for disposal. Avoid generating dust. Always obey local regulations. Dispose of empty containers as unused product. Refer to Section 13. Refer to Section 8.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Minimize dust generation and accumulation. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Do not eat, drink, smoke, or use personal products when handling chemical substances. Use only in well ventilated areas. Avoid contact with eyes, skin, and clothing.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Provide ventilation for containers. Keep container tightly closed. Protect from freezing and physical damage.

SECTION 8: Exposure controls/personal protection

Effective date: 12.05.2015

Sugar, Table





Control parameters: 57-50-1, Sucrose, ACS, ACGIH: 10 mg/m3 TWA.

57-50-1, Sucrose, ACS, NIOSH: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA

(respirable dust).

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in

the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational

Exposure Limits-OELs) indicated above.

Respiratory protection: Not required under normal conditions of use. Where risk assessment

shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved

breathing equipment.

Protection of skin: Select glove material impermeable and resistant to the substance. Select

glove material based on rates of diffusion and degradation.

Eye protection: Safety glasses with side shields.

General hygienic measures: Wash hands before breaks and at the end of work. Before wearing wash

contaminated clothing. Perform routine housekeeping to prevent dust

generation. Wear protective eyewear, gloves, and clothing.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	White solid	Explosion limit lower: Explosion limit upper:	Non Explosive Non Explosive
Odor:	Odorless	Vapor pressure at 20°C:	Not available
Odor threshold:	Not available	Vapor density:	Not available
pH-value:	5.5 - 7.5 at 342 g/l at 25°C	Relative density:	Not available
Melting/Freezing point:	185 - 187°C	Solubilities:	342 g/l at 20°C
Boiling point/Boiling range:	Not available	Partition coefficient (noctanol/water):	Not available
Flash point (closed cup):	Not available	Auto/Self-ignition temperature:	Not available
Evaporation rate:	Not available	Decomposition temperature:	Not available
Flammability (solid, gaseous):	Not available	Viscosity:	a. Kinematic: Not available b. Dynamic: Not available
Density at 20°C:	Not available		

SECTION 10: Stability and reactivity

Reactivity:

None under normal processing.

Chemical stability:

Stable under normal conditions.

Effective date: 12.05.2015

Sugar, Table

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Oxidizers. Sulfuric acid. Nitric acid.

Incompatible materials:

Strong oxidizing agents.

Hazardous decomposition products:

Oxides of carbon and irritating and toxic gases/fumes.

SECTION 11: Toxicological information

Acute Toxicity: No additional information. **Chronic Toxicity**: No additional information.

Skin corrosion/irritation: No additional information.
Serious eye damage/irritation: No additional information.
Respiratory or skin sensitization: No additional information.

Carcinogenicity: No additional information.

Germ cell mutagenicity: No additional information. **Reproductive Toxicity**: No additional information.

STOT-single and repeated exposure: No additional information. **Additional toxicological information**: No additional information.

SECTION 12: Ecological information

Ecotoxicity: No additional information.

Persistence and degradability:

Not persistent.

Bioaccumulative potential:

Not readily biodegradable.

Mobility in soil: No additional information.

Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification. Dispose of empty containers as unused product.

SECTION 14: Transport information

US DOT

UN Number:

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 12.05.2015

Sugar, Table

ADR, ADN, DOT, IMDG, IATA

Not regulated

Limited Quantity Exception:

None

Bulk:

RQ (if applicable): None

Proper shipping Name: Not regulated.

Hazard Class: None

Packing Group: Not regulated. Marine Pollutant (if applicable): No

Comments: None

Non Bulk:

RQ (if applicable): None

Proper shipping Name: Not regulated.

Hazard Class: None

Packing Group: Not regulated.

Marine Pollutant (if applicable): No

Comments: None

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)

None of the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL)

All ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety

Effective date: 12.05.2015

Sugar, Table

information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 1-0-0 HMIS: 1-0-0

GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.

PNEC. Predicted No-Effect Concentration (REACH).

CFR Code of Federal Regulations (USA).

SARA Superfund Amendments and Reauthorization Act (USA).

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TSCA. Toxic Substances Control Act (USA).

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DOT US Department of Transportation.

IATA International Air Transport Association.

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ACGIH American Conference of Governmental Industrial Hygienists.

CAS Chemical Abstracts Service (division of the American Chemical Society).

NFPA National Fire Protection Association (USA).

HMIS Hazardous Materials Identification System (USA).

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DNEL Derived No-Effect Level (REACH).

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 12.19.2014

Yeast, Active Dry

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: Yeast, Active Dry

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: YT-5601-S
Recommended uses of the product and restrictions on use: Laboratory

Manufacturer Details:

AquaPhoenix Scientific, Inc. 9 Barnhart Drive Hanover, PA 17331 1-717-632-1291

Emergency telephone number:

ChemTel: (24-hour) +1(800)255-3924

+1(813)248-0585 (International)

SECTION 2: Hazards identification

Classification of the substance or mixture:

Signal word: Warning

Hazard statements: None

Precautionary statements: None

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:			
CAS 8013-01-2	Yeast, Active Dry	100 %	
		Percentages are by weight	

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing difficult, give oxygen.

After skin contact:

Wash affected area with soap and water. Rinse/flush exposed skin gently using water for 15-20 minutes. Seek medical advice if discomfort or irritation persists.

After eye contact:

Effective date: 12.19,2014

Yeast, Active Dry

Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors. Thermal decomposition can lead to release of irritating gases and vapors. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Advice for firefighters:

Protective equipment:

Use NIOSH-approved respiratory protection/breathing apparatus.

Additional information (precautions):

Move product containers away from fire or keep cool with water spray as a protective measure, where feasible, Use spark-proof tools and explosion-proof equipment.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Transfer to a disposal or recovery container. Use respiratory protective device against the effects of fumes/dust/aerosol. Ensure adequate ventilation. Protect from heat. Stop the spill, if possible. Contain spilled material by diking or using inert absorbent.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13.

Methods and material for containment and cleaning up:

If in a laboratory setting, follow Chemical Hygiene Plan procedures. Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Minimize dust generation and accumulation. Wash hands after handling. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. Use only in well ventilated areas. Avoid contact with eyes, skin, and clothing.

Effective date: 12.19.2014

Yeast, Active Dry

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Provide ventilation for containers. Store away from foodstuffs. Store away from oxidizing agents. Keep container tightly closed. Store with like hazards.

SECTION 8: Exposure controls/personal protection





Control parameters:

No applicable occupational exposure limits.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts (total/respirable) below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Use under a fume hood. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into

the work area (i.e., there is no leakage from the equipment).

Respiratory protection:

Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills,

respiratory protection may be advisable.

Protection of skin:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and

the degradation.

Eye protection:

Safety glasses with side shields or goggles.

General hygienic measures:

The usual precautionary measures are to be adhered to when handling

chemicals. Keep away from food, beverages and feed sources.

Immediately remove all soiled and contaminated clothing. Wash hands

before breaks and at the end of work. Do not inhale

gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and

skin.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Tan powder	Explosion limit lower: Explosion limit upper:	Not determined Not determined
Odor:	Characteristic odor	Vapor pressure at 20°C:	Not determined
Odor threshold:	Not determined	Vapor density:	Not determined
pH-value:	Not determined	Relative density:	1.0 g/ml
Melting/Freezing point:	Not determined	Solubilities:	Soluble in water.
Boiling point/Boiling range:	Not determined	Partition coefficient (n- octanol/water):	Not determined
Flash point (closed cup):	Not determined	Auto/Self-ignition temperature:	Not determined

Effective date: 12.19.2014

Yeast, Active Dry

Evaporation rate:	Not determined	Decomposition Not determined	
Flammability (solid, gaseous):	Not determined	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		

SECTION 10: Stability and reactivity

Reactivity: None Chemical stability:

No decomposition if used and stored according to specifications.

Possible hazardous reactions: None

Conditions to avoid:

Store away from oxidizing agents, strong acids or bases.

Incompatible materials:

Strong acids. Strong bases. Strong oxidizers.

Hazardous decomposition products:

Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

Acute Toxicity: None

Chronic Toxicity: No additional information.

Skin corrosion/irritation: No additional information.

Serious eye damage/irritation: No additional information.

Respiratory or skin sensitization: No additional information.

Carcinogenicity: No additional information.

Germ cell mutagenicity: No additional information. **Reproductive Toxicity**: No additional information.

STOT-single and repeated exposure: No additional information. **Additional toxicological information**: No additional information.

SECTION 12: Ecological information

Ecotoxicity: No additional information.

Persistence and degradability:

Readily degradable in the environment.

Bioaccumulative potential: No additional information.

Mobility in soil: No additional information.

Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may

Effective date: 12.19.2014

Yeast, Active Dry

incorporate some amount of this product.

SECTION 14: Transport information

US DOT

UN Number:

ADR, ADN, DOT, IMDG, IATA Not Dangerous Goods

Limited Quantity Exception: None

Bulk: Non Bulk:

RQ (if applicable): None RQ (if applicable): None

Proper shipping Name: Not Dangerous Proper shipping Name: Not Dangerous

Goods. Goods.

Hazard Class: None Hazard Class: None

Packing Group: Not Dangerous Goods.

Marine Pollutant (if applicable): No

Marine Pollutant (if applicable): No

additional information. additional information.

Comments: None Comments: None

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Effective date: 12.19.2014

Yeast, Active Dry

Canadian Domestic Substances List (DSL):

All ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 0-0-0 **HMIS**: 0-0-0

GHS Full Text Phrases: None

Abbreviations and Acronyms:

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