according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 01.15.2015 Page 1 of 7

Starch Ind Soln, 1.0% w/v

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

Product name: Starch Ind Soln,1.0%w/v

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25584
Recommended uses of the product and restrictions on use:

Manufacturer Details:

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

Supplier Details:

Fisher Science Education 6771 Silver Crest Road, Nazareth, PA 18064 (724)517-1954

Emergency telephone number:

Fisher Science Education

Emergency Telephone No.: 800-535-5053

SECTION 2: Hazards identification

Classification of the substance or mixture:



Corrosive

Serious eye damage, category 1



Irritant

Skin irritation, category 2

Eye Dam. 1. Skin Corr 2.

Signal word: Danger

Hazard statements:

Causes serious eye damage.

Causes skin irritation.

Precautionary statements:

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

Keep out of reach of children.

Read label before use.

Wash ... thoroughly after handling.

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

Continue rinsing.

Rinse mouth.

Specific treatment (see supplemental first aid instructions on this label).

Immediately call a POISON CENTER or doctor/physician.

Take off contaminated clothing and wash before reuse.

Effective date: 01.15.2015 Page 2 of 7

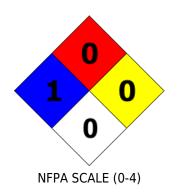
Starch Ind Soln, 1.0% w/v

IF ON SKIN: Wash with soap and water.

If skin irritation occurs: Get medical advice/attention.

Other Non-GHS Classification:







HMIS RATINGS (0-4)

SECTION 3: Composition/information on ingredients

Ingredients:			
CAS 69-72-7	Salicylic Acid	0.1 %	
CAS 9005-84-9	Starch	1 %	
CAS 7646-85-7	Zinc Chloride	0.4 %	
CAS 64-19-7	Acetic Acid	0.36 %	
Percentages are by weight			

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

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

After skin contact:

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

After eye contact:

Protect unexposed eye. Rinse or flush exposed eye gently using water for 15-20 minutes. Remove contact lenses while rinsing. Immediately get medical assistance.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Get medical assistance. 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. Physician should treat symptomatically. DO

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 01.15.2015 Page 3 of 7

Starch Ind Soln, 1.0% w/v

NOT use mouth-to-mouth resuscitation without a barrier device to prevent responder from receiving burns. Follow with gastric lavage with activated charcoal. If available, administer ferric hexacyanoferrate as a gastrointestinal trapping agent. Persons with pre - existing skin diso rders, eye problems, or impaired kidney function may be more susceptible to the effects of this substance.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

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

Unsuitable extinguishing agents:

Water or foam may cause frothing.

Special hazards arising from the substance or mixture:

Use water spray to cool unopened containers. Combustion products may include carbon oxides or other toxic vapors.

Advice for firefighters:

Protective equipment:

Wear protective eyeware, gloves, and clothing. Refer to Section 8. Wear special protective clothing and positive pressure self-contained breathing apparatus. Wear protective eyeware, gloves, and clothing.

Additional information (precautions):

Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing. 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. Stop the spill, if possible. When necessary use NIOSH approved breathing equipment. Transfer to a disposal or recovery container. Use respiratory protective device against the effects of fumes/dust/aerosol.

Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway. Collect contaminated soil for characterization per Section 13.

Methods and material for containment and cleaning up:

Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Always obey local regulations. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor. Absorb with suitable absorbent material such as sand or earth and containerize for disposal.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Avoid contact with skin, eyes, and clothing. Absorb spillage to prevent material damage. 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. Wash hands after handling.

Conditions for safe storage, including any incompatibilities:

Provide ventilation for containers. Store away from foodstuffs. Store in cool, dry conditions in well sealed containers. Store with like hazards. Protect from freezing and physical damage. Provide ventilation for containers. Keep away from food and beverages. Protect from freezing and physical damage. Store away from incompatible materials.

Effective date: 01.15.2015 Page 4 of 7

Starch Ind Soln, 1.0% w/v

SECTION 8: Exposure controls/personal protection





Control Parameters: 7646-85-7, Zinc Chloride, ACGIH TLV TWA 1 mg/m3.

7646-85-7, Zinc Chloride, OSHA PEL TWA 1 mg/m3.

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

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

the immediate vicinity of use or handling. Normal ventilation is adequate.

Ensure eyewash and safety shower are available.

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

> protective device when high concentrations are present. Where risk assessment shows air-purifying respirators are refer to Section 6.

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

glove material based on rates of diffusion and degradation. Wear

protective clothing.

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

General hygienic measures: Avoid contact with the eyes and skin. Wash hands and exposed skin with

soap and plenty of water. Before wearing again wash contaminated

clothing.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):		Explosion limit lower: Explosion limit upper:	Not Determined Not Determined
Odor:	Slight potato - like 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:	Infinite solubility in water.
Boiling point/Boiling range:	INATIATARMINAA	Partition coefficient (noctanol/water):	Not Determined
Flash point (closed cup):	ININI IJELEKMINEN	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 Specific Gravity: : 2.04	4	

SECTION 10: Stability and reactivity

Reactivity:

Nonreactive under normal conditions.

Chemical stability:

No decomposition if used and stored according to specifications.

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 01.15.2015 Page 5 of 7

Starch Ind Soln, 1.0% w/v

Possible hazardous reactions:

No information available.

Conditions to avoid:

Incompatible materials.

Incompatible materials:

Strong oxidizing agents.

Hazardous decomposition products:

Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

Acute Toxicity:

Oral:

Salicylic acid LD50 Rat: 891 mg/kg

Chronic Toxicity: No additional information.

Corrosion Irritation: No additional information.

Sensitization: No additional information.

Numerical Measures: No additional information.

Carcinogenicity: No additional information.

Mutagenicity: No additional information.

Reproductive Toxicity: 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:

Dilute with water and flush to sewer. 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. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Dispose of empty containers as unused product.

SECTION 14: Transport information

US DOT

UN Number:

ADR, ADN, DOT, IMDG, IATA

Not Dangerous Goods

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 01.15.2015 Page 6 of 7

Starch Ind Soln, 1.0% w/v

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):

Acute

SARA Section 313 (Specific toxic chemical listings):

7646-85-7 Zinc Chloride.

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):

1310-58-3 Potassium hydroxide 1000 lbs.

7646-85-7 Zinc Chloride 1000 lb.

64-19-7 Acetic Acid 5000.

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):

12125-02-9 Not Regulated.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 1%):

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 01.15.2015 Page 7 of 7

Starch Ind Soln, 1.0% w/v

7647-01-0 Hydrochloric Acid. 1310-58-3 Potassium hydroxide. 7646-85-7 Zinc Chloride. 64-19-7 Acetic Acid.

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. 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.

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).

RCRA Resource Conservation and Recovery Act (USA).

TSCA Toxic Substances Control Act (USA).

NPRI National Pollutant Release Inventory (Canada).

DOT US Department of Transportation.

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).

HMIS Hazardous Materials Identification System (USA).

WHMIS Workplace Hazardous Materials Information System (Canada).

DNEL Derived No-Effect Level (REACH).

NFPA National Fire Protection Association (USA).

NPRI National Pollutant Release Inventory (Canada).

Effective date: 01.15.2015 **Last updated**: 06.17.2015