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

Product name: Distilled White Vinegar, 5%

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: VN-5473-B

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:

Signal word: None

Hazard statements: None

Precautionary statements: None

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

<table>
<thead>
<tr>
<th>CAS / EINECS #</th>
<th>Ingredient Name</th>
<th>Wt. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-19-7</td>
<td>Acetic Acid</td>
<td>5</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>Deionized Water</td>
<td>95</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

Description of first aid measures

After inhalation:
Loosen clothing as necessary and position individual in a comfortable position. Maintain an unobstructed airway. Get medical advice/attention if you feel unwell.

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

After eye contact:
Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
After swallowing:
Rinse mouth and then drink plenty of water. Do not induce vomiting. Get medical advice/attention if you feel unwell.

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. Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit.
- Additional information (precautions):
  Heating causes a rise in pressure, risk of bursting and combustion. Shut off sources of ignition. Carbon monoxide and carbon dioxide may form upon combustion.

SECTION 6: Accidental release measures
Personal precautions, protective equipment and emergency procedures:
Ensure adequate ventilation. Ensure air handling systems are operational. Wear protective eye wear, gloves and clothing.

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

Methods and material for containment and cleaning up:
Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders). Dispose of contents / container in accordance with local regulations.

Reference to other sections: None

SECTION 7: Handling and storage
Precautions for safe handling:
Do not eat, drink, smoke or use personal products when handling chemical substances. Avoid breathing mist or vapor. Use only with adequate ventilation.

Conditions for safe storage, including any incompatibilities:
Store in a cool, well-ventilated area. Store away from foodstuffs.

SECTION 8: Exposure controls/personal protection
Control parameters: 64-19-7, Acetic Acid, ACGIH TLV: 25mg/m³.
64-19-7, Acetic Acid, OSHA PEL: 25mg/m³.

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-DELS) indicated above.

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. Perform routine housekeeping. Wash contaminated clothing before reusing.

SECTION 9: Physical and chemical properties

| Demonstrator (physical state, color): | Clear, colorless liquid | Explosion limit lower: | 0 Vol % |
| Explosion limit upper: | 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 (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 |
| Flammability (solid, gaseous): | Not determined | 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: None
Possible hazardous reactions: None
Conditions to avoid: None
Incompatible materials: None
Hazardous decomposition products: None

SECTION 11: Toxicological information

Acute Toxicity:
   Oral:
   Acetic Acid: LD50 oral-rat: 3310 mg/kg.
   Dermal:
   Acetic Acid: LC50 inhalation-rat: 5620 ppm/ 1hr.
**Distilled White Vinegar, 5%**

**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:**

**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:**
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.
Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 03.21.2016

Distilled White Vinegar, 5%

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.

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. 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: None