Section 1: Product and Company Identification

Item Number: s2009-1
Common Name: Acetic Acid 12% Aqueous
Intended Use: In Vitro Diagnostic use. Laboratory Use Only

IN CASE OF EMERGENCY, CONTACT: CHEMTREC (24HR) 800-424-9300

Section 2: Hazard Identification

315 Skin corrosion/irritation Cat 2
320 Serious eye damage/eye irritation Cat 2B
335 Specific target organ toxicity, single exposure; Respiratory tract irritation Cat 3

Warning
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.

Wash hands/ skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Use only in well-ventilated area. In case of inadequate ventilation wear respiratory ventilation. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise covered by GHS: None

Section 3: Composition Information

Exposure Limits (A blank value indicates no information available)

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS#</th>
<th>PEL(mg/m3)</th>
<th>STEL(mg/m3)</th>
<th>CEIL(mg/m3)</th>
<th>Concentration Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic Acid, Glacial</td>
<td>64-19-7</td>
<td>15.00</td>
<td>10.00</td>
<td>10-25%</td>
<td></td>
</tr>
</tbody>
</table>

Section 4: First Aid Measures

Eye Contact: Check for and remove contact lenses. Wash with large amounts of water for 15 minutes. Seek medical attention.

Skin Contact: Remove contaminated clothing and shoes. Wash the affected area with large with soap and water. Seek medical attention.

Ingestion: Give two glasses of water to a conscious victim. Do not induce vomiting. Seek medical attention.

Inhalation: Move person to fresh air. If necessary give CPR; warn in this could pose a risk of exposure to the rescue breather. Seek medical attention.

The most important known symptoms and effects are described in section 2 and/or section 11.

Section 5: Fire Fighting Measures

Extinguishing Media: Dry Chemical Powder, Alcohol Foam, Water Spray or Fog

Special Fire and Explosion Remarks: N/A

Section 6: Accidental Release Measures

Spill Cleanup and Disposal Special: Caution! Corrosive, neutralize with Sodium Bicarbonate or similar

Spill Cleanup: Take up spills with absorbent material and containize for proper disposal. Use proper PPE as per section 8. Provide ventilation.

Section 7: Handling and Storage

Storage and Handling Special: N/A

Storage and handling: Keep container tightly closed. Store in a cool, dry area and protect from physical damage.

Section 8: Exposure Controls/Personal Protection

Personal Protective Equipment: Gloves, Splash Goggles, Vapor Respirator, Apron

This information is provided as a guide but proper PPE can only be determined by the end user and their situation.

Engineering Controls: Provide local exhaust ventilation to keep the airborne concentrations of vapors below their respective threshold limit values. Ensure that eyewash stations and safety showers are local to the work-station.

Section 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Clear, Colorless Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>Odor</td>
<td>Pungent, Vinegar-like, sou</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>N/A</td>
</tr>
<tr>
<td>Lower Flammability Limit (%)</td>
<td>N/A</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>Specific Gravity (@20C)</td>
<td>1.05</td>
</tr>
<tr>
<td>Melting Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg)</td>
<td>11</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density (Air+1)</td>
<td>2.1</td>
</tr>
<tr>
<td>Flash Point (F) TCC</td>
<td>N/A</td>
</tr>
<tr>
<td>Relative Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Water Soluable?</td>
<td>Yes</td>
</tr>
<tr>
<td>Volatile Percent</td>
<td>N/A</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>n-octanol/water: N/A</td>
</tr>
<tr>
<td>Auto Ignition Temp</td>
<td>N/A</td>
</tr>
<tr>
<td>Decomposition Temp</td>
<td>N/A</td>
</tr>
<tr>
<td>Viscosity</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Section 10: Stability and Reactivity

Special Remarks on Stability: Stable

Special Remarks on Reactivity: N/A

Water Reactive: No

Manufacturer: Poly Scientific R&D Corp

Manufacturer: Poly Scientific R&D Corp

Address: 70 Cleveland Ave
            Bay Shore, NY 11706
            631-586-0400
            polyrnd@polyrnd.com
            www.polyrnd.com
SAFETY DATA SHEET

Section 11. Toxicological Information

Routes of Entry: Inhalation, Skin absorption, Ingestion

Animal Toxicity: Acute Oral (LD50): 3310 mg/kg (Rat); Acute Dermal (LD50): 1060 mg/kg (Rabbit); Acute Vapor (LC50): 5620 1hr (mouse)

Human Toxic Effects: Target Organs: Lungs, mucous membranes, upper respiratory tract, skin, eyes, teeth

Potential Acute Health Effects: Hazardous in case of eye, skin contact, inhalation, ingestion

Potential Chronic Health Effects: Mutagenic for yeast and bacteria. Repeated exposure can produce target organ damage.

Section 12. Ecological Information

Ecological Information: N/A

Section 13. Disposal Considerations

Waste Disposal: Dispose of in accordance with local, state and federal laws.

Section 14. Transport Information

DOT Identification: UN2790; Acetic Acid Solution; 8; III

Section 15. Regulatory Information

State Regulations: New York release reporting list: Acetic Acid

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS#</th>
<th>Sara Section 311 Reporting</th>
<th>Acute</th>
<th>Chronic</th>
<th>Fire</th>
<th>Pressure</th>
<th>Reactive</th>
<th>SARA302</th>
<th>SARA313</th>
<th>CERCLA</th>
<th>RCRA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic Acid, Glacial</td>
<td>64-19-7</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Section 16. Other Information

Review Date: 8/21/2017
Reviewed by: tsc
MSDS Group Id: 365

Notice: This SDS applies only to the material as packaged. If the material is altered by any means it may pose risks not mentioned here.
It is the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use.
While this SDS is based on reliable technical data, Poly Scientific R&D Corp. assumes no responsibility for the completeness or accuracy of the information contained herein.