1. Identification

Product Name: Acetic Acid, 12%

Synonyms: Diluted Glacial Acetic Acid

Recommended Use: N/A

Manufacturer/Supplier: Avantik Biogroup
32 Commerce Street
Springfield, NJ 07081
1-888-392-8411

Restrictions on Use: N/A

In Case of Emergency:
Chemtrec US 1-800-424-9300
Chemtrec International 703-527-3887

2. Hazards Identification

OSHA Hazard Classification(s):
- Skin Irritation - Category 2
- Eye Irritation - Category 2B

Signal Word: Warning

Hazard Statement(s): Causes skin irritation. Causes eye irritation.

Precautionary Statement(s):
- Prevention: Wash body thoroughly after handling. Wear protective gloves.
- Response: If on skin: Wash with plenty of water. Specific treatment (see first aid section on this label). If skin irritation or rash occurs: Get medical attention. Take off all contaminated clothing and wash it 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 attention.
- Storage: N/A
- Disposal: N/A

3. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common Name</th>
<th>CAS #</th>
<th>Concentration %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td>Glacial Acetic Acid</td>
<td>64-19-7</td>
<td>12</td>
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</tr>
</tbody>
</table>

4. First Aid Measures

**Eye Contact:** 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.

**Skin Contact:** If on skin (or hair): Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.

**Inhalation:** Remove to fresh air; give artificial respiration if breathing has stopped. Get medical advice/attention if you feel unwell.

**Ingestion:** Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.

**Symptoms:** Irritation eyes, nose, throat; headache, dizziness

**Recommendations for immediate medical care/special treatment:** Get medical advice/attention if you feel unwell.

5. Fire-Fighting Measures
Acetic Acid, 12%

Extinguishing Media: Dry chemical, carbon dioxide, alcohol foam, water.
Fire Hazards (Chemical): Not flammable.
Special Protective Equipment: Firefighters should use self-contained breathing apparatus and protective clothing.
Precautions for Firefighters: Firefighters should use self-contained breathing apparatus and protective clothing.

6. Accidental Release Measures
Emergency Procedures: Evacuate the area of all unnecessary personnel. Wear suitable protective equipment. Eliminate all sources of ignition and provide ventilation.
Protective Equipment: See section 8
Environmental Precautions: Prevent release to the environment by using barriers.

7. Handling and Storage
Handling: Do not breathe vapors. Do not eat, drink or smoke when using this product.
Storage: Store in a well-ventilated, cool place. Keep lid tightly closed.

8. Exposure Controls/Personal Protection
OSHA Permissible Exposure Limits (PELs):

<table>
<thead>
<tr>
<th>Reagent</th>
<th>CAS #</th>
<th>OSHA PEL TWA</th>
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<tbody>
<tr>
<td>Glacial Acetic Acid</td>
<td>64-19-7</td>
<td>10 ppm, 25 mg/m3</td>
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ACGIH Threshold Limit Values (TLVs):

<table>
<thead>
<tr>
<th>Reagent</th>
<th>CAS #</th>
<th>ACGIH PEL TLV</th>
<th>ACGIH STEL</th>
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</thead>
<tbody>
<tr>
<td>Glacial Acetic Acid</td>
<td>64-19-7</td>
<td>10 ppm, 25 mg/m3</td>
<td>15 ppm, 37 mg/m3</td>
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</tbody>
</table>

Engineering Controls: Use in a well ventilated area to prevent exposure. Maintain eyewash fountain and quick-drench facilities in work areas.
Personal Protective Measures: Wear gloves, lab coat, eye protection and impervious footwear. Contact lenses should not be worn when working with this material.
Special PPE Requirements: If ventilation hood not available wear respirator.

9. Physical and Chemical Properties Section
Appearance: Colorless, Liquid
Molecular Weight: N/A
Molecular Formula: N/A
pH: 2.1-2.3
Boiling Point and Boiling Range: N/A
Melting Point/Freezing Point: N/A
Flash Point: N/A
Specific Gravity/Relative Density: N/A
Odor: Pungent, like vinegar
Odor Threshold: N/A
Color: Colorless
Flammability (solid/gas): N/A
Vapor Density: N/A
Upper/Lower flammability or explosive limits: N/A
Vapor Pressure: N/A
Evaporation Rate: N/A
Acetic Acid, 12%

Partition Coefficient: n-octanol/water: N/A
Viscosity: N/A
Auto-ignition temperature: N/A
Solubility: Soluble in water.
Decomposition Temperature: N/A

10. Stability and Reactivity

Reactivity: Not reactive
Chemical Stability: Stable
Conditions of Stability/Instability: Stable under normal conditions of temperature and pressure.
Stabilizers needed: None
Safety issue indicated by appearance change: N/A
Other: N/A
Hazardous Reactions: N/A
Hazardous Polymerization: Does not occur
Conditions to avoid: N/A
Classes of Incompatible Materials: Oxidizers, Strong Acids, Strong Bases
Hazardous Decomposition Products: Thermal-oxidation degradation can produce oxides of carbon. Toxic gases and vapors (i.e. Carbon monoxide) may be released in a fire.

11. Toxicological Information

Likely Routes of Exposure
- Eyes: Irritation. Slightly hazardous in case of eye contact.
- Skin: Irritation. Slightly hazardous in case of skin contact.
- Inhalation: Dizziness, headache.
- Ingestion: Nausea.

Effects from short term exposure (delayed, immediate, chronic): Repeated or prolonged exposure is not known to aggravate medical conditions.

Acute Toxicity (Numerical Measures): Glacial Acetic Acid CAS 64-19-7: LD50 (mammal, skin)=1060mg/kg; LD50 (rabbit, skin)=1060 mg/kg; LC50 (inhalation, mouse)=5620 ppm/1H; LC50 (inhalation, mouse)=5620 mg/m3/1H

Carcinogenicity (NTP, IARC, OSHA): Not listed as a carcinogen.

12. Ecological Information

Ecotoxicity: Acute Aquatic Effects Data for 100% Glacial Acetic Acid 96 h LC-50 (fathead minnow): > 100mg/L 48 h LC-50 (golden orfe): 410 mg/L 48 h LC-50 (mosquito fish): 251 mg/L 96 h LC-50 (daphnid): > 100 mg/L
Persistence and degradability: The product itself and its products of degradation are not toxic.
Bioaccumulation Potential (octanol-water partition coefficient, BCF): This material is a strongly acidic aqueous solution, and this property may cause adverse environmental effects. Oxygen Demand Data for 100% Glacial Acetic Acid BOD-5: 340-880 mg/g BOD-20: 900 mg/g COD: 1,030 mg/g
Mobility in the soil: N/A
Adverse Environmental Effects: N/A

13. Disposal Considerations

Recommended Disposal Containers: Check with your local waste authorities*
Recommended Disposal Methods: Do not dispose of in drains, check with your local waste authorities.*
Physical/Chemical Properties affecting Disposal: See section 2 and section 9 applicable information.*
Special Precautions for Landfill and Incineration Activities: Check with your local waste authorities.*
Waste Stream: Consult your local or regional authorities.*
### 14. Transport Information

- **UN Number**: Not regulated.
- **UN Proper Shipping Name**: Not regulated.
- **Transport Hazard Class(es)**: Not regulated.
- **Packing Group Number**: Not regulated.
- **Environmental Hazards (IMDG code)**: Not regulated.
- **Marine Pollutant**: Not regulated.
- **Transport in Bulk (IBC Code)**: Not regulated.
- **Special Transport Precautions**: Not regulated.

### 15. Regulatory Information

- **OSHA**: N/A
- **DOT**: N/A
- **EPA**: N/A
- **CPSC**: N/A
16. Other Information

**Revision Date:** 09/08/2015

**NFPA**

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**Specific Hazard**

**Hazardous Material Information System (HMIS)**

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**Notice to Reader:**

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