SAFETY DATA SHEET (SDS)

Glacial Acetic Acid

01. Product and Company Identification

<table>
<thead>
<tr>
<th>Product Identifier:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trade Name:</strong> VMA-Skreen Glacial Acetic Acid</td>
</tr>
<tr>
<td><strong>Chemical Name:</strong> Glacial Acetic Acid</td>
</tr>
<tr>
<td><strong>Catalog Number:</strong> 35071253, 35071202</td>
</tr>
<tr>
<td><strong>Part of Kits:</strong> 35070303, 35070001, 35070401</td>
</tr>
<tr>
<td><strong>Use of chemical:</strong> Laboratory chemical</td>
</tr>
</tbody>
</table>

**Identification of Manufacturer:**

<table>
<thead>
<tr>
<th>Manufacturer/Supplier: Biochemical Diagnostics, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>180 Heartland Blvd., Edgewood, NY 11717</td>
</tr>
<tr>
<td>Phone: (631) 595-9200</td>
</tr>
<tr>
<td><strong>Emergency telephone number:</strong> (800) 255-3924</td>
</tr>
</tbody>
</table>

02. Hazard(s) Identification

**Classification of substance or mixture:**

- Skin corrosion (Category 1A), Serious eye damage (Category 1)
  - Skin severe skin burns and eye damage
- Flammable liquids (Category 3)

**Label elements:**

- **Hazard pictograms**
  - Corrosion
  - Flammable

**Signal word:** Danger

**Hazard statements:**

- H226 Flammable liquid and vapor
- H314 Causes severe skin burns and eye damage.

**Precautionary statements:**

- P233 Keep container tightly closed.
- P264 Wash skin thoroughly after handling.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection
- P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing
- P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Classification system:**

- **NFPA ratings (scale 0 - 4)**
  - Health = 3
  - Fire = 0
  - Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**
  - Health = 3
  - Fire = 0
  - Reactivity = 0
SAFETY DATA SHEET (SDS)

Glacial Acetic Acid

03. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Chemical Characterization:</th>
<th>Solvent</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS No. Description</td>
<td>64-19-7</td>
</tr>
<tr>
<td>Formula</td>
<td>CH₃COOH</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>60.05 g/mol</td>
</tr>
</tbody>
</table>

04. First aid measures

Description of first aid measures:

Inhalation: Remove to fresh air. Harmful if inhaled, may cause damage to respiratory passages and lungs. Consult a physician.

Ingestion: Rinse mouth with water. Seek medical attention.

Skin Contact: Contact cause severe burns. Remove contaminated clothing. Wash immediately with soap and water.

Eye Contact: Rinse with thoroughly with plenty of water for at least 15 minutes. Seek medical attention.

05. Firefighting measures

Extinguishing media: Water spray, dry chemical, alcohol-resistant foam, or carbon dioxide.

Special Fire Fighting Procedures: Wear proper protective equipment w/Self contained breathing apparatus.

Unusual Fire and Explosion Hazards: Contact with strong oxidizers may cause fire.

06. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Avoid breathing vapors, mist or gas. Keep unprotected persons away. Remove all sources of ignition. Ensure adequate ventilation.

Environmental precautions:

Prevent further leakage if safe to do. Do not allow to enter sewers/surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust) and remove.

Waste Disposal Method:

Dispose in accordance with state, local and federal regulations.

07. Handling and storage

Handling:

Precautions for safe handling: Avoid breathing vapors. Keep away from sources of ignition.

Conditions for safe storage, including any incompatibilities:

Requirements to be met by storerooms and receptacles: Store in a cool location.

Further information about storage conditions: Keep receptacle tightly sealed. Store in well-ventilated, cool, dry conditions in well-sealed receptacles. Keep container upright to prevent leakage.
08. Exposure controls/ personal protection

Exposure Controls:

Control parameters:
Components with limit values that require monitoring at the workplace:
64-19-7 Acetic Acid
- PEL Long-term value: 25 mg/m³, 10 ppm
- REL Long-term value: 25 mg/m³, 10ppm
- TLV Short-term value: 37 mg/m³, 15 ppm

Personal protective equipment:

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

Eye Protection: Tightly sealed safety glasses or face shield.

Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact

Protection of Hands: Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Dispose of gloves after use.

Respiratory Protection: Use approved fume hood. If the exposure limit is exceeded, use NIOSH approved and tested full-face respirator that is independent of circulating air.

Ventilation: Keep vapor levels as low as possible, use adequate general or local exhaust.

09. Physical and chemical properties

Appearance:
Form: Liquid
Color: Colorless

Odor: Pungent Odor
pH: 2.4 at 60.05 g/L

Melting Point: 16.2°C/ 61.2°F
Boiling Point: 117 - 118°C/ 243 - 244 °F
Flash Point: 40.0°C (104 °F)

Ignition temperature: 485.0°C/ 905.0 °F

Explosion limits: Lower: 19.9% (V)
Upper: 4% (v)

Vapor Pressure @ 20°C: 11.4 mm Hg

Specific Gravity @ 20°C (68°F): 1.049 g/cm³
Vapor Density: 2.07, Air=1

Percent Volatile: 100%
Evaporation Rate: 0.97

Flammable Limits in air % by volume: LEL: 5.4 %
UEL: 16.0 %

Solubility in/ Miscibility with Water@20°C: soluble
10. Stability and reactivity

**Stability:** Stable

**Incompatibility:** Avoid nitrates, aluminum or magnesium, strong oxidizers, amines, alkali metals, strong bases, or strong acids. Vinyl compounds, rubber, water, heat.

**Conditions to Avoid:** Heat, sparks, open flame. Exposure to sunlight.

**Hazardous Polymerization:** Will not occur

**Hazardous Decomposition:** Carbon oxides may form under fire conditions.

11. Toxicological information

**Acute toxicity:**

LD/LC50 values that are relevant for classification: Acetic Acid
- Oral LD50 3,310 mg/kg (rat)
- Inhalation LC50 4 h - 11.4 mg/ml (rat)
- Dermal LD50 1.06 L/kg (rabbit)

**Potential health effects:**

- **On the skin:** May be harmful if absorbed through skin. Contact causes skin burns.
- **On the eye:** Causes eye burns.
- **Inhalation:** May be harmful to the tissue of the mucus membranes and upper respiratory tract.
- **Ingestion:** May be harmful if swallowed.

12. Ecological information

**Toxicity:**

- semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 1,000 mg/l - 96 h
- EC50 - Daphnia magna (Water flea) - > 300.82 mg/l - 48 h

**Persistence and degradability:** aerobic - Exposure time 30 d
- Result: 99 % - Readily biodegradable
- Remarks: Expected to be biodegradable.
- Biochemical Oxygen Demand (BOD) 880 mg/g

**Bioaccumulative potential:** No data available.

**Mobility in soil:** No data available.

**Other adverse effects:** No data available.

13. Disposal considerations

**Waste treatment methods**

**Product:**

Dispose of in accordance with local, state and federal regulations.

**Contaminated packaging:**

Disposal must be made according to official regulations.
**SAFETY DATA SHEET (SDS)**

Glacial Acetic Acid

### 14. Transport Information

<table>
<thead>
<tr>
<th><strong>UN Number:</strong></th>
<th>2789</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UN proper shipping name:</strong></td>
<td>Acetic Acid, glacial</td>
</tr>
<tr>
<td><strong>Transport hazard class(es):</strong></td>
<td>8 (3)</td>
</tr>
<tr>
<td><strong>Packing group:</strong></td>
<td>II</td>
</tr>
<tr>
<td><strong>Environmental hazards:</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Special precautions</strong></td>
<td>None</td>
</tr>
</tbody>
</table>

### 15. Regulatory Information

<table>
<thead>
<tr>
<th><strong>SARA 302 Components:</strong></th>
<th>No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SARA 313 Components:</strong></td>
<td>This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.</td>
</tr>
<tr>
<td><strong>SARA 311/312 Hazards:</strong></td>
<td>Fire Hazard, Acute Health Hazard, Chronic Health Hazard</td>
</tr>
</tbody>
</table>

### 16. Other Information

Revision B, June 2015

The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, we make no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for a particular purpose. Accordingly, we will not be responsible for damages of any kind resulting from the use of or reliance upon such information. No representations, or warranties, either express or implied of merchantability fitness for a particular purpose or of any other nature made hereunder with respect to the information set forth herein or to the product which the information refers.