1. IDENTIFICATION

**Product Identifier**

**Product Name**

Acid CIP

**Other means of Identification**

**Product Code**

067200

**Recommended use of the Chemical and Restrictions on Use**

**Recommended Use**

Acid circulation cleaner. For industrial use.

**Details of the Supplier of the Safety Data Sheet**

Midlab, Inc.

140 Private Brand Way

Athens, TN 37303

**Emergency Telephone Number**

**Company Phone Number**

Phone: 1-423-337-3180

**Emergency Telephone (24 hr)**

INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

**Appearance**

Pink

**Physical State**

Liquid

**Odor**

Acidic

**Classification**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
<th>Sub-category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 1</td>
<td>A</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
<td></td>
</tr>
<tr>
<td>Oxidizing liquids</td>
<td>Category 3</td>
<td></td>
</tr>
<tr>
<td>Corrosive to Metals</td>
<td>Category 1</td>
<td></td>
</tr>
</tbody>
</table>

**Signal Word**

Danger

**Hazard Statements**

Causes severe skin burns and eye damage.
May intensify fire; oxidizer.
May be corrosive to metals.

**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray.
Keep away from heat.
Keep/Store away from combustible materials
Wash face, hands and any exposed skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Keep only in original container.

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash contaminated clothing before reuse.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
IN CASE OF SPILL: Absorb spillage to prevent material damage.

Precautionary Statements - Storage
Store locked up.
Store in corrosive resistant container with a resistant inner liner.

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant.

Other Hazards
Harmful to aquatic life with long lasting effects.

Unknown Acute Toxicity
None known.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>40-70</td>
</tr>
<tr>
<td>Nitric Acid</td>
<td>7697-37-2</td>
<td>15-40</td>
</tr>
<tr>
<td>Phosphoric Acid</td>
<td>7664-38-2</td>
<td>1-5</td>
</tr>
</tbody>
</table>

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

### 4. FIRST-AID MEASURES

First Aid Measures

**Eye Contact**
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove and discard contact lenses. Seek immediate medical attention/advice.

**Skin Contact**
Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing. Wash contaminated clothing before reuse. Get medical attention immediately.

**Inhalation**
Remove to fresh air. Seek immediate medical attention/advice.

**Ingestion**
Rinse mouth. Drink plenty of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

**Most Important Symptoms and Effects**

**Symptoms**
Corrosive to eyes. Contact will cause irritation and redness to exposed areas. Prolonged contact may even cause severe skin irritation or mild burn. Chronic exposure may cause liver, kidney and/or blood disorders.

**Indication of Any Immediate Medical Attention and Special Treatment Needed**

**Notes to Physician**
Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Water spray (fog). Carbon dioxide (CO2). Dry chemical. Foam.

**Unsuitable Extinguishing Media**
Not determined.

**Specific Hazards Arising from the Chemical**
None known.
Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Use personal protective equipment as required.

Environmental Precautions Avoid release to the environment.

Methods and Material for Containment and Cleaning Up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Collect spillage. Collect in a clean, dry waste container for disposal. Dilute remaining residue with water.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling Wash thoroughly after handling. Use personal protection recommended in Section 8. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

Conditions for Safe Storage, including Any Incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep locked up and out of reach of children. Keep from freezing. Keep only in original container.


8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitric Acid 7697-37-2</td>
<td>TWA: 2 ppm (5 mg/m³)</td>
<td>TWA: 2 ppm (5 mg/m³)</td>
<td>IDLH: 25 ppm TWA: 2 ppm (5 mg/m³)</td>
</tr>
<tr>
<td></td>
<td>STEL: 4 ppm (10 mg/m³)</td>
<td>STEL: 4 ppm (10 mg/m³)</td>
<td></td>
</tr>
<tr>
<td>Phosphoric Acid 7664-38-2</td>
<td>STEL: 3 mg/m³ (vacated) TWA: 1 mg/m³</td>
<td>TWA: 1 mg/m³ (vacated) STEL: 3 mg/m³</td>
<td>IDLH: 1000 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA: 1 mg/m³</td>
<td></td>
<td>TWA: 1 mg/m³</td>
</tr>
<tr>
<td></td>
<td>STEL: 3 mg/m³</td>
<td></td>
<td>STEL: 3 mg/m³</td>
</tr>
</tbody>
</table>

Appropriate Engineering Controls

Engineering Controls Ventilation systems. Eyewash stations. Showers.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection Splash goggles or safety glasses.

Skin and Body Protection Rubber, Nitrile, PVC, or other chemically resistant skin protection to prevent contact.

Respiratory Protection Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES
Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Pink</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Acidic</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>&lt; 2</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not known</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>100.5 °C / 213 °F</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>n/a-liquid</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.19</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Completely soluble</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to Avoid
Keep out of reach of children. Keep from freezing.

Incompatible Materials

Hazardous Decomposition Products
When exposed to fire, produces normal products of combustion. Oxides of Nitrogen, Phosphorus, and Carbon.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Eye Contact Causes severe eye damage.

Skin Contact Causes severe skin burns.

Inhalation Avoid breathing vapors or mists.

Ingestion Do not taste or swallow.
Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitric Acid 7697-37-2</td>
<td>-</td>
<td>-</td>
<td>0.13 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>Phosphoric Acid 7664-38-2</td>
<td>= 1530 mg/kg (Rat)</td>
<td>= 2730 mg/kg (Rabbit)</td>
<td>&gt; 850 mg/m³ (Rat) 1 h</td>
</tr>
</tbody>
</table>

Information on Physical, Chemical and Toxicological Effects

Symptoms
Please see section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure

Carcinogenicity
This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity
Not determined

Unknown Acute Toxicity
None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Harmful to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitric Acid 7697-37-2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Phosphoric Acid 7664-38-2</td>
<td>-</td>
<td>3 - 3.5: 96 h Gambusia affinis mg/L LC50</td>
<td>-</td>
<td>4.6: 12 h Daphnia magna mg/L EC50</td>
</tr>
</tbody>
</table>

Persistence/Degradability
Not determined

Bioaccumulation
Not determined

Mobility
Not determined

Other Adverse Effects
Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging
Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status
14. TRANSPORT INFORMATION

**Note**
Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT UN/ID No**
UN3264, Corrosive Liquid, Acidic, Inorganic, NOS (Containing Nitric Acid and Phosphoric Acid), 8, PG II

**IATA**

**IMDG**
Marine Pollutant
This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

**International Inventories**
Canada – Domestic Substances List (DSL) All ingredients are listed or exempt.
TSCA (Toxic Substances Control Act) All ingredients are listed or exempt.

**Legend:**
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

**US Federal Regulations**

**CERCLA**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitric Acid</td>
<td>1000 lb</td>
<td>1000 lb</td>
<td>RQ 1000 lb final RQ</td>
</tr>
<tr>
<td>7697-37-2</td>
<td></td>
<td></td>
<td>RQ 454 kg final RQ</td>
</tr>
<tr>
<td>Phosphoric Acid</td>
<td>5000 lb</td>
<td></td>
<td>RQ 5000 lb final RQ</td>
</tr>
<tr>
<td>7664-38-2</td>
<td></td>
<td></td>
<td>RQ 2270 kg final RQ</td>
</tr>
</tbody>
</table>

**SARA 311/312 Hazard Categories**

Acute Health Hazard Yes
Chronic Health Hazard Yes
Reactive Hazard Yes

**SARA 313**
This product contains the following toxic chemicals subject to reporting requirements.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitric Acid</td>
<td>7697-37-2</td>
<td>15-40</td>
</tr>
</tbody>
</table>

**CWA (Clean Water Act)**

<table>
<thead>
<tr>
<th>Component</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitric Acid</td>
<td>1000 lb</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7697-37-2</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Phosphoric Acid</td>
<td>5000 lb</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7664-38-2</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

**US State Regulations**

U.S. State Right-to-Know Regulations
067200 - Acid CIP

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>State List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitric Acid 7697-37-2</td>
<td>MA, NJ, PA</td>
</tr>
<tr>
<td>Phosphoric Acid 7664-38-2</td>
<td>MA, NJ, PA</td>
</tr>
</tbody>
</table>

AZ- Arizona Ambient Air Quality Guidelines
CT- Connecticut Hazardous Air Pollutants
CA- California Director's List of Hazardous Substances
CAP65C- California Prop 65 Carcinogen
FL- Florida Substances List
ID- Idaho Non-Carcinogen Toxic Air Pollutants
MA- Massachusetts Right to Know List
MN- Minnesota Hazardous Substances List
NJ- New Jersey Right to Know List
PA- Pennsylvania Right to Know List
RI- Rhode Island Hazardous Substances List

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMISS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

Issue Date: 15-Dec-16
Revision Date: 15-Dec-16
Revision Note: Version 1.0

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Keep Out of Reach of Children. For Industrial and Institutional Use Only.

*Denotes changes from last version.

End of Safety Data Sheet